

Narcissistic Personality Features and Social Trust: The Mediating Roles of the Dangerous and Competitive Social Worldviews

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Abstract

Narcissism has been shown to be associated with a lack of trust in others, but little is known about the factors that may play a role in the tendency for narcissistic individuals to mistrust others. The present research examined whether the associations that specific narcissistic personality features had with social trust were mediated by social worldviews. A large study of Iranian community members ($N = 3,446$; mean age of 34.28 years) revealed that the antagonistic and neurotic aspects of narcissism had *negative* indirect associations with social trust through the competitive social worldview, whereas the extraverted aspect of narcissism had a *positive* indirect association with social trust through the competitive social worldview. In addition, the extraverted and neurotic aspects of narcissism had positive indirect associations with social trust through the dangerous social worldview. These results suggest that the extraverted, antagonistic, and neurotic aspects of narcissism diverged in their associations with social trust and that the dangerous and competitive social worldviews played important roles in these associations. Discussion will focus on the implications of these results for understanding the roles that social worldviews play in the connections between narcissism and social trust.

Keywords: narcissism, trust, competition, worldviews

Introduction

Narcissism refers to a constellation of personality features that are characterized by overly positive self-views along with feelings of self-importance, vanity, self-absorption, and entitlement (e.g., Campbell & Foster, 2007; Krizan & Herlache, 2018; Morf & Rhodewalt, 2001). Narcissism has been found to be associated with a wide array of interpersonal difficulties which appear to be largely explained by particular social-cognitive processes (e.g., narcissistic individuals overvaluing their contributions to joint tasks; Campbell et al., 2000) and interpersonal behaviours (e.g., narcissistic individuals often derogating the accomplishments or abilities of others;

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Morf & Rhodewalt, 1993). The purpose of the present research was to examine whether narcissistic personality features would be associated with the tendency to mistrust others. More specifically, we were interested in the possibility that particular aspects of narcissism may be associated with a lack of trust in others and that these associations may be due, at least in part, to the social worldviews that are adopted by narcissistic individuals. For example, narcissistic individuals may perceive the world as being intensely competitive which may inhibit their abilities to trust others because they may consider them to be potential adversaries rather than potential allies.

What is Narcissism?

There has been considerable debate regarding the nature of narcissism during recent decades (see Miller et al., 2017, for a review). However, it is largely recognized that narcissism is characterized by features such as a sense of grandiosity, vanity, self-absorption, feelings of entitlement, and a willingness to exploit others (e.g., Grapsas et al., 2020; Krizan & Herlache, 2018; Miller et al., 2017; Morf & Rhodewalt, 2001). Narcissistic individuals often use their interactions with others to satisfy their interpersonal goals such as navigating local status hierarchies (e.g., Grapsas et al., 2020; Zeigler-Hill et al., 2018, 2019). However, many of the interpersonal strategies that narcissistic individuals use – including a lack of empathy or respect for other individuals (e.g., Brunell & Campbell, 2011; Campbell et al., 2004) – almost certainly contribute to their interpersonal difficulties. It appears that many of the interpersonal difficulties that characterize narcissism may stem from the tendency for narcissistic individuals to view others as potential adversaries which may prevent them from establishing positive and mutually beneficial connections with others (e.g., Back, 2018; Miller et al., 2007, 2017, 2012; Szymczak et al., in press; Zeigler-Hill et al., in press).

Narcissism has often been treated as a unidimensional construct in the past but there is a considerable amount of evidence that it is actually multidimensional in nature (e.g., Ackerman et al., 2011; Miller et al., 2016). Although there is still debate regarding how to best conceptualize narcissism (e.g., Krizan & Herlache, 2018), one view that has emerged during recent years is the Trifurcated Model of Narcissism (Crowe et al., 2019; Miller et al., 2016; Weiss et al., 2019). This model argues that narcissism can be separated into two broad expressions that are referred to as *grandiose* narcissism and *vulnerable* narcissism which, in turn, can be further separated into three distinct aspects: *extraverted* narcissism (an exclusively grandiose form of narcissism), *antagonistic* narcissism (a form of narcissism that blends its grandiose and vulnerable expressions), and *neurotic* narcissism (an exclusively vulnerable form of narcissism). The conceptualization of narcissism offered by the Trifurcated Model is particularly important because distinguishing the antagonistic aspect of narcissism from the extraverted and neurotic aspects of narcissism has allowed for a deeper and more nuanced understanding of the connections that narcissistic personality features have with various attitudes and behaviours (e.g.,

Szymczak et al., in press; Weiss et al., 2021; Zeigler-Hill et al., in press; see Weiss et al., 2019, for a review).

