Further basic evidence for the dark-ego-vehicle principle: Higher pathological narcissism is associated with greater involvement in feminist activism

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Abstract

According to the *dark-ego-vehicle principle* (DEVP), individuals with so-called dark personalities (e.g., individuals with high narcissistic traits) are attracted to political and social activism not for the achievement of prosocial goals but to repurpose the activism to satisfy their specific ego-focused needs. In this pre-registered study, we aimed at replicating and extending previous empirical evidence for the DEVP by examining the associations of pathological narcissism with involvement in feminist activism. A diverse US sample ($N=458$) completed online measures of the Pathological Narcissism Inventory and several covariates (i.e., altruism, self-identification as a feminist, and age). Paralleling previous research, higher pathological narcissistic grandiosity was found to be statistically significantly related to greater involvement in feminist activism. Unexpectedly, gender did not moderate this relationship. Also, higher pathological narcissism was related to stronger self-identification as a feminist; however, pathological narcissistic grandiosity explained some variance in the involvement in feminist activism over and above feminist self-identification. In exploratory secondary analyses, we found that higher pathological narcissism was associated with specific feminist conversational interaction behaviors (e.g., correcting other's non-feminist language). The limitations (e.g., the relevance of other dark personality traits beyond narcissism) and the theoretical implications for the DEVP are discussed. Overall, the findings of the present study are further support for the DEVP.

Keywords Activism · Altruism · Dark triad of personality · Narcissism

Political and social activism comes in many forms (e.g., donations, volunteer work, petitions, demonstrations, protesting, civil disobedience, etc.) and typically focusses on a specific issue or cause (e.g., women's rights, gender equality, discrimination, environmental issues, peace etc.) (Norris, 2009). Individuals may engage in political or social activism for different reasons: Some people will fight for a specific cause because they are members of a disadvantaged group and directly affected by the cause. For example, in the #MeToo movement, women spoke out against their perpetrators because they were survivors of sexual violence (Sisak & Hays,

2020, Feb 25). Other individuals may join a specific movement because they want to improve the well-being of others or the collective (i.e., for pro-social motives; Harré, 2007).

Some people, however, might participate in political or social activism (merely) to satisfy their own ego-focused needs. This notion was recently investigated by Bertrams and Krispenz (2023) in the context of *anti-sexual-assault activism*. The authors argued that individuals high in narcissism may be attracted to this form of activism because it allows them to manipulate and exploit others due to their lack of empathy, sense of entitlement, and arrogance. For example, an individual with high narcissistic traits may become a leader or figurehead of an anti-sexual assault movement to gain immaterial and/or monetary benefits (e.g., attention, status, fame etc.). In line with their assumptions, the authors found that higher narcissism was related to greater involvement in anti-sexual-assault activism. Results further showed that this relationship was primarily driven by extraverted narcissism (a facet of narcissism that is associated with feelings of narcissistic grandiosity; Miller

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et al., 2016) and was more pronounced in women than men. From these results, Bertrams and Krispenz (2023) derived the so called *dark-ego-vehicle principle* (DEVP; see also Krispenz & Bertrams, 2023) which states that for some individuals with pronounced dark personality traits (e.g., individuals high in narcissism) political or social activism may function as a vehicle for the satisfaction of their own ego-centered needs (rather than the pursuit of pro-social goals). However, as the DEVP is not yet an elaborated theory, it is unclear whether the results of Bertrams and Krispenz (2023) refer to a reliably occurring phenomenon. Therefore, the present study mainly aims at investigating the validity of the DEVP by replicating those findings in the wider context of feminist activism and by focusing on pathological narcissism (i.e., a different conceptualization of narcissism).

Feminist activism

Women's rights activism has led to many important historical accomplishments in the fight for gender equality and against violence towards woman and girls (Molyneux et al., 2021). Over the course of time, feminist activism has had different priorities and several currents across the world. Therefore, we rely on the broad definition of Szymanski (2004), according to which feminism refers to "a movement that advocates for economic, political, and social equality among women, as well as between men and women" (p. 145) and includes different forms (e.g., cultural and socialist feminism). Hence, feminist activism also involves issues beyond sexual assault, for example the fight for social justice, equal pay, and access to higher education. Therefore, we consider feminist activism a more comprehensive approach to the women's rights movement than anti-sexual-assault activism.

Narcissism

Narcissism is one of the personality traits represented in the Dark Triad (next to Machiavellianism and psychopathy) and the Dark Tetrad (Dark Triad plus sadism) (Paulhus, 2014). In the contemporary literature, narcissism is either conceptualized as a pathological (e.g., Pincus, 2023) or a non-clinical personality trait (e.g., Foster & Raley, 2023). Going beyond the approach of Bertrams and Krispenz (2023) and the typical focus on *non*clinical dark personalities in Dark Triad/Tetrad research (Furnham et al., 2013), the present study applies a *pathological* conceptualization and measure of narcissism using the Pathological Narcissism Inventory (PNI; Pincus, 2023; Pincus et al., 2009; Wright et al., 2010). Pathological narcissism refers to the two phenotypic themes of narcissism: narcissistic

grandiosity and narcissistic vulnerability (Pincus, 2023; Pincus et al., 2009; Wright et al., 2010). *Narcissistic grandiosity* is characterized by "entitled attitudes, an inflated self-image without requisite accomplishments and skills, as well as engagement in regulatory fantasies of unlimited power, superiority, perfection, and adulation" and "interpersonally exploitative acts, lack of empathy, intense envy, aggression, and exhibitionism" (Wright et al., 2010, p. 468). In contrast, the *vulnerability aspect of pathological narcissism* comprises "experiences of helplessness, emptiness, low self-esteem, and shame" and "avoidance of interpersonal relationships because of a hypersensitivity to rejection and criticism rooted in intense needs for admiration and recognition" (Wright et al., 2010, p. 468). We consider *pathological narcissistic grandiosity* as a particularly useful conceptualization of narcissism within the research framework of the DEVP as it implies specific personality characteristics that may be of high relevance in understanding specific problematic expressions of political and social activism.

