



## Narcissus locked in the past: Vulnerable narcissism and the negative views of the past

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### ABSTRACT

We examined how the perception of past events might contribute to the understanding of vulnerable narcissism. Across seven samples ( $N_{Grand} = 1271$ ), we investigated the association between vulnerable narcissism and individual differences in negative view of the past as well as how both were associated with basic personality traits, intrapersonal (i.e., affect, life satisfaction, and self-esteem) and interpersonal (i.e., anger, and hostility) outcomes, and memory biases of immediate life events and early life traumas. We found that vulnerable narcissism was reliably correlated with a negative view of the past. Additionally, both variables showed similar personality profiles (e.g., high neuroticism) and overlapped in explaining various outcomes, including self-esteem, anger, hostility, recalled traumas, and a negative memory bias.

### 1. Introduction

The concept of narcissism has a long research tradition. Historically, interpreted mostly as a personality pathology (e.g., Freud, 1914), nowadays, it is also studied as a personality trait (Hermann, Brunell, & Foster, 2018). Narcissism may come in two major forms – grandiose and vulnerable – which are weakly positively correlated (e.g., Miller et al., 2017; Wink, 1991). They share some features such as a sense of entitlement (Miller & Campbell, 2008), self-importance (Krizan & Herlache, 2018), and antagonism (Back, 2018; Lynam & Miller, 2019) but differ in several important ways. For example, while the basic goal of a narcissist is to maintain their self-esteem (Morf & Rhodewalt, 2001), grandiose narcissists achieve this through self-promotion and praise-seeking and when they fail to get it, they derogate others to protect their ego (Back et al., 2013; Back, 2018; Grapsas, Brummelman, Back, & Denissen, 2020; Wetzel, Leckelt, Gerlach, & Back, 2016) whereas vulnerable narcissists do so by withdrawing to avoid feelings of shame, pain, or envy (Caligor, Levy, & Yeomans, 2015) and being discovered by others as “fragile” (Kealy & Rasmussen, 2011) which opens them up to suffer from depression and anxiety, and may increase the number of attempted suicides (Dawood, Schroder, Donnellan, & Pincus, 2018; Ronningstam & Maltzbreger, 2010). In their withdrawn state, vulnerable narcissists

engage in grandiose fantasies of prevailing over others and winning the admiration of others (Kealy & Rasmussen, 2011; Pincus & Lukowitsky, 2010; Ronningstam, 2005), often externalizing blame onto others for their sense of inadequacy.

The strategy of avoiding other people observed in vulnerable narcissism has been widely studied. However, less is known about how vulnerable narcissists perceive their personal experiences. For instance, frequent feelings of shame and anger are often associated with intrusive thoughts (Ghim, Choi, Lim, & Lim, 2015). Although the ruminative thinking may be an important characteristic leading to increased aggression in vulnerable narcissists (Krizan & Johar, 2015), surprisingly little attention has been paid to narcissists' tendency to concentrate on the past. Thus, within the current research we ask *how* vulnerable narcissists view the past. Are they excessively concentrated on the negative side of their past? What are the foundations and processes underlying the aversive thinking about the past among vulnerable narcissists? We aim to answer these questions in a series of studies examining the association between vulnerable narcissism and the negative view of the past.

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### 1.1. Psychological underpinnings of vulnerable narcissism

