ARTICLE IN PRESS

Personality and Individual Differences xxx (xxxx) xxx

ELSEVIER

Contents lists available at ScienceDirect

Personality and Individual Differences

journal homepage: www.elsevier.com/locate/paid



Short Communication

Effects of narcissism in essential workers during COVID-19

Stephanie D. Freis a,*, Amy B. Brunell b

- ^a Presbyterian College, 503 South Broad St., Clinton, SC 29325, United States of America
- ^b Ohio State University Mansfield, 1760 University Dr., Mansfield, OH 44906, United States of America

ARTICLE INFO

Keywords: Communal narcissism Grandiose narcissism Vulnerable narcissism Agentic State narcissism COVID-19 Essential workers

ABSTRACT

We studied essential workers during the COVID-19 pandemic. We hypothesized that trait narcissists would communicate more about their work during the pandemic because their work elevated their status to "hero" and provided an opportunity to shine. We found evidence of this for grandiose, but not vulnerable narcissism. Second, we hypothesized that sharing about work would be associated with increases in state narcissism. Results supported this for state grandiose narcissism with mixed evidence for state vulnerable narcissism. Perceiving validation from others was associated with higher state grandiose narcissism and self-esteem, as well as lower vulnerable narcissism in one sample.

1. Introduction

During the COVD-19 quarantine, retailers, grocery store employees, and restaurant workers were elevated to the status of "hero" in addition to doctors, nurses, and others on the frontlines (e.g., Wermiel, 2020). Our central question was to determine whether this new hero status had consequences for essential workers' narcissism.

State narcissism can change across time and situations, most notably following outcomes such as experiencing power over someone else, receiving recognition, helping another person, or after social media use (Gentile et al., 2012; Giacomin & Jordan, 2016). Thus, it seems reasonable that an essential worker's newfound hero status could have implications for experiences of state narcissism. In the present study, we surveyed essential workers to examine this question.

1.1. Trait narcissism

Trait narcissism is comprised by three forms: agentic grandiose narcissism (AN), communal grandiose narcissism (CN), and vulnerable narcissism (VN). Grandiose narcissists¹ believe they are uniquely important, influential, and deserving of special treatment (Krizan & Herlache, 2018; Thomaes et al., 2018). What distinguishes AN from CN is the domain used to justify their global self-evaluations, either through agency (e.g., assertiveness) or communion (e.g., prosociality) (Gebauer & Sedikides, 2018). VNs, on the other hand, feel uniquely important and deserving of more (Freis, 2018) but experience lower self-esteem,

anxiety, and desire for social approval (Brown & Brunell, 2017; Brunell & Buelow, 2019). Thus, both grandiose and vulnerable narcissists might be motivated to bask in hero worship of essential workers during the pandemic and experience a boost to their self-importance as a result.

1.2. The current research

Essential workers self-reported their trait and state narcissism and their communication behavior during the early parts of the pandemic, including over social media, which narcissists tend to use in abundance (Kircaburun et al., 2019). We predicted that narcissists would be more likely to communicate about their work in attempt to gain attention and approval. Furthermore, we predicted that greater communication about one's work, and feeling validated in this communication, would inflate a person's self-importance as observed through increased state narcissism levels.

2. Method

2.1. Participants

2.1.1. Sample A

Through Prolific Academic, 153 persons completed a 10-minute online survey for \$1.50. Eighty-six reported being essential workers and were included in analyses ($M_{age} = 28.38$, $SD_{age} = 6.79$). There were 16 females, 69 males, and 1 trans. Of these participants, 51 were

https://doi.org/10.1016/j.paid.2020.110533

Received 28 August 2020; Received in revised form 7 November 2020; Accepted 13 November 2020 0191-8869/© 2020 Elsevier Ltd. All rights reserved.

^{*} Corresponding author at: Psychology Department, Presbyterian College, 503 South Broad St., Clinton, SC 29325, United States of America. E-mail address: sdfreis@presby.edu (S.D. Freis).