The dark-ego-vehicle principle

According to the DEVP, some individuals with pronounced dark personality traits (e.g., individuals high in narcissism) are attracted to political or social activism because they can use it as a vehicle for the satisfaction of their self-centered motives (rather than the pursuit of pro-social goals). While we plan to expand our research on the other dark personality traits (i.e., Machiavellianism, psychopathy, sadism) in the future, the present study exclusively focusses on investigating the DEVP in light of pathological *narcissism*. In particular, we argue that political and social activism (such as feminist activism) is an attractive vehicle for individuals with high narcissistic traits because it provides them with opportunities for the gain of social status, positive self-presentation and displays of moral superiority, the domination of others, and the engagement in social conflicts and aggression. Indirect empirical support for the DEVP in relation to the dark trait of narcissism can be found in studies which show that individuals high in narcissism actively seek positions of leadership and power (Nevicka, 2018), social status (Mahadevan & Jordan, 2022), and fame (Greenwood et al., 2013). Further, narcissism has been related to the moral elevation above others (i.e., virtue signaling; Krispenz & Bertrams, 2023; Ok et al., 2021) and lower empathy (Bushman & Thomaes, 2011) as well as manipulative and exploitative tendencies (Hepper et al., 2014). Interestingly, Konrath et al. (2014) found the exploitative aspect of narcissism to be related to the recognition of negative emotions in others (e.g., their anxiety). The authors argued that this ability might give

individuals high in narcissism the ability to successfully manipulate others by exploiting their vulnerabilities. Further, a meta-analysis revealed that narcissism is associated with externalizing malevolent behaviors such as all forms of aggression (i.e., indirect, direct, displaced, physical, verbal, and bullying; Kjærvik & Bushman, 2021). Moreover, evidence shows that narcissistic individuals may pretend to be altruistic while lacking authentic prosocial motivation (Greenwood et al., 2013; Konrath et al., 2016).

Note that the DEVP does not mean that activism is per se narcissistic. The DEVP rather says that some forms of political activism can be attractive for individuals high in narcissism; however, people also get involved in political activism due to their altruistic motives (Krispenz & Bertrams, 2023). Assuming that the DEVP is valid, it would have serious practical implications for activist movements. Many activists pro-socially engage in the protection of minority groups against external oppression (e.g., violence, measures of inequality, the restriction of rights; Swank & Fahs, 2013). Attacks on the minority groups can seriously harm the well-being and health of the members of those minority groups (e.g., Meyer, 2003). If the DEVP is valid, minority groups should be made aware of the narcissistic "enemies" from within their activist movement as these individuals could hijack the cause thereby reducing the success of the activism in many ways. As individuals high in narcissistic traits typically desire fame, distinction, elevated social status, and high social importance (Greenwood et al., 2013; Mahadevan & Jordan, 2022), they can be assumed to strive for influential positions that involve social visibility and outreach as well as access to financial and other resources. However, while pretending to be prosocial, individuals with high narcissistic traits tend to have low empathy and to be primarily interested in satisfying their self-centered needs (Hepper et al., 2014; Jankowiak-Siuda & Zajkowski, 2013; Konrath et al., 2016). Therefore, instead of striving for reasonable solutions, individuals with high narcissistic traits will rather be interested in keeping the perception of problems going to maintain their highlighted position. Also, individuals with high narcissistic traits may use the resources of the activist movements for their own private purposes, thereby causing irreparable financial and reputational harm to the activist movement. For example, individuals high in narcissistic traits may use donations made to the activist movement and spend them on personal items due to their sense of entitlement. The perception of such narcissistic behaviors within an activist movement might then lead to dwindling support for the activist movement by the public and – in the worst case – could even be wielded against the respective movement.

At present, however, the DEVP is not an elaborated theory as it is yet unclear whether it refers to reliably occurring phenomenon (i.e., a robust, stable, reproducible empirical generalization of a pattern in empirical data; c.f., Borsboom et al., 2021). Therefore, we currently see the DEVP merely as the starting point of theory development at which "a solid foundation is essential to successful theory construction" (Borsboom et al., 2021, p. 760) in the sense that the respective phenomenon must be clearly identified first.

The present research

Accordingly, the present study foremost aims at investigating the validity of the DEVP by conceptually replicating the findings of Bertrams and Krispenz (2023) in the wider context of feminist activism and by applying a different conceptualization and measure of narcissism (i.e., pathological narcissism). Based on the assumptions and recent findings of Bertrams and Krispenz (2023), we expected that higher pathological narcissistic grandiosity (but not vulnerability) is related to greater involvement in feminist activism. This prediction was based on the following rational: Like anti-sexual-assault activism, feminist activism has moral-based elements (e.g., equality and solidarity; Cole & Luna, 2010; Szymanski, 2004). Further, different attitudes toward feminism exist (Barroso, 2020). Both of these conditions (i.e., integrated morality and attitudinal diversity within society) may be crucial to attract individuals high in pathological narcissistic grandiosity to this type of activism – enabling them to experience and signal their self-accredited moral superiority above others (i.e., non-feminists), to manipulatively exert moral pressure, to legitimize acts of aggression, and so forth. Further, pathological narcissistic grandiosity implies personality characteristics that may be of high relevance in understanding specific problematic expressions of political and social activism. In contrast to more adaptive (nonclinical) conceptions of grandiose narcissism, pathological narcissistic grandiosity has been found to be related to hostility, suspiciousness, cognitive/perceptual dysregulation, emotional lability, irresponsibility, eccentricity, and rigid perfectionism (Miller et al., 2014) – traits which are presumably associated with cognitions and behaviors that could severely undermine the declared prosocial goals of activism.
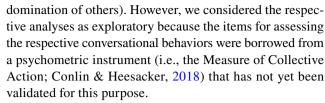
We also assumed that the association between pathological narcissistic grandiosity and involvement in feminist activism would be moderated by gender (i.e., be greater for women than for men) because Bertrams and Krispenz (2023) found the relationship between narcissism and anti-sexual-assault activism to be more pronounced for women than men. This finding shows that competing females with high narcissistic traits may easily banish males high in narcissism from the desired prominent positions in an activist movement. For instance, male activists high in narcissism

could be accused of so-called "mansplaining" or patronizing behaviors and, thus, be morally discredited. The same reasoning may apply to feminist activism as we consider feminist activism a more comprehensive approach to the women's rights movement than anti-sexual-assault activism.