The most prototypical broadband personality trait associated with vulnerable narcissism is neuroticism, followed by low agreeableness and low extraversion (Maciantowicz & Zajenkowski, 2020a; Miller et al., 2018). The heightened levels of neuroticism could be expressed either through highly negative affect and social withdrawal (i.e., neuroticism underpinned by low extraversion) or through emotional lability, irritability, and anger (i.e., neuroticism underpinned by low agreeableness; DeYoung, Quilty, & Peterson, 2007; Miller et al., 2010; Miller et al., 2011; Rogoza, Ciecuch, Strus, & Baran, 2019). These prototypical personality features are also congruent with temperamental traits, in as much as vulnerable narcissism is primarily associated with high avoidance motivation (i.e., fear of punishment; Krizan & Herlache, 2018). Furthermore, vulnerable narcissists manifest low, fragile, and highly dependent self-esteem (Miller et al., 2010; Rogoza, Żemojtel-Piotrowska, Kwiatkowska, & Kwiatkowska, 2018; Zeigler-Hill, Clark, & Pickard, 2008). They also display an array of hostile attitudes (Czarna, Zajenkowski, Maciantowicz, & Szymaniak, 2019; Miller & Campbell, 2008; Miller et al., 2010), often accompanied by the rumination of anger (Krizan & Johar, 2015). Taken together, such a set of undesired psychological underpinnings makes vulnerable narcissists fragile by their nature. Thus, as every negative or negatively perceived situation evokes intense feelings of shame and inferiority (Di Sarno, Zimmerman, Madeddu, Casini, & Di Pierro, 2020; Pincus et al., 2009), vulnerable narcissists are likely to constantly experience such intrusive thoughts over an excessively longer periods of time.

### 1.2. How vulnerable narcissists view their past?

The crucial role of the past is a part of many theories of narcissism. The psychoanalytic concepts emphasized the importance of early experiences in childhood as the etiology of narcissistic personality (Freud, 1932; Kernberg, 1975; Kohut, 1971). For instance, Kohut (1971) suggested that inappropriate feedback from parents (both lack of approval or excessive attention) may lead to narcissistic injury and, in turn, to the creation of an unrealistic sense of self. Other psychoanalysts indicated that narcissists experience anger in response to rejection because it opens childhood wounds (Kernberg, 1975). Depending on how strong the sense of self is, it could either express itself in grandiose (i.e., approaching) or vulnerable (i.e., avoiding) ways.

Evidence from social-personality psychology is generally in line with the psychoanalytic concepts emphasizing the role of the negative past in the development of narcissism. Vulnerable narcissists report more adverse childhood experiences (Crawford & Wright, 2007; Kim & Cicchetti, 2010; Rogosch & Cicchetti, 2004), especially emotional abuse and emotional neglect (Nguyen & Shaw, 2020), which may lead to mistrust and increased antagonism in adulthood (Miller et al., 2011). In addition, they present anxious and avoidant attachment styles (Miller et al., 2011; Pistol, 1995), which are often linked to childhood maltreatment (Baer & Martinez, 2006). The focus on the negative past manifests in vulnerable narcissism also by the tendency toward the rumination on anger, that is, recalling past events evoking anger and thinking over the causes and consequences of anger episodes (Sukhodolsky, Golub, & Cromwell, 2001). Such rumination of anger could be viewed as a form of compensation and restitution for early deprivation and humiliation (Bishop & Lane, 2002). It has been suggested that the rumination of anger fueled by shame might be a potential driver of the increased levels of aggressiveness in vulnerable narcissism (Ghim et al., 2015; Krizan & Johar, 2015).

Consistent with the above, those with more vulnerable narcissism tend to have a more negative perspective on their past (i.e. the negative view of the past; Zajenkowski, Witowska, Maciantowicz, & Malesza, 2016). This negative view of the past is often accompanied by a concentration on unpleasant events from the past and a negative interpretation of past events (Zimbardo & Boyd, 1999). Interestingly, the

nomological network of the negative view of the past resembles that of vulnerable narcissism in, for example, associations with high neuroticism and low extraversion (Kairys & Liniauskaitė, 2015). The negative view of the past correlates also with a wide spectrum of negative emotionality, including anxiety and depression (Stolarski, Matthews, Postek, Zimbardo, & Bitner, 2014; Zimbardo & Boyd, 1999), anger and hostility (Stolarski, Zajenkowski, & Zajenkowska, 2016), low levels of self-esteem (Zimbardo & Boyd, 1999) and life satisfaction (Zhang & Howell, 2011), more severe symptoms (e.g., intrusive memories) of post-traumatic stress disorder after experiencing trauma (i.e., motor vehicle accident; Stolarski & Cyniak-Cieciura, 2016), and frame their time as a child by emphasizing parental alienation, lack of closeness, emotional remoteness, and inadequacy (Kostić, Pejičić, & Chadee, 2017).