Narcissism and Trust

Social trust refers to the basic belief that the social environment is largely occupied by other people who are generally fair, helpful, and trustworthy (e.g., Evans & Revelle, 2008; Farris et al., 1973; Lewicki et al., 1998; Mayer et al., 1995; Righetti & Finkenauer, 2011; Rotter, 1967; Yamagishi & Yamagishi, 1994). Social trust allows individuals to engage in behaviours that may make them vulnerable to exploitation by others (e.g., cooperating with others, assuming that the assistance they provide to others will be reciprocated in the future) because they have positive expectations regarding the intentions and behaviours of others (e.g., Balliet & Van Lange, 2013; Campbell et al., 2010; Mayer et al., 1995; Rousseau et al., 1998). Individuals who exhibit a lack of trust in others may struggle with many aspects of their interpersonal functioning. More specifically, this mistrust of others may promote a lack of cooperation which tends to characterize various forms of personality pathology (e.g., Poggi et al., 2019).

It has been suggested that narcissism is likely to be characterized by a lack of trust in others since individuals with elevated levels of narcissism should be reluctant to make themselves vulnerable to potential exploitation by others (e.g., Glover et al., 2012; Kong, 2015; Krizan & Johar, 2015; Miller et al., 2017; Morf & Rhodewalt, 2001; Poggi et al., 2019). However, studies that have distinguished between particular aspects of narcissism have found that the mistrust of others tends to characterize only certain aspects of narcissism. For example, the relatively antagonistic aspects of narcissism are negatively associated with social trust (Back et al., 2013; Kwiatkowska et al., 2019; Szymczak et al., in press), whereas the more extraverted aspects of narcissism are often unrelated to trust (Back et al., 2013; Kwiatkowska et al., 2019) or even have a small positive association with trust (Szymczak et al., in press). In addition, vulnerable narcissism has been shown to be associated with mistrust of others (e.g., Thomas et al., 2012) but this appears to be largely due to the antagonistic elements of vulnerable narcissism rather than its neurotic elements (e.g., Miller et al., 2018; Szymczak et al., in press). This pattern suggests that this mistrust of others may be mostly limited to the antagonistic aspect of narcissism rather than characterizing narcissism more broadly.

The Importance of Social Worldviews

Social worldviews refer to schematic knowledge structures that capture how individuals think about their social environments (e.g., Duckitt & Fisher, 2003; Ross, 1993). There are various ways to conceptualize social worldviews (see Clifton et al., 2019, for an extended discussion), but two worldviews that have received a great deal of empirical attention are the *dangerous* social worldview (i.e., the tendency to

perceive the social environment to be a threatening and unpredictable place) and the *competitive* social worldview (i.e., the tendency to perceive the social environment to be similar to a Darwinian jungle; e.g., Duckitt, 2001). These social worldviews often shape how individuals understand the events in their lives such that they tend to interpret these experiences in a manner that aligns with their existing worldviews (e.g., Duckitt, 2001).

The tendency to view the world as being highly competitive has been argued to play an important role in understanding some of the outcomes that characterize narcissism (see Zeigler-Hill et al., in press, for an extended discussion). More specifically, narcissism may predispose individuals to view the world as an intensely competitive place which, in turn, fosters the development of many of the attitudes and behaviours that characterize narcissistic individuals. Support for this basic idea has been observed in studies showing that the competitive social worldview mediates the associations that narcissistic personality features have with outcomes such as anti-egalitarian ideological attitudes (Zeigler-Hill et al., 2020, in press) and environmental attitudes (Abraham & Pane, 2016). For the present study, we were interested in the possibility that perceiving the world to be an intensely competitive place may mediate the associations that narcissistic personality features had with social trust. That is, we expected that the tendency for narcissistic individuals to think of themselves as being in a social environment in which only the strong survive and the weak perish may make it less likely that they would be willing to leave themselves open to potential exploitation by trusting others. This view is consistent with the results of studies showing that competitive environments often promote a lack of trust in those who may be perceived as potential rivals (e.g., Casella et al., 2018; Densley et al., 2014).