¹ Although narcissism is assessed on a continuum, we refer to those who score higher on the continuum as "narcissists" for brevity.

Table 1 Variables predicting communication frequency and social media frequency, controlling for sex.

Variables	Communication frequency				Social media frequency			
	\overline{F}	R^2	β	t	F	R^2	β	t
CN	12.31**	0.23	0.47	4.90**	1.13	0.09	0.26	1.34
	(8.67**)	(0.07)	(0.27)	(4.16**)	(7.66**)	(0.24)	(0.46)	(3.59*)
AN	1.85	0.04	20	1.80^{\dagger}	0.33	0.03	0.09	0.45
	(14.89**)	(0.12)	(0.35)	(5.46**)	(7.81**)	(0.24)	(0.48)	(3.62**)
VN	1.54	0.04	0.18	1.62	0.35	0.03	0.10	0.50
	(1.81)	(0.02)	(0.13)	(1.90^{\dagger})	(1.86)	(0.07)	(0.18)	(1.30)

Note. Sample A (n = 86) is reported first and Sample B (n = 226) is reported second in parentheses.

Caucasian, 17 Hispanic, 9 Asian/Asian American, 2 Black/African American, and 7 did not specify.

2.1.2. Sample B

We recruited another 255 persons via Prolific Academic, but restricted participants to the United States and to be working outside the home during the quarantine. Of these participants, 226 reported being essential workers and were included in analyses ($M_{age} = 31.82$, $SD_{age} =$ 9.06). There were 106 females, 118 males, and 2 trans participants. Of these participants, 156 were Caucasian, 13 Hispanic, 17 Asian/Asian American, 17 Black/African American, 3 Native American/Pacific Islander, and 20 did not specify.

2.2. Procedure

After informed consent, participants indicated agreement to the prompt, "Over the past few weeks (during the month of April 2020), have you been working at your job outside of the home?" Participants who selected yes were asked additional information (see supplemental material for work position information). Participants were then asked about their communication behavior during the pandemic, including social media activity. They indicated how supported or validated they felt when they shared about their work experiences. Lastly, participants completed a state narcissism measure and self-reported their demographics. Finally, participants completed trait measures of CN, AN, and VN.2

2.3. Materials

2.3.1. Communication frequency

Participants rated four statements that asked how often they used different forms of communication to share about their work (1 = never, 5 = very frequently). This included communication on the phone, over video, in person, and on social media. Items were summed to create a total Communication Frequency score (sample A, $\alpha = 0.88$; sample B, α = 0.85).

2.3.2. Perceived validation

When participants rated the frequency of a communication mode as higher than "never," they then rated how supported and validated they felt in that communication (1 = never, 5 = always). Items were summed to create a total Perceived Validation score (sample A, $\alpha = 0.80$; sample B, $\alpha = 0.84$).

2.3.3. Social media frequency

When participants rated the frequency of social media communication higher than "never," they then rated nine more specific social media behaviors, such as sending private messages, posting personal messages, or posting personal update photos related to work efforts. Participants rated how frequently they performed each activity (1 = never to 5 = never to 5very frequently). Items were summed to create a total Social Media Frequency score (sample A, $\alpha = 0.89$; sample B, $\alpha = 0.94$).

2.3.4. Communal narcissism (CN)

The Communal Narcissism Inventory (Gebauer et al., 2012) measured participants' communal narcissism. Participants rated 16 statements from 1 (strongly disagree) to 5 (strongly agree). For example, "I will be known for the good deeds I will have done." Items were summed to create a total CN score (sample A, $\alpha = 0.92$; sample B, $\alpha =$ 0.94).

2.3.5. Agentic narcissism (AN)

The shortened Narcissistic Personality Inventory (Gentile et al., 2013) measured participants' agentic narcissism. Participants rated 13 statements from 1 (strongly disagree) to 5 (strongly agree). For example, "I will usually show off if I get the chance." Items were summed to create a total AN score (sample A, $\alpha = 0.88$; sample B, $\alpha = 0.87$).