Following the recommendations of Simmons et al. (2011), we also wanted to analyze if the relationship between pathological narcissistic grandiosity and involvement in feminist activism would still be found when the following, potentially influential covariates were statistically controlled for. This approach was chosen to avoid the reporting of false-positive results for our pre-registered main hypothesis which requires the reporting of alternative analyses excluding and including relevant covariates. As a first covariate and in line with the recommendations of Pincus (2023), we included *pathological narcissistic vulnerability* in the analysis since this form of narcissism is substantially correlated with pathological narcissistic grandiosity (Pincus, 2023; Wright et al., 2010). Additionally, we controlled for individuals' *altruism*. In the context of activism, altruism may reflect the honest desire to address societal problems, which corresponds to the activists' typical portrayal of their political goals (Cole & Luna, 2010). Accordingly, previous research (Bertrams & Krispenz, 2023; Strauss Swanson & Szymanski, 2021) found higher altruism to be related to greater involvement in activism. Furthermore, altruism may also be (inauthentically) displayed by narcissistic individuals (Konrath et al., 2016). Additionally, we included *self-identification as a feminist* as a covariate since it has been found to be strongly correlated with involvement in feminist activism (Szymanski, 2004) and because it may be another important reason (alongside altruism and narcissism) why individuals engage in feminist activism. Finally, we statistically controlled for *age*, as younger people apparently tend to be both more narcissistic and more involved in activism than older people (Bertrams & Krispenz, 2023; Greenwood et al., 2013).

For exploratory reasons and as a pre-registered secondary analysis, we also investigated how pathological narcissistic grandiosity is related to specific feminist conversational interaction behaviors. Because individuals high in narcissism are usually inclined to dominate others (Brown & Zeigler-Hill, 2004; Pincus et al., 2009), we expected a positive relationship between pathological narcissistic grandiosity and the domination of others through feminist conversational interaction behaviors. We believed that pathological narcissistic grandiosity is somewhat related to one's own use of feminist language (i.e., no domination of others), but more strongly related to arguing with strangers about their non-feminist comments (i.e., moderate domination of others), and most strongly related to the inclination to correct others' non-feminist language (i.e., strong

domination of others). However, we considered the respective analyses as exploratory because the items for assessing the respective conversational behaviors were borrowed from a psychometric instrument (i.e., the Measure of Collective Action; Conlin & Heesacker, 2018) that has not yet been validated for this purpose.

Finally, as another pre-registered secondary analysis, we investigated the relationships between involvement in feminist activism and the seven sub-facets underlying pathological narcissistic grandiosity and pathological narcissistic vulnerability (Pincus, 2023; Wright et al., 2010). Also, we included the respective interactions of these sub-facets with gender in the model. Since this was done to inform future research, we did not have any specific predictions.

Method

Open science and compliance with ethical standards

The study was pre-registered at https://aspredicted.org prior to the data collection. The pre-registration, complete materials, and raw data are available at https://researchbox.org/756 (note that the Prolific IDs have been deleted from the raw data files to maximally protect the participants' personal rights). This study was approved by the local ethics commission of the University of Bern (Switzerland) (no. 2022-05-00006). All participants provided informed consent prior to participating.

Participants

Using G*Power 3.1 (Faul et al., 2009), we calculated the sample size required for our main analysis (input parameters: H_0 $\rho^2 = 0$, H_1 $\rho^2 = .04$, $\alpha = .05$ [two-tailed], $1 - \beta = .80$, number of predictors = 8). The a priori power analysis was based on an average effect size of $\bar{r} = 0.21$ which mirrors the average published effect in personality and social psychology (Richard et al., 2003). Analogous to Brysbaert (2019), we considered an expected effect of this size to be a reasonable starting point for empirical studies in an under-researched area. Results revealed a minimum sample size of $N = 433$ participants. For the final sample, we nevertheless aimed at $N = 500$ to compensate for pre-registered data exclusions. The participants were recruited via the research-oriented crowdsourcing platform Prolific (https://www.prolific.co). We used Prolific's option for selecting a representative sample of US nationals.

Overall, the survey participation link was accessed 539 times. According to the pre-registered criteria, and prior to the analyses, we excluded 81 cases due to incomplete data ($n = 36$), the presence of duplicates ($n = 25$), failed attention checks ($n = 17$), and an indication of a gender other than

female or male ($n = 3$).[1] Thus, the final sample consisted of $N = 458$ participants. All socio-demographic data for the sample is displayed in Table 1.

Procedure

The survey was announced as an "Attitudes and Behaviors Study." All instructions and measures were provided online via the survey software Qualtrics. In addition to the socio-demographic data (Table 1), the participants completed the measures described below. The items measuring each variable were shown on a single page. The participants completed the measures in the same order as we present them in the next section. However, per random assignment, the participants either first completed the measure of pathological narcissism or the measure of altruism. At the end of the data collection process, the participants were thanked and debriefed. Each participant was compensated with £1.70.

Measures

Attention check

The participants were instructed to continue without responding to the item "I breathe oxygen every day" on a seven-point scale from *strongly disagree* (1) to *strongly agree* (7) (Jones & Paulhus, 2014). Any response to this item was considered as a case of failed attention and the data of the responding participants was excluded from the data analyses adhering to the preregistered criteria for data exclusions.

Pathological narcissism

We applied the Pathological Narcissism Inventory (PNI; Pincus, 2023; Pincus et al., 2009; Wright et al., 2010) for the assessment of narcissism. The 52 items of this measure are answered on six-point scales from *not at all like me* (0) to *very much like me* (5). We computed the two subscale mean scores for *pathological narcissistic grandiosity* (18 items; e.g., "I often fantasize about being admired and respected")

and *pathological narcissistic vulnerability* (34 items; e.g., "It irritates me when people don't notice how good a person I am"). In addition, we computed a total mean PNI score using all 52 items. For the two subscales scores and the total score, higher values represent higher narcissism. All three scales demonstrated excellent internal consistencies (PNI grandiosity: McDonald's $\omega = .90$; PNI vulnerability: McDonald's $\omega = .95$; PNI total score: McDonald's $\omega = .96$).

For a supplementary analysis, we additionally computed mean scores for the seven PNI sub-scales (1) exploitativeness (5 items, McDonald's $\omega = .68$); (2) grandiose fantasy (7 items, McDonald's $\omega = .92$); (3) self-sacrificing self-enhancement (6 items, McDonald's $\omega = .82$); (4) contingent self-esteem (12 items, McDonald's $\omega = .94$); (5) hiding the self (7 items, McDonald's $\omega = .81$); (6) devaluing (7 items, McDonald's $\omega = .86$); (7) entitlement rage (8 items, McDonald's $\omega = .89$).

Altruism

We used the Self-Report Altruism Scale (Rushton et al., 1981) to assess altruism. The scale consists of 20 items such as "I have given money to a charity." The items are responded to on five-point scales from *never* (1) to *very often* (5). Higher mean scores represent a higher tendency to engage in altruistic behavior. The scale showed good internal consistency (McDonald's $\omega = .88$).