Considering the above, vulnerable narcissism and the negative view of the past may have a similar psychological profile. However, both constructs might slightly differ at the conceptual level as well as the magnitude of associations with specific intra- and interpersonal outcomes. While people who negatively view their past seem to be more withdrawn, passive, and less reward-dependent (Zimbardo & Boyd, 1999), some studies indicate that vulnerable narcissists may display an increased tendency toward approach motivation (e.g., Miles, Smyrniotis, Jackson, & Francis, 2019). Additionally, one of the central characteristics of vulnerable narcissism is antagonism, especially the frequent experience of anger and hostile attitude (e.g., Krizan & Johar, 2015; Maciantowicz & Zajenkowski, 2020a), whereas a negative view of the past is associated with well-being (Stolarski et al., 2014; Zhang & Howell, 2011). Correspondingly, both constructs are highly correlated with neuroticism, however, for vulnerable narcissism more important might be neurotic irritability while for negative view of the past the aspect related to anxiety. Examining the similarities and differences between vulnerable narcissism and negative view of the past might broaden the understanding of the former.

## 2. The current research

The primary aim of the current research was examining how the perception of past events might contribute to the understanding of vulnerable narcissism. For this purpose, we comprehensively investigated the association between vulnerable narcissism and the negative view of the past. Using data from seven samples, we tested where and to what extent individual differences in negative view of the past explain the variance of vulnerable narcissism in various areas. The current studies and hypotheses can be grouped into three overarching research questions characterized below. A summary of the hypotheses is presented in Table 1.

First, we examine how individual differences in vulnerable narcissism and negative view of the past are related to basic personality characteristics. Generally, we expect that vulnerable narcissism and negative view of the past will be positively correlated with one another (H1a) and that both will be associated positively with neuroticism (H1b) and negatively with extraversion (H1c), agreeableness (H1d), and conscientiousness (H1e; Kairys & Liniauskaitė, 2015; Miller et al., 2011, 2018; Rogoza et al., 2018). Furthermore, both vulnerable narcissism and past negative perceptions are characterized by high anxiety and social withdrawal (Krizan & Herlache, 2018; Zimbardo & Boyd, 1999). Therefore, we expect they will be positively linked to behavioral inhibition system (H1f). Additionally, negative view of the past was unrelated to reward dependence (Zimbardo & Boyd, 1999), while in case of vulnerable narcissism there is no clear evidence; however, some studies show its positive association with approach motivation (H1g; e.g., Miles et al., 2019). Lastly, we expected to find weak or no relationship with grandiose narcissism of both vulnerable narcissism and negative view of the past (H1h; Miller et al., 2011; Rogoza et al., 2018; Zajenkowski, Stolarski, Witowska, Maciantowicz, & Łowicki, 2016). In lower-order personality facets, we expect a difference within neuroticism:

**Table 1**  
Summary of the expected correlations between vulnerable narcissism, negative view of the past, and external variables and their corresponding hypotheses.

	Vulnerable Narcissism	Negative View of the Past
Vulnerable Narcissism/Past Negative (H1a)	++	++
Neuroticism (H1b)	++	++
Extraversion (H1c)	-	-
Agreeableness (H1d)	-	-
Conscientiousness (H1e)	-	-
Openness/Intellect	0	0
Behavioral Inhibition System (H1f)	++	++
Behavioral Activation System (H1g)	+	-
Grandiose Narcissism (H1h)	0/+	0/-
Neuroticism – Volatility (H1i)	++	+
Neuroticism – Withdrawal (H1j)	+	++
Negative Affect (H2a)	+	++
Life Satisfaction (H2b)	-	-
Self-esteem (H2c)	-	-
Anger (H2d)	++	++
Hostility (H2e)	++	++
Traumatic Experiences (H3a)	+	+
Memory Bias (Negative – Positive; H3b)	-	-

Note. 0 = null association; 0/- = null or weak negative association; 0/+ = null or weak positive association; - = negative association; + = positive association; -- = strong negative association; ++ = strong positive association.