Overview and Predictions

The goal of the present study was to examine whether social worldviews mediate the associations between narcissistic personality features and social trust. Previous research has shown that narcissism is sometimes characterized by a cynical view of others, but that this association is often limited to the antagonistic aspect of narcissism (e.g., Kwiatkowska et al., 2019; Miller et al., 2017; Szymczak et al., in press). Furthermore, recent studies have found that narcissism has indirect associations with outcomes such as anti-egalitarian ideological attitudes (Zeigler-Hill et al., 2020, in press) through the competitive social worldview. The emerging pattern suggests that narcissistic individuals – especially those with elevated levels of the antagonistic aspect of narcissism – may perceive the world to be intensely competitive which, in turn, leads them to endorse attitudes and behaviours that may allow them to gain advantages for themselves by dominating those who are weaker than themselves. This is important because it suggests that narcissistic individuals may be likely to see themselves as living in a world that is similar in some respects to a Darwinian jungle which may be a considerably different perception of the world

than is held by other individuals. If narcissism promotes a view of the world as being hyper-competitive, then a lack of trust in others may seem to be a reasonable strategy for navigating the social environment and any attempts to convince narcissistic individuals to place their trust in others may seem naïve given their perceptions of the social environment. Put another way, many of the attitudes and behaviours that characterize narcissism – including the reluctance to trust others – may have their origins in disagreements about the fundamental nature of the world. We developed the following hypotheses for the present study:

Hypothesis 1: We expected extraverted narcissism to be positively associated with social trust. This prediction is consistent with the results of a recent study which found a small positive association between extraverted narcissism and trust when controlling for antagonistic narcissism and neurotic narcissism (Szymczak et al., in press). However, it is important to note that other studies have not always found a significant association between extraverted narcissism and trust (e.g., Kwiatkowska et al., 2019; Miller et al., 2017). We were uncertain whether extraverted narcissism would have indirect associations with social trust through the dangerous or competitive social worldviews but we examined these associations for exploratory purposes.

Hypothesis 2: We expected antagonistic narcissism to be negatively associated with social trust. This prediction is consistent with the results of previous studies showing that the relatively antagonistic aspects of narcissism tend to be associated with a lack of trust (Fukunishi et al., 1995; Kwiatkowska et al., 2019; Miller et al., 2017; Poggi et al., 2019; Szymczak et al., in press). Further, we expected antagonistic narcissism to have a negative indirect association with social trust through the competitive social worldview. That is, we expected the tendency for antagonistic narcissism to be characterized by perceptions of the world as being intensely competitive would, in turn, promote a lack of trust in others. We did not expect antagonistic narcissism to be associated with the dangerous social worldview nor did we expect it to have an indirect association with social trust through the dangerous social worldview but we examined these associations for exploratory purposes.

Hypothesis 3: We were uncertain about the association that neurotic narcissism would have with social trust and whether this association – if it exists at all – would be mediated by social worldviews. The reason for our uncertainty was that a recent study failed to find an association between neurotic narcissism and trust (Szymczak et al., in press). However, previous studies have revealed considerable similarities between the neurotic aspect of narcissism and the basic personality trait of neuroticism (e.g., Miller et al., 2018) which has been shown to be negatively associated with trust (e.g., Evans & Revelle, 2008; Martins, 2002). One possible explanation for this pattern is that neurotic narcissism may actually have a complex set of connections with social trust due to the tendency for this aspect of narcissism to be characterized by a view of the world as being both dangerous and competitive. It is possible that neurotic narcissism could have a positive indirect association with social trust through the dangerous social worldview (see Christoffersen, 2018, for an

extended discussion of the complex connections between perceptions of danger and trust) but a negative indirect association with social trust through the competitive social worldview. However, it should be noted that the connections neurotic narcissism has with the social worldviews have been rather weak and somewhat inconsistent across previous studies (e.g., Zeigler-Hill et al., in press). Despite our lack of clear predictions for the direct and indirect associations that neurotic narcissism may have with social trust, we examined these associations for exploratory purposes.