Involvement in feminist activism

The participants completed the Involvement in Feminist Activities Scale (IFAS; Szymanski, 2004) which comprises 17 items (e.g., "I participate in feminist demonstrations, boycotts, marches, and/or rallies") and seven-point response scales from *very untrue of me* (1) to *very true of me* (7). The higher the total IFAS mean score the higher an individual can be considered to be involved in feminist activism. The IFAS showed excellent internal consistency (McDonald's $\omega = .95$).

Feminist conversational interaction behaviors

We selected three items from the Measure of Collective Action (Conlin & Heesacker, 2018) that are directly related to conversational interaction behaviors. We assume that these items imply increasing degrees of the inclination to dominate other people. The items were "I make a conscious attempt to use feminist language relating to gender" (i.e., no domination of others), "If, in a group of strangers (i.e., people who I haven't known for long or well), a non-feminist comment is made, I will make a point of arguing against it" (i.e., moderate domination of others), and "I will correct other's use of non-feminist language" (i.e., strong

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[1] We had pre-registered this exclusion criterion for methodological reasons. In our experience, only very few participants usually indicate to be neither female nor male. This typically leads to very uneven numbers of participants in the different gender categories, which is also true for the present study (female: $n = 242$ vs. male: $n = 216$ vs. others: $n = 3$). However, according to Tabachnick and Fidell (2007), a sample allocation ratio of 9 to 1 can be considered the highest acceptable unevenness between the categories of a variable that does not provoke deflated statistical relationships with other variables. Hence, the sample allocation ratio for gender was expected to not be within the acceptable range.

Table 1 Sample Demographics

	N	M	SD	%
Age (years)	458	46.44	16.11	
Gender				
Female	243			53.1
Male	215			46.9
Sexual orientation				
Heterosexual, straight	399			87.1
Homosexual, gay/lesbian	18			3.9
Bisexual	34			7.4
Other	7			1.5
Marital status				
Single (never married)	146			31.9
Married (first marriage)	169			36.9
Remarried	37			8.1
Separated	7			1.5
Divorced	44			9.6
Widowed	9			2.0
Long-term domestic partner (at least one year)	46			10.0
Political orientation on left–right spectrum[a]	458	3.38	1.71	
Political ideology				
Leftist	43			9.4
Liberal	176			38.4
Moderate	126			27.5
Conservative	92			20.1
Libertarian	19			4.1
Populist	2			0.4
Political party identification				
Democratic	212			46.3
Green	6			1.3
Libertarian	14			3.1
Republican	88			19.2
Socialist	20			4.4
None	82			17.9
Other	36			7.9
Ethnicity[b]				
American Indian or Alaska Native	5			1.1
Asian or Asian-American	34			7.4
Black or African-American	60			13.1
Hispanic or Latino	28			6.1
Native Hawaiian or Pacific Islander	0			0
White	349			76.2
Other	2			0.4
Native language				
English	413			90.2
English and another language	20			4.4
Another language	25			5.5
Highest educational level				
Professional degree (JD, MD)	10			2.2
Doctoral degree	7			1.5
Master's degree	75			16.4
Bachelor's degree in college (four-year)	160			34.9
Associate degree in college (two-year)	54			11.8

Table 1 (continued)

	N	M	SD	%
Some college but no degree	94			20.5
High school graduate	54			11.8
Less than high school degree	3			0.7
Other	1			0.2
Household income[c]				
Less than $10,000	15			3.3
$10,000 to $19,999	29			6.3
$20,000 to $29,999	47			10.3
$30,000 to $39,999	42			9.2
$40,000 to $49,999	46			10.0
$50,000 to $59,999	41			9.0
$60,000 to $69,999	37			8.1
$70,000 to $79,999	39			8.5
$80,000 to $89,999	33			7.2
$90,000 to $99,999	27			5.9
$100,000 to $149,999	63			13.8
$150,000 or more	39			8.5

[a]Selection on a seven-point scale from *extremely left-wing* (1) to *extremely right-wing* (7)

[b]The participants could select multiple choices

[c]Household income includes the entire household income (in previous year) before taxes

domination of others). The participants responded to each item either with *no* (coded for the analyses with 0) or *yes* (coded for the analyses with 1). We also computed a sum score by summing up the yes responses, resulting in sum scores from 0 to 3. This three-item measure demonstrated good internal consistency (McDonald's $\omega = .82$).

Self-identification as a feminist

We used the Self-Identification as a Feminist Scale (Szymanski, 2004). This scale consists of four items (e.g., "Feminist values and principles are important to me") which are answered on five-point scales from *strongly disagree* (1) to *strongly agree* (5). A higher mean score represents a higher self-identification as being a feminist. The scale showed excellent internal consistency (McDonald's $\omega = .93$).

Data analysis strategy

In the present study, we pre-registered the assumption that higher pathological narcissistic grandiosity would be related to higher involvement in feminist activities. Further, we expected this relationship to be more pronounced for women compared to men. To test these hypotheses, we calculated a multiple linear regression predicting involvement in feminist activism by pathological narcissistic grandiosity, gender, and the interaction of pathological narcissistic grandiosity × gender. Gender was coded female = 0 vs. male = 1. Note that transsexual and non-binary participants could not be included into their own gender categories due to their small numbers ($n = 3$). As the tested model comprised an interaction term, the continuous variables were *z*-standardized. For this analysis, we applied the conventional 0.05 significance level (two-tailed testing).

In a next step, we repeated the main analysis by adding several covariates (i.e., age, gender, pathological narcissistic vulnerability, pathological narcissistic vulnerability × gender, altruism, and self-identification as a feminist) in the multiple regression model. Again, we *z*-standardized all continuous variables and applied the conventional 0.05 significance level (two-tailed testing).

For exploratory reasons and as a pre-registered secondary analysis, we also investigated how pathological narcissistic grandiosity is related to specific feminist conversational interaction behaviors. In particular, we had expected a positive relationship between pathological narcissistic grandiosity and the domination of others through feminist conversational interaction behavior. To test our assumption, we first looked at the frequencies of participants' yes responses regarding their feminist conversational interaction behaviors. In a second step, we analyzed the respective bivariate correlations between pathological narcissistic grandiosity and overall feminist conversational interaction behaviors as well as the specific behaviors respectively. For these analyses, we report Pearson product-moment correlation coefficients. To further ensure the robustness of

the correlation coefficients, we also report bias-corrected and accelerated bootstrap 95% confidence intervals based on 1,000 bootstrap samples (c.f., Field, 2018). For the interpretation of the results, we used the guidelines regarding typical effect sizes in social psychology and individual differences research ($\bar{r} = .21$ and $\bar{r} = .19$; Gignac & Szodorai, 2016; Richard et al., 2003) as well as for pre-registered psychological studies (median $r = .16$; Schäfer & Schwarz, 2019).