2.3.6. Vulnerable narcissism (VN)

The Hypersensitive Narcissism Scale (Hendin & Cheek, 1997) measured participants' vulnerable narcissism. Participants rated ten statements from 1 (very untrue of me) to 7 (very true of me). For example, "I feel that I have enough on my hands without worrying about other peoples' troubles." Items were summed to create a total VN score (sample A, $\alpha = 0.82$; sample B, $\alpha = 0.79$).

2.3.7. State narcissism

For state measures, we modified the State Narcissism Scale (Giacomin & Jordan, 2016). This included 13 items to measure state communal narcissism (SCN), 15 items reflective of state agentic narcissism (SAN), and 7 items reflective of state vulnerable narcissism (SVN). We also included 2 items reflective of state self-esteem (SSE). All items were rated from 1 (strongly disagree) to 7 (strongly agree). Items for each subscale were summed to create total state scores. (For SCN: $\alpha_{sampleA} =$ 0.92, $\alpha_{sample B} = 0.92$; for SAN: $\alpha_{sample A} = 0.91$, $\alpha_{sample B} = 0.89$; for SVN: $\alpha_{sampleA} = 0.70$; $\alpha_{sample\ B} = 0.73$; and for SSE: $\alpha_{sampleA} = 0.88$; sample B, $\alpha_{sample B} = 0.82$). This measure is detailed in Supplemental Table 1.

3. Results

To examine the extent to which trait narcissism predicted higher likelihood to share about work during COVID-19, we ran a series of linear regressions with trait narcissism entered as predictor variables and communication frequency and social media frequency entered as outcome variables. These analyses controlled for sex (see Supplemental Table 2 for correlations between sex, age, and narcissism variables). Table 1 summarizes these results. CNs reported frequent communication about their work efforts during COVID-19; for the US sample, this was

[†] $p \le .10$.

 $p \le .05.$

 $p \le .01$.

 $^{^{2}}$ Because trait narcissism tends to be stable (e.g., Brunell & Buelow, 2019; Del Rosario & White, 2005), these questionnaires were assessed last.

Table 2
Variables predicting state self measures, controlling for sex.

Variables	SCN				SAN				SVN				SSE			
	F	\mathbb{R}^2	β	t	F	\mathbb{R}^2	β	t	F	\mathbb{R}^2	β	t	F	\mathbb{R}^2	β	t
Communication frequency	15.28**	0.27	0.47	4.97**	**09'9	0.14	0.29	2.87**	2.57	90.0	0.24	2.26*	2.58	90.0	0.12	1.23
	(17.22**)	(0.13)	(0.31)	(4.94**)	(30.05**)	(0.21)	(0.36)	(6.08**)	(0.60)	(0.01)	(0.07)	(1.08)	(3.95*)	(0.03)	(0.12)	(1.75^{\dagger})
Social media frequency	1.36	0.10	0.32	1.62	1.82	0.13	0.36	1.89	0.62	0.05	0.22	1.09	0.14	0.01	-0.05	-0.22
	(12.07**)	(0.33)	(0.54)	(4.55**)	(15.08**)	(0.38)	(0.51)	(4.46**)	(2.08)	(0.08)	(0.28)	(2.03*)	(2.12)	(0.08)	(0.22)	(1.54)
Perceived validation	15.00**	0.34	0.52		9.18**	0.24	0.41	3.54**	0.43	0.02	0.12	0.92	3.99*	0.12	0.25	1.99
	(11.17**)	(0.14)	(0.31)		(18.05**)	(0.21)	(0.22)	(2.77**)	(2.48^{\dagger})	(0.04)	(-0.19)	(-2.22*)	(6.10**)	(0.08)	(0.23)	(2.76**