**Table 2**  
Number of participants, variables, and measures used in each study.

Study	N	Variable (Measure)
1	233	Vulnerable Narcissism (HSNS), Grandiose Narcissism (NPI), Negative Views of the Past (ZTPI), Big Five (IPIP-BFFM-50), Satisfaction with Life (SWLS), State Anger (STAXI), Trait Anger (STAXI)
2	199	Vulnerable Narcissism (HSNS), Grandiose Narcissism (NPI), Negative Views of the Past (ZTPI), Big Five (IPIP-BFFM-50), Approach/Avoidance Motivation (BIS/BAS), Temporal Satisfaction with Life (TSLs), Mood (UMACL)
3	195	Vulnerable Narcissism (HSNS), Grandiose Narcissism (NPI), Negative Views of the Past (ZTPI), Big Five (TIPI), Self-Esteem (SES)
4	216	Vulnerable Narcissism (HSNS), Grandiose Narcissism (NPI), Negative Views of the Past (ZTPI), Big Five (IPIP-BFFM-50), Trait Anger (AQ), Hostility (AQ)
5	267	Vulnerable Narcissism (HSNS), Grandiose Narcissism (NPI), Negative Views of the Past (ZTPI), Big Five (BFAS), Trait Anger (AQ), Hostility (AQ), Positive Affect/Negative Affect (PANAS)
6	84	Vulnerable Narcissism (HSNS), Grandiose Narcissism (NPI), Negative Views of the Past (ZTPI), Big Five (TIPI), Traumas (ELSQ)
7	77	Vulnerable Narcissism (HSNS), Grandiose Narcissism (NPI), Negative Views of the Past (ZTPI), Big Five (TIPI), Memory bias

Note. AQ = Aggression Questionnaire; BIS/BAS = Behavioral Inhibition System/Behavioral Activation System; ELSQ = Early Life Stress Questionnaire; HSNS = Hypersensitive Narcissism Scale; IPIP-BFFM-50 = International Personality Item Pool Big Five Factor Markers Questionnaire; NPI = Narcissistic Personality Inventory; PANAS = Positive Affect Negative Affect Scale; SES = Self-esteem Scale; STAXI = State-Trait Anger Expression Inventory; SWLS = Satisfaction with Life Scale; TSLs = Temporal Satisfaction with Life Scale; UMACL = the UWIST Mood Adjective Check List; ZTPI = Zimbardo Time Perspective Inventory.

vulnerable narcissism will be more strongly associated with the aspect of volatility (H1i), while negative view of the past will correlate more strongly with the aspect of withdrawal (H1j).

Second, we examine how individual differences in vulnerable narcissism and the negative view of the past are correlated to intrapersonal (i.e., affect, life satisfaction, and self-evaluation) and interpersonal (i.e., antagonism) outcomes. With respect to well-being, we analyzed both affective experiences and life satisfaction. In case of affect, we hypothesize (H2a) that they will be associated with a generally negative affect (Maciantowicz & Zajenkowski, 2020a; Miller et al., 2011;

Stolarski et al., 2014). More specifically, we expect that vulnerable narcissism and negative view of the past will be linked to high negative affect and low positive affect from the two-dimensional model of mood (Watson, Clark, & Tellegen, 1988). In the three-dimensional model, negative mood is defined as high tense arousal, and low energetic arousal and low hedonic tone (Matthews, Jones, & Chamberlain, 1990). Similarly, we expect (H2b) a negative association with life satisfaction (Miller et al., 2011; Zhang & Howell, 2011).