As another pre-registered secondary analysis, we examined how the seven sub-facets underlying pathological narcissistic grandiosity and pathological narcissistic vulnerability (Pincus, 2023; Wright et al., 2010) would predict involvement in feminist activism and if any of these relationships would be moderated by gender. For this purpose, we calculated another multiple linear regression predicting involvement in feminist activities by the seven subfacets, gender, and the seven interactions between each subfacet × gender. Continuous variables were again z-standardized and the conventional .05 significance level (two-tailed testing) was applied.

Results

Preliminary analyses

The means, standard deviations, and intercorrelations among the applied measures are displayed in Table 2. As we relied on self-report questionnaires and a cross-sectional research design, we controlled for common method variance (c.f., Chang et al., 2010). The Harman single-factor test as described in Zhang et al. (2022) suggested that common method bias did not seriously affect the examined relationships in this study (i.e., more than one component emerged in an unrotated principal component analysis and the proportion of the variation explained by the first principal component was < 40%). Bootstrapped confidence intervals which are also reported in Table 2 support the robustness of the intercorrelations (see Field, 2018). In addition, all correlations held when we applied a non-parametric correlation coefficient (Spearman's rank correlation coefficient) alternatively to the Pearson product-moment correlation coefficient (for the results, see supplemental Table S1).

As expected, higher pathological narcissistic grandiosity was correlated with greater involvement in feminist activism ($r = .28$, $p < .001$, BCa 95% CI [0.19, 0.36]). Note, that greater involvement in feminist activism was also related to higher pathological narcissistic vulnerability ($r = .21$, $p < .001$, BCa 95% CI [0.11, 0.30]), higher altruism ($r = .34$, $p < .001$, BCa 95% CI [0.25, 0.42]), higher self-identification as a feminist ($r = .63$, $p < .001$, BCa 95% CI [0.59, 0.67]),

and younger age ($r = -.22$, $p < .001$, BCa 95% CI [–0.29, –0.14]). Interestingly, higher pathological narcissistic grandiosity ($r = .15$, $p < .001$, BCa 95% CI [0.06, 0.24]) as well as altruism ($r = .17$, $p < .001$, BCa 95% CI [0.08, 0.26]) were also associated with higher self-identification as a feminist.

Pre-registered main analyses

To test our pre-registered main hypothesis, we calculated a multiple linear regression predicting involvement in feminist activism by pathological narcissistic grandiosity, gender, and the interaction of pathological narcissistic grandiosity × gender. First, we looked at the variance inflation factor (VIF) to check for extreme collinearity. All VIFs were below the threshold of 10 (all VIFs < 2.09) (c.f., Field, 2018), indicating that extreme collinearity did not occur. Results of the regression analysis revealed that higher pathological narcissistic grandiosity was related to greater involvement in feminist activism ($b = 0.37$, BCa 95% CI [0.22, 0.53], $SE_b = 0.06$, $\beta = .37$, $p < .001$). However, this relationship was not moderated by gender, as indicated by the non-significant interaction term (for all results, see Table 3).

In a next step, we included the covariates (i.e., age, gender, pathological narcissistic vulnerability, pathological narcissistic vulnerability × gender, altruism, and self-identification as a feminist) in the multiple regression model. Again, VIF values for all included predictors were lower than 10 (all VIFs < 3.45). In this analysis, higher pathological narcissistic grandiosity was still found to be related to higher involvement in feminist activism ($b = 0.16$, BCa 95% CI [0.05, 0.27], $SE_b = 0.06$, $\beta = .16$, $p = .010$) over and above the variance explained by the covariates. With regard to the covariates, female gender, higher altruism, stronger self-identification as a feminist, and younger age explained unique variance with respect to higher involvement in feminist activism. Further, pathological narcissistic vulnerability was unrelated to involvement in feminist activism, and none of the interactions with gender were statistically significant (for all results, see Table 4).

Pre-registered secondary analyses

Descriptive results showed declining frequencies with increasing domination of others (intent to use feminist language: *yes* responses $n = 186$ [41%] > arguing with strangers about their non-feminist comments: *yes* responses $n = 144$ [31%] > correcting others non-feminist language: *yes* responses $n = 131$ [29%]). Bivariate correlation revealed that higher pathological narcissistic grandiosity was associated with more pronounced

Table 2 Descriptive Statistics and Zero Order Correlations

Variable	M	SD	Correlations [BCa 95% Cis]										
			01	02	03	04	05	06	07	08	09	10	11
01 Involvement in feminist activism	2.10	1.26	–										
02 FCIB – own feminist expressions	–	–	.50*** [.43, .57]	–									
03 FCIB – arguing with strangers	–	–	.48*** [.39, .55]	.53*** [.45, .61]	–								
04 FCIB – correcting other's non-feminist expressions	–	–	.51*** [.42, .58]	.59*** [.51, .66]	.67*** [.60, .75]	–							
05 Sum of FCIB	1.00	1.20	.58*** [.51, .64]	.83*** [.81, .86]	.86*** [.82, .89]	.88*** [.85, .90]	–						
06 Pathological narcissistic grandiosity	2.11	0.90	.28*** [.19, .36]	.15** [.06, .24]	.12** [.04, .21]	.16*** [.07, .26]	.17*** [.08, .26]	–					
07 Pathological narcissistic vulnerability	1.77	0.92	.21*** [.11, .30]	.14** [.05, .23]	.05 [−.05, .13]	.13** [.04, .23]	.12** [.03, .21]	56*** [.50, .63]	–				
08 Pathological narcissism total score	1.85	0.84	.26*** [.17, .36]	.16*** [.07, .25]	.09 [−.01, .17]	.16*** [.07, .26]	.16*** [.07, .26]	.79*** [.76, .83]	.95*** [.94, .96]	–			
09 Altruism	2.62	0.57	.34*** [.25, .42]	.17*** [.08, .26]	.20*** [.12, .29]	.18*** [.09, .28]	.22*** [.13, .33]	.24*** [.15, .33]	−.05 [−.14, .03]	.05 [−.05, .13]	–		
10 Self-identification as a feminist	3.04	1.17	.63*** [.59, 67]	.61*** [.56, .70]	.58*** [.52, 62]	.53*** [.48, .59]	.67*** [.63, .71]	.15** [.06, .24]	.13** [.04, .22]	.16*** [.07, .25]	.17*** [.08, .26]	–	
11 Age	46.44	16.11	−.22*** [−.29, −.14]	−.16*** [−.26, −.06]	−.11* [−.20, −.02]	−.16*** [−.25, −.08]	−.17*** [−.26, −.07]	−.32*** [−.40, −.24]	−.44*** [−.51, −.37]	−.46*** [−.52, −.38]	.23*** [.15, .32]	−.20*** [−.29, −.10]	–
12 Gender (0=female, 1=male)	–	–	−.19*** [−.27, −.11]	−.13** [−.22, −.05]	−.06 [−.15, .03]	−.06 [−.15, .04]	−.10* [−.19, −.01]	.10* [−.01, .19]	−.11* [−.20, −.03]	−.05 [−.14, .05]	.06 [−.02, .15]	−.19*** [−.28, −.11]	.01 [−.08, .11]