Note. Sample A (n=86) is reported first and Sample B (n=226) is reported second in parentheses

also true of their frequency of social media use. ANs were not more frequent communicators in the global sample, but did more frequently communicate in the US sample, both generally and on social media more specifically. We observed no significant communication patterns with VN

To examine if sharing about work and feeling validated about one's communication predicted changes in state measures, we ran a series of linear regressions with communication frequency, social media frequency, and perceived validation entered as predictor variables and the state measures entered as outcome variables. These analyses controlled for sex. See Table 2 for a summary of the results. Both SCN and SAN were higher when communication frequency and perceived validation were higher. In the US sample, higher social media use predicted higher SCN, SAN, and, SVN; but higher perceived validation predicted lower SVN. Finally, we observed increased SSE from perceived validation in both samples.

4. Discussion

We predicted that a) narcissists would communicate more about their helping efforts during the pandemic and b) this communication (including social media), along with perceived validation, would increase state narcissism measures. The results supported our first hypothesis with respect to CN and AN. The results also demonstrated that more communication about one's work during the pandemic was associated with increased SCN and SAN. Results pertaining to the VN were less consistent but suggested that SVN could change with posting experiences to social media and perceiving validation from others. More communication about one's work was not associated with reports of SSE, but increases in perceived validation were.

CNs perceive themselves to be the "best at" being helpful, doing good deeds, caring for others, and increasing their well-being (Gebauer et al., 2012). Serving as an essential worker during a pandemic gave them a mode for standing out when they might not otherwise; social media sites provided the platform for shining as a hero and inviting praise. Thus, CNs were more likely to communicate about their work. Likewise, workers experienced an associated boost in their SCN from telling others about their work and receiving praise.

ANs tend not to shine in communal contexts. However, they likely thrived from attention they received and the status boost to "hero." This is likely why they shared about their work; hero status during a pandemic provided a mechanism to receive admiration from others and feel distinct. Likewise, the communication about their work and the admiration they received predicted higher SAN, reflecting their insatiable desire to grow in self-importance.

VNs are heavily focused on their inner worlds and their own troubles. While they may want to be seen as unique, such status brings great anxiety. Perhaps working as an essential worker made VNs feel more exposed to others' judgments or anxious about their own well-being, making them less likely to risk drawing further attention to themselves. In fact, in the US sample, frequently using social media predicted increases in SVN, likely reflecting this intensified self-consciousness. In comparison, higher perceived validation predicted decreases in SVN and increases in SSE indicating that validation made people feel better about themselves.

A limitation of this work is that the first sample size is small and included participants from multiple cultures. The US sample is more reliable, but possibly not generalizable to other countries. A second limitation is the cross-sectional design which relies on self-report. Third, future research is needed to further validate state measures of narcissism. However, a strength of the study is the examination of narcissism in a unique context.

Inflations in state narcissism could compromise overall work performance. This would align with Meier and Semmer's (2013) work showing narcissism in the workplace is associated with incivility and counterproductive behaviors. Future research should further investigate

the impact of narcissists' ego-driven helping motivations on coworker relations.

In sum, situations such as global pandemics that shift social perceptions may be used by narcissists to benefit themselves. Furthermore, actions within such unique contexts have implications for people's state narcissism levels which may help pinpoint ways to address narcissists' insecurities.

CRediT authorship contribution statement

Stephanie D. Freis: Conceptualization, Methodology, Formal analysis, Data curation, Resources, Project administration, Visualization, Writing - original draft, Writing - review & editing. **Amy B. Brunell:** Conceptualization, Methodology, Funding acquisition, Resources, Project administration, Investigation, Writing - original draft, Writing - review & editing.

Acknowledgements

This work was supported in part by research funds at Ohio State University – Mansfield campus.

Data availability statement

The data that support the findings of this study are available from the corresponding author, Stephanie D. Freis, upon reasonable request.

Declaration of competing interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.paid.2020.110533.