Method

Participants and Procedure

Participants were 3,592 Iranian community members who responded to requests asking for volunteers to take part in a study concerning “personality and social worldviews” via flyers that were placed in public locations and postings on social media. Participants completed measures of narcissism, social worldviews, and social trust with all of the questionnaires used in the present study being administered in Persian. Data were excluded for 146 participants due to careless or inattentive responding: 4 participants were excluded for excessive amounts of missing data, 82 participants were excluded for being univariate outliers, 5 participants were excluded for being multivariate outliers as assessed by Mahalanobis distance (De Maesschalck et al., 2000), 51 participants were excluded for having invariant response patterns as assessed by long-string analysis (Huang et al., 2012; Meade & Craig, 2012), and 4 participants were excluded due to inconsistent responding as assessed by inter-item standard deviation (Marjanovic et al., 2015; see Curran, 2016, for a review of methods for detecting careless or inattentive responding). The final 3,446 participants (1,890 women and 1,552 men) had a mean age of 34.28 years ($SD = 10.21$) and their mean number of years of formal education was 15.23 ($SD = 3.03$). The self-reported current economic status of the participants in the final sample was 2% “very good,” 19% “good,” 57% “moderate,” 16% “bad,” and 6% “very bad.”

Measures

Narcissism

The short form of the Five-Factor Narcissism Inventory (Glover et al., 2012; Sherman et al., 2015) was used to capture *extraverted* narcissism (16 items; e.g., “I get lots of enjoyment from entertaining others” [$\alpha = .78$]), *antagonistic* narcissism (32 items; e.g., “I’m pretty good at manipulating people” [$\alpha = .77$]), and *neurotic* narcissism (12 items; e.g., “I feel awful when I get put down in front of others” [$\alpha = .71$]). Participants were asked to rate their level of agreement with each statement using scales that ranged from 1 (*disagree strongly*) to 5 (*agree strongly*).

Dangerous and Competitive Social Worldviews

The Social Worldviews Scale-Revised (Perry et al., 2013) was used to capture the *dangerous social worldview* (10 items; e.g., “Any day now chaos and anarchy could erupt around us. All the signs are pointing to it” [$\alpha = .53$]) and the *competitive social worldview* (10 items; e.g., “My knowledge and experience tells me that the social world we live in is basically a competitive ‘jungle’ in which the fittest survive and succeed, in which power, wealth, and winning are everything, and might is right” [$\alpha = .54$]). Participants were asked to indicate their level of agreement with each item using scales that ranged from 1 (*strongly disagree*) to 7 (*strongly agree*).

Social Trust

The Social Trust Scale (Saffarinia & Sharif, 2011) is a 25-item instrument that was used to capture the extent to which other people are trusted (e.g., “I trust in my old friends” [$\alpha = .80$]). Participants were asked to indicate their level of agreement with each item using scales that ranged from 1 (*strongly disagree*) to 5 (*strongly agree*).

Results

Descriptive statistics and zero-order correlations are presented in Table 1. Extraverted narcissism had a large positive correlation with antagonistic narcissism as well as small positive correlations with neurotic narcissism, the dangerous social worldview, the competitive social worldview, and social trust. Antagonistic narcissism had small positive correlations with neurotic narcissism and the dangerous social worldview as well as a medium positive correlation with the competitive social worldview. However, antagonistic narcissism was not correlated with social trust. Neurotic narcissism had small positive correlations with the dangerous social worldview, the competitive social worldview, and social trust.

Table 1

Intercorrelations and Descriptive Statistics

	1	2	3	4	5	6
1. Extraverted Narcissism	–					
2. Antagonistic Narcissism	.58**	–				
3. Neurotic Narcissism	.07**	.17**	–			
4. Dangerous Social Worldview	.08**	.09**	.16**	–		
5. Competitive Social Worldview	.08**	.33**	.12**	.12**	–	
6. Social Trust	.25**	.01	.05*	.20**	-.38**	–
Mean	3.11	2.79	2.91	4.48	3.23	3.65
Standard Deviation	0.61	0.44	0.62	0.72	0.73	0.46

* $p < .01$; ** $p < .001$.