$N = 458$. FCIB = feminist conversational interaction behaviors. The total scores for the measures that used Likert scales were obtained by averaging the responses to the scale items. The pathological narcissism total score comprised the averaged 52 Pathological Narcissism Inventory items (Pincus et al., 2009). Displayed are Pearson product-moment correlation coefficients. BCa 95% CI = bias-corrected and accelerated bootstrap 95% confidence intervals based on 1,000 bootstrap samples

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$. The p-values refer to two-tailed testing

Table 3 Multiple Regression Analyses Regressing Involvement in Feminist Activism (Without Covariates)

	B	SE	BCa 95% CI for B		β	p	R^2	df1, df2	F	p
			LL	UL						
							.13	3, 454	22.25	<.001
Constant	0.21	0.06	0.08	0.34	–	<.001				
Gender (0 = female, 1 = male)	–0.44	0.09	–0.62	–0.26	–.22	<.001				
Pathological narcissistic grandiosity	0.37	0.06	0.22	0.53	.37	<.001				
Pathological narcissistic grandiosity × gender	–0.15	0.09	–0.33	0.03	–.10	.098				

N = 458. BCa 95% CI = bias-corrected and accelerated bootstrap 95% confidence intervals based on 1,000 bootstrap samples. The continuous predictor and the criterion were *z*-standardized as an interaction term was included in the model (Frazier et al., 2004). The *p*-values in the table refer to two-tailed testing

Table 4 Multiple Regression Analyses Regressing Involvement in Feminist Activism (Including Covariates)

	B	SE	BCa 95% CI for B		β	p	R^2	df1, df2	F	p
			LL	UL						
							.50	8, 449	56.99	<.001
Constant	0.11	0.05	0.02	0.21	–	.016				
Age	–0.14	0.04	–0.23	–0.06	–.14	<.001				
Gender (0 = female, 1 = male)	–0.22	0.07	–0.34	–0.08	–.11	.002				
Pathological narcissistic grandiosity	0.16	0.06	0.05	0.27	.16	.010				
Pathological narcissistic grandiosity × gender	–0.15	0.08	–0.31	0.01	–.11	.066				
Pathological narcissistic vulnerability	–0.01	0.06	–0.14	0.13	–.01	.928				
Pathological narcissistic vulnerability × gender	0.07	0.08	–0.09	0.25	.05	.382				
Altruism	0.27	0.04	0.20	0.35	.27	<.001				
Self-identification as a feminist	0.52	0.04	0.46	0.59	.52	<.001				

N = 458. BCa 95% CI = bias-corrected and accelerated bootstrap 95% confidence intervals based on 1,000 bootstrap samples. All continuous predictors and the criterion were *z*-standardized as interaction terms were included in the model (Frazier et al., 2004). The *p*-values in the table refer to two-tailed testing

feminist conversational interaction behaviors (*r* = .17, *p* < .001, BCa 95% CI [0.08, 0.26]). At the level of specific behaviors, higher pathological narcissistic grandiosity was related to a higher intent to use feminist language (*r* = .15, *p* < .001, BCa 95% CI [0.06, 0.24]), to argue with strangers about their non-feminist comments (*r* = .12, *p* = .009, BCa 95% CI [0.04, 0.21]), and to correct other's non-feminist language (*r* = .16, *p* < .001, BCa 95% CI [0.07, 0.26]). Contrary to our assumptions, the correlations with pathological narcissistic grandiosity were almost equally high for one's own use of feminist language (i.e., no domination of others, *r* = .15) and the correction of other's non-feminist language (i.e., high domination of others, *r* = .16), whereas the correlation between pathological narcissistic grandiosity and arguing with strangers about their non-feminist comments (i.e., moderate domination of others) was lower (*r* = .12) in comparison.

The results of another pre-registered secondary analysis showed that only higher narcissistic *exploitativeness* (i.e., a component of pathological narcissistic grandiosity) was statistically significantly related to greater involvement in feminist activism over and above the remaining narcissism components (*b* = 0.24, BCa 95% CI [0.07, 0.38], SE_b = 0.07, β = .24, *p* < .001) while none of the other subfacets underlying pathological narcissistic grandiosity and pathological narcissistic vulnerability were. Further, none of the regression coefficients for the interactions were statistically significant. All results of this analysis are displayed in Supplementary Table S2.

Discussion

In a recent study, Bertrams and Krispenz (2023) found that extraverted narcissism was (independently of altruism) related to involvement in anti-sexual-assault activism. From their results, the authors derived the so called *dark-ego-vehicle principle* (DEVP; see also Krispenz & Bertrams, 2023). According to the DEVP, individuals with dark personalities are attracted to specific forms of political and social activism that can be used for their own ego-focused purposes. To advance the theory construction (see Borsboom et al., 2021) regarding the DEVP, we conducted the present study to conceptually replicate and extend the initial evidence supporting the DEVP by providing additional empirical evidence for the relationship between narcissistic grandiosity and activism as a robust phenomenon.