References

Brown, A. A., & Brunell, A. B. (2017). The "modest mask"? An investigation of vulnerable narcissists' implicit self-esteem. Personality and Individual Differences, 119, 160–167. https://doi.org/10.1016/j.paid.2017.07.020.

- Brunell, A. B., & Buelow, M. T. (2019). Using the bogus pipeline to investigate trait narcissism and well-being. *Personality and Individual Differences*, 151, 1–6. https://doi.org/10.1016/j.paid.2019.109509.
- Del Rosario, P. M., & White, R. M. (2005). The narcissistic personality inventory: Test-retest stability and internal consistency. *Personality and Individual Differences*, 39, 1075–1081. https://doi.org/10.1016/j.paid.2005.08.001.
- Freis, S. D. (2018). The Distinctiveness Model of the Narcissistic Subtypes (DMNS): What binds and differentiates grandiose and vulnerable narcissism. In A. T. Hermann, A. B. Brunell, & J. D. Foster (Eds.), Handbook of trait narcissism: Key advances, research methods, and controversies. Springer. https://doi.org/10.1007/978-3-319-92171-6-4
- Gebauer, J. E., & Sedikides, C. (2018). Communal narcissism: Theoretical and empirical support. In A. T. Hermann, A. B. Brunell, & J. D. Foster (Eds.), Handbook of trait narcissism: Key advances, research methods, and controversies. Springer. https://doi. org/10.1007/978-3-319-92171-6 4.
- Gebauer, J. E., Sedikides, C., Verplanken, B., & Maio, G. R. (2012). Communal narcissism. *Journal of Personality and Social Psychology*, 103(5), 854. https://doi.org/
- Gentile, B., Miller, J. D., Hoffman, B. J., Reidy, D. E., Zeichner, A., & Campbell, W. K. (2013). A test of two brief measures of grandiose narcissism: The Narcissistic Personality Inventory–13 and the Narcissistic Personality Inventory-16. *Psychological Assessment*, 25(4), 1120. https://doi.org/10.1037/a0033192.
- Gentile, B., Twenge, J. M., Freeman, E. C., & Campbell, W. K. (2012). The effect of social networking websites on positive self-views: An experimental investigation. *Computers in Human Behavior*, 28(5), 1929–1933. https://doi.org/10.1016/j. chb.2012.05.012
- Giacomin, M., & Jordan, C. H. (2016). Self-focused and feeling fine: Assessing state narcissism and its relation to well-being. *Journal of Research in Personality*, 63, 12–21. https://doi.org/10.1016/j.jrp.2016.04.009.
- Hendin, H. M., & Cheek, J. M. (1997). Assessing hypersensitive narcissism: A reexamination of Murrays Narcism Scale. *Journal of Research in Personality*, 31, 588–599. https://doi.org/10.1006/jrpe.1997.2204.
- Kircaburun, K., Demtrovics, Z., & Tosuntas, S. B. (2019). Analyzing the links between problematic social media use, dark triad traits, and self-esteem. *International Journal* of Mental Health and Addiction, 17, 1496–1507.
- Krizan, Z., & Herlache, A. D. (2018). The Narcissism Spectrum Model: A synthetic view of narcissistic personality. Personality and Social Psychology Review, 22(1), 3–31. https://doi.org/10.1177/1088868316685018.
- Meier, L. L., & Semmer, N. K. (2013). Lack of reciprocity, narcissism, anger, and instigated workplace incivility: A moderated mediation model. European Journal of Work and Organizational Psychology, 22(4), 461–475.
- Thomaes, S., Brummelman, E., & Sedikides, C. (2018). Narcissism: A social-developmental perspective. In V. Zeigler-Hill, & T. K. Shackelford (Eds.), The SAGE handbook of personality and individual differences: Applications of personality and individual differences (pp. 377–396). Sage Reference. https://doi.org/10.4135/9781526451248.n16.
- Wermiel, A. (2020, April 13). The unsung heroes of the coronavirus pandemic: NYC's essential workers. New York Post.