Our hypotheses were consistent with an indirect effects model such that the associations that extraverted narcissism, antagonistic narcissism, and neurotic narcissism had with social trust were believed to be explained, at least in part, by social worldviews. This led us to conduct a series of parallel multiple mediation analyses using model four of the PROCESS macro developed by Hayes (2018) which uses a bootstrap resampling process that was repeated 10,000 times to generate a 95% percentile bootstrap confidence interval (CI) for each direct and indirect association. More specifically, each aspect of narcissism served as a predictor for social trust in its own parallel multiple mediation analysis with the dangerous and competitive worldviews as potential mediators while controlling for the other aspects of narcissism (e.g., we controlled for antagonistic narcissism and neurotic narcissism when conducting the analysis for extraverted narcissism). This approach allowed us to examine the unique direct and indirect associations that each aspect of narcissism had with social trust. Each variable was standardized in order to aid with the interpretation of the resulting coefficients.¹

The results of these parallel multiple mediational analyses are presented together in Figure 1. These analyses revealed that extraverted narcissism ($a_1 = .05$, $SE = .02$, $t = 2.29$, $p = .02$, 95% CI [.01, .09], $f^2 = .00$) and neurotic narcissism ($a_3 = .15$, $SE = .02$, $t = 8.63$, $p < .001$, 95% CI [.11, .18], $f^2 = .02$) had small positive associations with the dangerous social worldview but that antagonistic narcissism was not associated with this worldview ($a_2 = .04$, $SE = .02$, $t = 1.68$, $p = .09$, 95% CI [-.01, .08], $f^2 = .00$). In contrast, extraverted narcissism had a small *negative* association with the competitive social worldview ($a_4 = -.16$, $SE = .02$, $t = -8.39$, $p < .001$, 95% CI [-.20, -.13], $f^2 = .02$), whereas antagonistic narcissism ($a_5 = .41$, $SE = .02$, $t = 21.00$, $p < .001$, 95% CI [.38, .45], $f^2 = .13$) and neurotic narcissism ($a_6 = .06$, $SE = .02$, $t = 3.62$, $p < .001$, 95% CI [.03, .09], $f^2 = .00$) had small *positive* associations with the competitive social worldview. In turn, the dangerous social worldview had a small *positive* association with social trust ($b_1 = .23$, $SE = .01$, $t = 15.32$, $p < .001$, 95% CI [.20, .26], $f^2 = .07$), whereas the competitive social worldview had a medium *negative* association with social trust ($b_2 = -.42$, $SE = .02$, $t = -26.75$, $p < .001$, 95% CI [-.45, -.39], $f^2 = .21$).

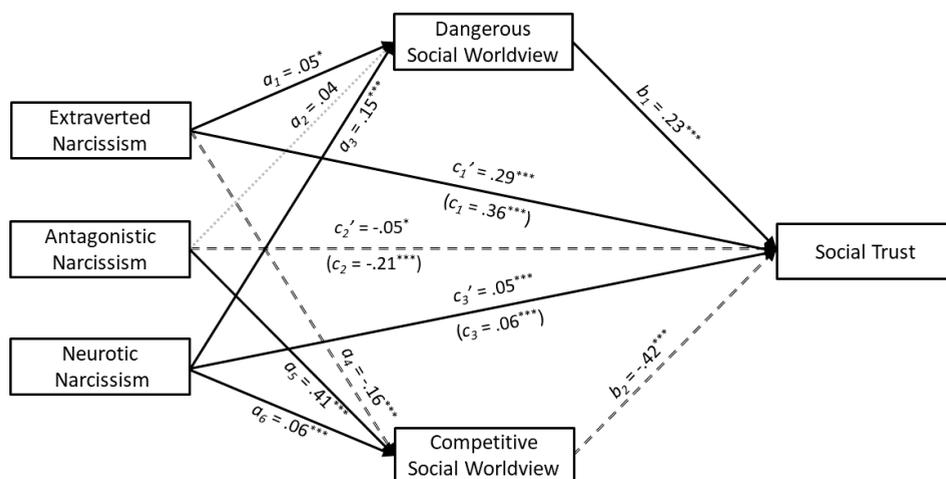
Extraverted narcissism had a small positive total association with social trust ($c_1 = .36$, $SE = .02$, $t = 18.31$, $p < .001$, 95% CI [.33, .40], $f^2 = .10$). The positive