The present findings

In the present study, we replicated the findings of Bertrams and Krispenz (2023)by investigating the relationship between pathological narcissistic grandiosity and involvement in feminist activism. We consider feminist activism a more comprehensive kind of activism for women's rights than anti-sexual-assault activism because it involves issues beyond sexual assault (according to its definition by Szymanski, 2004). However, just as anti-sexual assault activism, feminist activism can be exploited by individuals high in narcissism for signaling of grandiose moral superiority and virtue, venting aggressive impulses, and the demonstration of other malevolent behaviors that have been found to be typical for narcissists (Bushman & Thomaes, 2011; Greenwood et al., 2013; Hepper et al., 2014; Kjærvik & Bushman, 2021; Konrath et al., 2014; Konrath et al., 2016; Krispenz & Bertrams, 2023; Mahadevan & Jordan, 2022; Nevicka, 2018; Ok et al., 2021; Pincus et al., 2009). Therefore, we interpret the present findings as added empirical support for the DEVP. Noteworthy, our results showed that pathological narcissistic grandiosity was even related to involvement in feminist activism when self-identification as a feminist – i.e., the ideology underlying this kind of activism – was statistically controlled for. This finding suggests that the involvement in certain kinds of activism may satisfy the ego-focusses needs of individuals high in narcissism even if they do not actually or reliably believe in the normative fundament of the respective activism.

In addition, we also turned to a conceptualization and measure of narcissism that is clearly pathological. While the manifestations of non-clinical narcissistic behaviors are frequently annoying and harmful for the social environments of individuals high in narcissism, they can be functional and adaptive for those individuals themselves. For example, Pincus et al. (2009) found so-called *normal narcissism*

to be substantially positively related to self-esteem; in contrast, higher pathological narcissism was related to lower self-esteem and higher suicidality. Thus, pathological narcissism may carry costs not only for other people but also for the narcissistic individuals themselves. However, in a pre-registered secondary analysis we found only grandiose narcissistic *exploitativeness* to play the crucial role in the relationship between pathological narcissism and feminist activism. The exploitativeness facet of pathological narcissistic grandiosity reflects a manipulative interpersonal orientation associated with increased self-esteem, the inclination to dominate others, lowered empathy, increased aggression, and lowered moral values which is unrelated to indicators of vulnerability (such as suicidality and shame) (Pincus et al., 2009; also see Schoenleber et al., 2015). Accordingly, the results of our study revealed that feminist activism was unrelated to the facets representative of pathological narcissistic vulnerability when we statistically controlled for the facets representative of pathological narcissistic grandiosity and the relevant covariates. From this finding, we conclude that feminist activism likely attracts individuals high in narcissistic grandiosity, whose narcissism manifests in interpersonal problems, rather than individuals high in narcissistic vulnerability.

Diverging from our expectations, the relationship between pathological narcissistic grandiosity was not moderated by gender. The results of a prior study (Bertrams & Krispenz, 2023) had revealed that narcissism and involvement in anti-sexual-assault activism were associated only for women but not for men. However, in more detailed analyses of this prior study, we found only a non-significant tendency for gender to act as a moderating factor. Thus, gender seems to be somewhat relevant when explaining gender-related activism, but it does not seem to be a very robust factor. The missing moderating effect of gender in the present study suggests that even narcissistic men may find ways to exploit activism that is primarily oriented toward women's rights. Possibly, interpersonal manipulative tactics – as expressed by the narcissistic facet of exploitativeness (e.g., "I can make anyone believe anything I want them to"; Pincus et al., 2009) – may play a crucial role in this regard.

Our exploratory analyses further revealed a relationship between pathological narcissistic grandiosity and feminist conversational interaction behaviors. Higher pathological narcissistic grandiosity was related to a higher intent to use feminist language, to argue with strangers about their non-feminist comments, and to correct others non-feminist language. However, we did not find these relationships between pathological narcissistic grandiosity and the respective feminist conversational interaction behaviors to be dependent on how strongly we considered the respective behaviors to represent the inclination
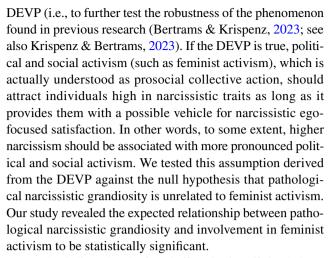
to dominate others. Deviating from our expectations, the use of feminist language and the correction of other's non-feminist language (considered as no vs. high domination of others) were almost equally strongly related to pathological narcissistic grandiosity. Prior research shows that domineering other people is a narcissistic characteristic (Cheng et al., 2010; Pincus et al., 2009). Therefore, we are reluctant to interpret our results as contradicting narcissists' inclination toward social domination. An alternative explanation could be that the narcissistic inclination to self-present as moral (Ok et al., 2021) is possibly reflected in a virtue-signaling display of alleged feminist language that goes beyond what non-narcissistic feminists find useful. Thus, narcissism could affect both one's own language usage *and* the correction of other's language usage for various reasons. Further research is required in this regard, and one should keep in mind that these were exploratory analyses undertaken with an instrument (i.e., the Measure of Collective Action; Conlin & Heesacker, 2018) that was not validated for the present purpose.

Finally, as in the study regarding anti-sexual-assault activism (Bertrams & Krispenz, 2023), we found that higher altruism was also related to stronger involvement in feminist activism. This reliable finding highlights that feminist activism cannot be defined as merely a facet of narcissistic behavior. This result rather suggests that individuals high in narcissism may sometimes behave in a prosocial manner as a function of virtuous self-presentation even though they typically act in their own interest (Konrath et al., 2016). In the present study, altruism was related to feminist activism over and above pathological narcissism, and pathological narcissistic grandiosity was related to feminist activism over and above altruism. These findings indicate that altruism may be one motive for the engagement in feminist activism apart from narcissists' instrumental prosocial behaviors. This also shows that activism is not per se narcissistic. In addition, these findings are in line with the notion of the DEVP that activism can also be repurposed as a vehicle for satisfying certain narcissistic needs free from altruistic drive.

Theoretical implications

Currently, the DEVP is not yet an elaborated theory. Rather, we conducted the present study as part of the process of theory construction methodology (Borsboom et al., 2021) which requires researchers to develop theories bottom-up (i.e., from empirical phenomenon to theoretical explanation). Within Borsboom et al.'s (2021) theoretical circle, the research on the DEVP is still at the point where we need to reliably identify the captured empirical phenomenon by means of data collection. Hence, the first and foremost aim of the present pre-registered study was to falsify the

DEVP (i.e., to further test the robustness of the phenomenon found in previous research (Bertrams & Krispenz, 2023; see also Krispenz & Bertrams, 2023). If the DEVP is true, political and social activism (such as feminist activism), which is actually understood as prosocial collective action, should attract individuals high in narcissistic traits as long as it provides them with a possible vehicle for narcissistic ego-focused satisfaction. In other words, to some extent, higher narcissism should be associated with more pronounced political and social activism. We tested this assumption derived from the DEVP against the null hypothesis that pathological narcissistic grandiosity is unrelated to feminist activism. Our study revealed the expected relationship between pathological narcissistic grandiosity and involvement in feminist activism to be statistically significant.