Another important area in which the traits can manifest themselves is related to self-evaluation. Here, we expect (H2c) that people scoring high on vulnerable narcissism and negative view of the past will display a low level of self-esteem (Miller et al., 2011; Rogoza et al., 2018; Zhang, Howell, & Stolarski, 2013; Zimbardo & Boyd, 1999). The last area we consider is correlated with antagonism. Vulnerable narcissism and a negative view of the past are associated with similar manifestations of antagonism, which mainly concentrate on internalizing aggression (Krizan & Johar, 2015; Maciantowicz & Zajenkowski, 2020b; Stolarski et al., 2016). Thus, we expect that both dimensions will be positively correlated with the frequent experience of anger (i.e., aggression triggering emotion; H2d) and hostility (i.e., aggressive interpretation of other people’s intentions; H2e).

Third, we explore two potential processes (i.e., memory bias and traumatic experiences) that might be responsible for the heightened tendency to think in an aversive way about the past. For example, people’s negative views of the past might stem from the actual traumatic experiences of a person. Thus, we examine the hypothesis that people with high levels of vulnerable narcissism and people with high levels of past negative views report more early traumatic experiences than people low on vulnerable narcissism and low on past negative (H3a). Alternatively, we investigate the possibility that the concentration on the past might be a function of memory bias. We expect that people with highly vulnerable narcissism, as well as people with a tendency to view their past negatively, are more susceptible to recall negative, rather than positive, events (H3b).

### 3. Method

#### 3.1. Participants and procedure

**Sample 1.**<sup>1</sup> Via a snowball recruitment of in-person participants, we sampled 233 (123 women, 110 men) undergraduate students between the ages of 18 and 39 ( $M = 23.62$ ;  $SD = 3.80$ ) who were tested individually in a laboratory at the University of [blind]. A set of questionnaires and cognitive tasks were completed by participants after providing informed consent. A small gift (e.g., a cup  $\approx 10\text{€}$ ) was offered for participation. The data was collected as part of a larger project (Zajenkowski et al., 2016).

**Sample 2.** Via a snowball recruitment of in-person participants, we sampled 199 participants (99 women, 100 men) that were Polish undergraduate students between the ages of 18–40 ( $M = 22.80$ ;  $SD = 3.78$ ) who were tested individually in a laboratory at the University of [blind]. Participants provided informed consent and were offered a cash reward ( $\approx 10\text{€}$ ) for participation. Participants completed a set of questionnaires and cognitive tasks. The data was collected as part of a larger project (Witowska & Zajenkowski, 2019).

**Sample 3.** Via a snowball recruitment of online participants, we sampled 195 participants (163 women, 32 men) between the ages of 18 and 50 ( $M = 24.00$ ;  $SD = 4.83$ ). They were mostly (52%) undergraduate students and professionals (48%). After giving their informed consent, participants completed a set of questionnaires.

**Sample 4.** Via a snowball recruitment of online participants, we

<sup>1</sup> The studies presented in the manuscript were not pre-registered. The summary of the variables and measures used in each study are presented in Table 2.

sampled 216 (115 women; 91 men; 10 nonresponsive) undergraduate students from various universities in Warsaw between the ages of 18–54 ( $M = 25.22$ ;  $SD = 7.09$ ) who were tested individually in a laboratory at the University of [blind]. After giving their informed consent, participants filled a set of questionnaires. Participants were offered a small gift (e.g., a cup worth  $\approx 10\text{€}$ ) in exchange for participation.

**Sample 5.** Via a snowball recruitment of in-person participants, we sampled 267 participants (132 women; 131 men; 4 nonresponsive) between the ages of 18 and 49 ( $M = 23.31$ ;  $SD = 4.97$ ) who were tested individually in a laboratory at the University of [blind]. Participants were recruited via website announcements and offered cash for participation ( $\approx 20\text{€}$ ). Upon giving informed consent, participants completed a packet of questionnaires and cognitive tasks. The data was collected as part of a larger project (Zajenkowski, Czarna, Szymaniak, & Dufner, 2020).

**Sample 6.** During classes at the University of [blind] and the [blind], we recruited, in person, 84 (44 women, 38 men) undergraduate students who were aged between 19 and 27 ( $M = 21.16$   $SD = 1.72$ ). Students who gave their consent completed a set of questionnaires during a lecture.