¹ Gender differences have consistently been found for narcissism (e.g., Grijalva et al., 2015) and gender has sometimes been found to moderate the associations that narcissism has with certain outcomes (e.g., Sauls et al., 2019). As a result, we conducted preliminary analyses that included gender as a potential moderator of the mediational associations that narcissistic personality features had with social trust through the dangerous and competitive worldviews. However, gender did not moderate any of our results (i.e., there was no evidence of moderated mediation) nor did the inclusion of gender in those analyses substantially alter the reported results. As a consequence, we did not include gender in the final analyses nor do we discuss gender differences in the interest of parsimony.

association that extraverted narcissism had with social trust persisted when the mediators were included in the model ($c_1' = .29$, $SE = .02$, $t = 15.88$, $p < .001$, 95% CI [.25, .32], $f^2 = .07$). Extraverted narcissism had positive indirect associations with social trust through the dangerous social worldview ($a_1b_1 = .01$, $SE = .00$, $z = 2.26$, $p = .02$, 95% CI [.00, .02]) and the competitive social worldview ($a_4b_2 = .07$, $SE = .01$, $z = 8.00$, $p < .001$, 95% CI [.05, .08]).

Figure 1

The Results of the Parallel Multiple Mediation Analyses with the Dangerous Social Worldview and The Competitive Social Worldview Mediating the Associations that Extraverted Narcissism, Antagonistic Narcissism, and Neurotic Narcissism Had with Social Trust



Note. The significant positive associations are indicated by solid black arrows. The significant negative associations are indicated by dashed black arrows. The dotted grey lines represent nonsignificant associations. * $p < .05$; ** $p < .01$; *** $p < .001$.

Antagonistic narcissism had a small negative total association with social trust ($c_2 = -.21$, $SE = .02$, $t = -10.52$, $p < .001$, 95% CI [-.25, -.17], $f^2 = .03$) that was reduced in magnitude – but still significant – when the mediators were included in the model ($c_2' = -.05$, $SE = .02$, $t = -2.44$, $p = .01$, 95% CI [-.08, -.01], $f^2 = .00$). Antagonistic narcissism had a negative indirect association with social trust through the competitive social worldview ($a_5b_2 = -.17$, $SE = .01$, $z = -16.51$, $p < .001$, 95% CI [-.19, -.15]). Antagonistic narcissism did not have an indirect association with social trust through the dangerous social worldview ($a_2b_1 = .01$, $SE = .00$, $z = 1.67$, $p = .09$, 95% CI [.00, .02]).

Neurotic narcissism had a small positive total association with social trust ($c_3 = .06$, $SE = .02$, $t = 3.76$, $p < .001$, 95% CI [.03, .09], $f^2 = .00$) that persisted when the mediators were included in the model ($c_3' = .05$, $SE = .01$, $t = 3.57$, $p < .001$, 95% CI [.02, .08], $f^2 = .00$). Neurotic narcissism had conflicting indirect associations with

social trust through the social worldviews. More specifically, neurotic narcissism had a *positive* indirect association with social trust through the dangerous social worldview ($a_3b_1 = .03$, $SE = .00$, $z = 7.51$, $p < .001$, 95% CI [.02, .04]) but a *negative* indirect association with social trust through the competitive social worldview ($a_6b_2 = -.02$, $SE = .01$, $z = -3.58$, $p < .001$, 95% CI [-.04, -.01]).

Alternative Analyses

We were concerned that including extraverted narcissism, antagonistic narcissism, and neurotic narcissism in the same analyses may make it difficult to interpret their associations with the social worldviews and social trust due to their overlap with each other (see Lynam et al., 2006, for an extended discussion of this “perils of partialling” issue). This led us to conduct a series of alternative parallel multiple mediation analyses in which each aspect of narcissism was included in a model without controlling for the other aspects of narcissism. The results that emerged from these alternative analyses were similar in many respects to the reported results but there were some important differences. One difference in the results was that the negative association that extraverted narcissism had with the competitive social worldview in the reported results actually *reversed* its sign in the alternative analysis when the other aspects of narcissism were not included such that there was a small positive association between extraverted narcissism and the competitive social worldview. This reversal also impacted the indirect association that extraverted narcissism had with social trust through the competitive social worldview such that the alternative analysis revealed a *negative* indirect association rather than the *positive* indirect association that emerged when controlling for the other aspects of narcissism.