We also believe that the found effect size is sufficiently large to constitute a relevant contribution to the literature. Typically, the effect size found in individual-differences research lies at $\bar{r} = .19$ (Gignac & Szodorai, 2016) and at $\bar{r} = .21$ for social psychological effects (Richard et al., 2003). In some specific research fields that are relevant for the present study, the typical effect size is even smaller (e.g., $\bar{r} = .15$ in motivation research, and $\bar{r} = .13$ in social influence research; Richard et al., 2003). In addition, effect sizes are usually considerably smaller in publications that were pre-registered like the present study (median $r = .16$) compared to those that were not (median $r = .36$) (Schäfer & Schwarz, 2019). Based on their meta-analytical results, Gignac and Szodorai (2016) recommend interpreting effect sizes of about $r = .10$ as relatively small, $r = .20$ as typical, and $r = .30$ as relatively large. Given this recommendation, and the fact that we followed a pre-registered analysis plan, we consider the relationship between pathological narcissistic grandiosity and feminist activism found in the present study ($r = .28$, $p < .001$, BCa 95% CI [0.19, 0.36]) to be relevant. In concert, these results make us confident that the DEVP represents a fruitful research approach.

Nevertheless, there still are open questions currently limiting the conceptual strength of the DEVP. In particular, more research is needed to understand the boundary conditions of the DEVP (i.e., possible moderating influences) as we do not believe that every kind of activism is equally usable as a dark-ego vehicle. As a minimum requirement, the activism must provide benefits that individuals with high narcissistic traits can repurpose to satisfy their dark personalities' needs. For example, activistic causes receiving little to no public interest may attract individuals high in narcissism less than activism which is widely noticed – because the former is hardly compatible with narcissistic desires for fame, influence, and distinguished social status (Greenwood et al., 2013; Mahadevan & Jordan, 2022). In line with this notion, previous research Bertrams and Krispenz (2023) found the association between pathological narcissistic grandiosity and involvement in anti-sexual assault activism to be moderated by gender (i.e., the

association was more pronounced for women than men). Based on these results, the authors argued that specific social norms against so-called "mansplaining" or patronizing behaviors could banish male individuals with high narcissistic traits from the desired prominent positions in the activist movement. The results of the present study add another piece to this puzzle as they do *not* replicate this gender effect in the context of feminist activism. This result could indicate that the social norms regarding the (leading) role of male activists differ significantly in the context of feminist activism (from those of anti-sexual assault activism) allowing male individuals high in narcissistic traits to actually satisfy their dark-ego motives. However, more research is needed to understand the boundary conditions of the DEVP more thoroughly.

Practical implications

A practical implication of our findings is that the success of feminist activism may be reduced by individuals high in narcissism. Individuals high in narcissistic grandiosity typically desire fame, distinction, elevated social status, and high social importance (Greenwood et al., 2013; Mahadevan & Jordan, 2022) and can thus be assumed to strive for influential positions that involve social visibility and outreach within the feminist activism sphere. Accordingly, individuals high in narcissism may be more likely than individuals low in narcissism to set the tone for feminist activism. However, while pretending to be prosocial, individuals with high narcissistic traits tend to have low empathy and to be primarily interested in satisfying their self-centered needs (Hepper et al., 2014; Jankowiak-Siuda & Zajkowski, 2013; Konrath et al., 2016). Therefore, it appears unlikely to us that speakers and influencers high in narcissistic grandiosity are authentically motivated to find the most reasonable solutions in terms of women's rights. From a logical viewpoint, they should rather be interested in keeping the perception of problems going to maintain their highlighted position. One possible way to do so may be victim signaling, which has been found to be related to narcissism, Machiavellianism, and psychopathy (Ok et al., 2021). Moreover, individuals with high narcissistic traits may use the financial and immaterial resources of feminist movements for their own private purposes, thereby causing irreparable financial and reputational harm to the movement. For example, individuals high in narcissistic traits may use donations made to a feminist movement and spend them on personal items due to their sense of entitlement. Additionally, the public perception of such narcissistic behaviors within an activist movement may lead to dwindling support for the cause by the public and could even be wielded against the respective movement. Hence, women, girls, and altruistically motivated feminist activists should be made aware of the danger that narcissistic individuals could hijack their movement as they may profit from understanding and recognizing narcissistic behaviors, including manipulation tactics, to avoid being exploited for narcissists' egotistic self-interests.

Limitations and future research

This study has several limitations, of which we will discuss some. One crucial limitation is the cross-sectional design of this study and the reliance on self-reports, which together could cause the emergence of artificial relationships due to common method variance. However, this challenge to our results is mitigated by the fact that the central variables of this research (i.e., pathological narcissism and involvement in feminist activism) were measured on different abstraction levels of the items and response formats (see Chang et al., 2010). In addition, the Harman single-factor test indicated that serious common method bias was unlikely. Also, there is evidence supporting the validity of self-report measures (e.g., Saunders et al., 2022).

Another limitation of the present study is that we neglected the potential influence of other dark-personality variables that are related to narcissism (i.e., Machiavellianism and psychopathy) (Paulhus, 2014). However, since narcissism is the only Dark Triad variable that was related to *virtue signaling* in a recent study (Ok et al., 2021) which may be an important motive for repurposing feminist activism, in the present study we focused only on narcissism. Nonetheless, there is the possibility that the narcissism–activism relationship is also driven by Machiavellianism or psychopathy. Future studies may thus focus more on other dark-personality variables. Additionally, future research should consider the differences between pathological and so-called *normal* narcissism (Miller et al., 2017).

Moreover, the present study does not examine which specific forms of feminism are related to pathological narcissistic grandiosity. This seemed secondary to us as previous research had found that forms of feminism as diverse as liberal feminism and socialist feminism were all substantially related to the feminist activism measurement we used (Szymanski, 2004). Nevertheless, it seems likely that the associations of all these forms of feminism with narcissism are not equally strong. For example, Krispenz and Bertrams (2023) found aspects of left-wing authoritarianism to be related to dark-personality variables. Therefore, we assume socialist feminism to be more strongly related to dark-personality variables than less politically far-left leaning forms of feminism.

Finally, we would like to point out that future research should empirically address the nomological network of the narcissism–activism relationship. We mentioned virtue signaling and a need for domineering others as potential factors for why higher pathological narcissistic grandiosity is assumed to be related to more pronounced feminist activism, but empirical evidence supporting this assumption is still missing.

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