**Sample 7.** Via a snowball recruitment of in-person participants, we recruited 77 (32 women; 45 men) undergraduate students aged between 18 and 35 ( $M = 23.25$ ;  $SD = 3.54$ ), who were tested individually in a laboratory at the University of [blind]. After completing paper questionnaires, participants were asked to recall a recent memory (see Measures below). A small gift (e.g., a cup worth  $\approx 10\text{€}$ ) was offered for participation in the study.

### 3.2. Measures

**Vulnerable Narcissism.** In all studies, we assessed vulnerable narcissism using the Polish translation (Czarna, Dufner, & Clifton, 2014) of the Hypersensitive Narcissism Scale (Hendin & Cheek, 1997). Participants reported their agreement (1 = *strongly disagree*; 5 = *strongly agree*) with 10 items (e.g., *I often interpret the remarks of others in a personal way*) that were summed to serve as indexes of vulnerable narcissism (Cronbach's  $\alpha = 0.68$ – $0.80$ ).

**Negative View of the Past.** In all studies, we measured individual differences in negative view of the past with the Past Negative scale from Polish translation (Kozak & Mażewski, 2007) of the Zimbardo Time Perspective Inventory (Zimbardo & Boyd, 1999). Participants reported their agreement (1 = *strongly disagree*; 5 = *strongly agree*) with 10 items (*I think about the bad things that have happened to me in the past*) that were averaged to capture individual differences in negative view of the past ( $\alpha = 0.80$ – $0.88$ ).

**Grandiose Narcissism.** In all studies except 3, we measured individual differences in grandiose narcissism with the Polish translation (Bazińska & Drat-Ruszczak, 2000) of the Narcissistic Personality Inventory (Raskin & Hall, 1979). Participants reported how much 34 items (e.g., *I will be a success*) applied to them (1 = *does not apply to me*; 5 = *applies to me*). The items were summed to create indexes of grandiose narcissism ( $\alpha = 0.91$ – $0.93$ ). In Study 3, we used the reduced version of this scale with 13 items (Gentile et al., 2013) in its Polish form (Żemojtel-Piotrowska et al., 2018) where participants choose between two items, one that reflects a narcissistic statement (e.g., *I insist upon getting the respect that is due me*) and the other that does not (e.g., *I usually get the respect I deserve*). Again, items were summed consistent with the parent-measure and prior research.

**The Big Five Traits.** In Studies 1, 2, and 4, we measured the Big Five traits with the Polish adaptation (Strus, Cieciuch, & Rowiński, 2014) of the International Personality Item Pool Big Five Factor Markers Questionnaire (Goldberg, 1992). Participants rated their agreement (1 = *strongly disagree*; 5 = *strongly agree*) with 50 items. The items were summed to create indexes of extraversion ( $\alpha = 0.88$ – $0.90$ ), emotional stability ( $\alpha = 0.87$ – $0.90$ ), intellect/imagination ( $\alpha = 0.75$ – $0.81$ ), conscientiousness ( $\alpha = 0.84$ – $0.86$ ), and agreeableness ( $\alpha = 0.81$ – $0.83$ ).

In Studies 3, 6, and 7, we measured the Big Five traits with the Polish translation (Łaguna, Bąk, Purc, Mielniczuk, & Oleś, 2014) of the Ten Item Personality Inventory (Gosling, Rentfrow, & Swann, 2003). The measure is composed of 10 items where participants report the accuracy of each statement in describing them (1 = *very inaccurate*; 7 = *very accurate*). Items were summed to create indexes of extraversion ( $r_s = 0.41$ – $0.50$ ), neuroticism ( $r_s = 0.44$ – $0.55$ ), openness ( $r_s = 0.32$ – $0.45$ ), conscientiousness ( $r_s = 0.55$ – $0.61$ ), and agreeableness ( $r_s = 0.20$ – $0.32$ ).<sup>2</sup>