Another difference in the results that emerged from these alternative analyses was that antagonistic narcissism had a small positive association with the dangerous social worldview even though this association was not significant when extraverted narcissism and neurotic narcissism were included in the same analysis. In addition, antagonistic narcissism had a positive indirect association with social trust through the dangerous social worldview in the alternative analysis despite this indirect association not emerging from the original analysis. The results of the alternative analysis for neurotic narcissism were very similar to those of the original analyses (e.g., it had a positive indirect association with social trust through the dangerous social worldview but a negative indirect association through the competitive social worldview).

Discussion

The purpose of the present study was to examine whether the dangerous and competitive social worldviews mediated the associations that narcissistic personality

features had with social trust. We found support for our prediction that extraverted narcissism would be positively associated with social trust (Hypothesis 1). This pattern is consistent with the results of a recent study which found extraverted narcissism to be positively associated with trust (Szymczak et al., in press). In addition, extraverted narcissism had unexpected positive indirect associations with social trust through both the dangerous and competitive social worldviews. However, it is important to note that the nature of the indirect association that extraverted narcissism had with social trust through the competitive social worldview depended on whether the other aspects of narcissism were included in the analysis. More specifically, this indirect association was positive when the analysis controlled for the antagonistic and neurotic aspects of narcissism but this indirect association actually *reversed* its sign when these other aspects of narcissism were not included in the analysis. The reason for this reversal of the indirect association is that the association between extraverted narcissism and the competitive social worldview was drastically changed by the inclusion of the other aspects of narcissism. This suggests that extraverted narcissism may reflect an especially positive form of narcissism that is less competitive and more trusting when its overlap with the antagonistic and neurotic aspects of narcissism has been statistically removed. This is an important issue because the strong associations that extraverted narcissism has with the other aspects of narcissism – especially antagonistic narcissism – make it difficult to understand the best way to characterize the associations that extraverted narcissism has with the competitive social worldview and social trust. Researchers should continue to search for better data analytic strategies to understand the associations that highly correlated predictors have with the same outcomes. For example, Seidman et al. (in press) recently suggested that it may be beneficial for researchers to consider using the *level and difference approach* (Iida et al., 2018) – which uses the average of a pair of correlated predictor variables along with the difference between those variables – to disentangle the associations that characterize the extraverted and antagonistic aspects of narcissism.

There was partial support for our prediction that antagonistic narcissism would be negatively associated with social trust (Hypothesis 2). More specifically, antagonistic narcissism was negatively associated with social trust in the mediational analysis but it did not have a significant zero-order correlation with social trust. This suggests that antagonistic narcissism may capture a particularly aversive form of narcissism that involves a tendency to be less trusting of others when the overlap that it shares with the extraverted and neurotic aspects of narcissism has been removed. This pattern is only somewhat consistent with the results of previous studies which have found antagonistic narcissism to have a stronger association with the mistrust of others (Fukunishi et al., 1995; Kwiatkowska et al., 2019; Miller et al., 2017; Poggi et al., 2019; Szymczak et al., in press). It is important to note that antagonistic narcissism did have the expected negative indirect association with social trust through the competitive social worldview. This suggests that antagonistic narcissism may promote a view of the world as being similar to a Darwinian jungle in which

only the strong survive and the weak perish that, in turn, may inhibit the development of trust in others. However, it will be important for future studies to consider contextual factors that may impact the association between antagonistic narcissism and lack of social trust. For example, can individuals with elevated levels of antagonistic narcissism overcome their lack of trust when they need to cooperate with other members of their ingroup in order to combat outgroup rivals?

We did not have clear predictions for the connections that neurotic narcissism would have with social trust because the expected negative association between these variables failed to emerge in a recent study (Szymczak et al., in press). Despite our lack of a clear prediction, it was still surprising to find that neurotic narcissism had a small *positive* association with trust. Further, neurotic narcissism had conflicting indirect associations with social trust through the dangerous and competitive social worldviews. More specifically, neurotic narcissism had a *positive* indirect association with social trust through the dangerous social worldview but a *negative* indirect association with social trust through the competitive social worldview. This suggests that neurotic narcissism may promote a view of the social environment as being both dangerous and competitive. In turn, these worldviews may lead to a conflicted view of trust such that perceived danger may promote the development of trust but perceived competition may foster mistrust of others. Although this pattern is certainly interesting, it was not anticipated so it is particularly important for future research to examine whether similar patterns emerge in other samples.

The present results support the importance of distinguishing between the extraverted, antagonistic, and neurotic aspects of narcissism because there were both important similarities and differences between the aspects of narcissism. For example, each aspect of narcissism had similar negative indirect associations with social trust through the competitive social worldview when they were examined separately. However, this pattern only emerged for antagonistic narcissism and neurotic narcissism when each aspect of narcissism was included in the same analysis. In fact, the indirect association that extraverted narcissism had with social trust through the competitive social worldview actually reversed its sign and became positive when controlling for the other aspects of narcissism. Taken together, these results suggest that the tendencies to view the world as being either a dangerous or competitive place has an important role in the connections between narcissistic personality features and social trust.

It is important to acknowledge some of the limitations of the present research. One limitation was that the correlational nature of the present research precludes us from determining the direction of causality between narcissism, social worldviews, and social trust (see Maxwell & Cole, 2007 or Maxwell et al., 2011, for extended discussions of the limitations associated with cross-sectional mediational analyses). The present results were partially consistent with the process model we adopted for the present study but this does not necessarily demonstrate the causal pattern implied by the use of a mediational analysis because it is possible that other causal patterns may exist between these variables. For example, Clifton et al. (2019) argued that

social worldviews may provide the foundation for the development of personality features rather than being a consequence of these personality features. Future research attempt to gain a better understanding of the potential causal links between narcissism, social worldviews, and social trust by using experimental designs or longitudinal studies.

The second limitation was that the present research relied completely on self-report instruments. As a result, it is possible that our findings may have been impacted by factors such as socially desirable responding. For example, some individuals may have been unwilling to acknowledge their mistrust of others in an effort to avoid portraying themselves as overly cynical. It is also quite likely that individuals may have limited insight into some of their own psychological processes (e.g., it has been argued that social worldviews may operate outside of conscious awareness; Clifton et al., 2019). It would be beneficial for future research in this area to avoid an exclusive reliance on self-report instruments (e.g., measuring social trust by using a behavioural task such as an economic game).

The third limitation was that the internal consistencies for the dangerous and competitive social worldviews were low in the present study. Although the reason for these particularly low internal consistencies was not immediately obvious, it should be noted that similar results have emerged for this instrument in previous studies using non-W.E.I.R.D. samples. For example, Zeigler-Hill et al. (2020) reported low internal consistencies for this instrument in a large sample of incarcerated adult offenders in Nigeria (i.e., $\alpha = .47$ for the dangerous social worldview and $\alpha = .64$ for the competitive social worldview). This pattern suggests that future researchers who are interested in examining these social worldviews outside of W.E.I.R.D. samples may want to consider employing instruments that are specifically adapted for use with individuals from those particular cultures.

The fourth limitation was that many of the associations that we observed in the present study were relatively small in magnitude. That is, the associations that emerged from the present study were often not particularly large in magnitude despite being statistically significant. For example, the positive indirect association that extraverted narcissism had with social trust through the dangerous social worldview was rather small. We were only able to detect many of these associations because we used a sample that was quite large. Despite these limitations, the results of the present study expand the current understanding of the connections that narcissistic personality features have with social worldviews and social trust.

Conclusion

The present study examined whether the associations that narcissistic personality features had with social trust were mediated by social worldviews. Our results showed that narcissistic personality features had divergent direct and indirect associations with social trust. Extraverted narcissism had positive indirect associations with social trust through both the dangerous and competitive social

worldviews, whereas antagonistic narcissism had a negative indirect association with social trust through the competitive social worldview. Neurotic narcissism had a positive indirect association with social trust through the dangerous social worldview but a negative indirect association with social trust through the competitive social worldview. Taken together, these results suggest that these aspects of narcissism had divergent associations with social trust and that social worldviews played important roles in these associations.

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