In Study 5 we measured the Big Five traits using the Polish version (Strus, Cieciuch, & Rowiński, 2012) of the International Personality Item Pool Big Five Aspect Scales (DeYoung et al., 2007). Participants reported their agreement (1 = *strongly disagree*; 5 = *strongly agree*) with 100 items measuring both the traits themselves but also their two corresponding, lower-order aspects (i.e., volatility, withdrawal, compassion, politeness, industriousness, orderliness, enthusiasm, assertiveness, intellect, and openness). Items were summed to create indexes of extraversion ( $\alpha = 0.88$ ), neuroticism ( $\alpha = 0.90$ ), openness ( $\alpha = 0.76$ ), conscientiousness ( $\alpha = 0.81$ ), and agreeableness ( $\alpha = 0.89$ ) along with each lower-order facet of each trait ( $\alpha_s = 0.60$ – $0.92$ ).

**Approach/Avoidance Motivation.** In Study 2, we assessed individual differences in approach and avoidance motivations with the Polish translation (Muller & Wytykowska, 2005) of the BIS/BAS scale (Carver & White, 1994). Participants indicated how true (1 = *very true for me*; 5 = *very false for me*) 24 statements were to them in terms of behavioral inhibition ([7 items;  $\alpha = 0.81$ ], e.g., *Criticism or scolding hurts me quite a bit*), reward responsiveness ([5 items;  $\alpha = 0.55$ ], e.g., *When I see an opportunity for something I like I get excited right away*), drive ([4 items;  $\alpha = 0.75$ ], e.g., *If I see a chance to get something I want I move on it right away*), and fun-seeking ([4 items;  $\alpha = 0.65$ ], e.g., *I will often do things for no other reason than that they might be fun*). Items were summed to create indexes of each trait.

**Life Satisfaction.** We assessed life satisfaction twice. In Study 1, we used the Polish translation (Jankowski, 2015) of the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985). It consists of five statements (e.g., *In most ways my life is close to my ideal*) where participants reported how true (1 = *very untrue*; 7 = *very true*) that were summed to create a dispositional measure of life satisfaction ( $\alpha = 0.85$ ). In addition, in Study 2, we measured it with the Polish translation (Byra, 2011) of the Temporal Satisfaction with Life Scale (Pavot et al., 1998). Participants reported their agreement (1 = *strongly disagree*; 7 = *strongly agree*) with 15 items (e.g., *I will be satisfied with my life in the future*) that were summed to measure participants' life satisfaction related to the past ( $\alpha = 0.80$ ), present ( $\alpha = 0.86$ ), and future ( $\alpha = 0.79$ ).

**Affect.** We used two different scales to assess affective state. In Study 2, we used the Polish translation (Zajenkowski & Matthews, 2019) of the UWIST Mood Adjective Check List (Matthews et al., 1990) by asking participants how much they thought 24 items were true about them (1 = *definitely yes*; 4 = *definitely no*). The items are grouped into subscales called Energetic Arousal ([10 items;  $\alpha = 0.81$ ], e.g., *active*), Tense Arousal ([9 items;  $\alpha = 0.73$ ], e.g., *anxious*), and Hedonic Tone ([10 items;  $\alpha = 0.90$ ], e.g., *satisfied*). Items were summed to measure each aspect of mood. In Study 5, we used the Polish version (Brzozowski, 2010) of the Positive and Negative Affect Scale (Watson et al., 1988). Participants reported how much (1 = *not at all* or *very slightly*; 5 = *extremely*) they felt positive (e.g., *enthusiastic*) and negative (e.g., *irritable*) emotions with 20 items that were summed to create indexes of negative ( $\alpha = 0.58$ ) and positive ( $\alpha = 0.72$ ) affect.

**Self-Esteem.** In Study 3, we assessed individual differences in self-esteem using the Polish translation of Rosenberg (1965) Self-Esteem Scale. Participants were asked their agreement (1 = *strongly disagree*; 4 = *strongly agree*) with 10 items (e.g., *I feel that I have a number of good qualities*) that were summed ( $\alpha = 0.89$ ).

<sup>2</sup> Because each scale consists of only two items, we report item correlations.

**Anger.** We assessed anger with two different self-report questionnaires. In Study 1, we used the Polish translation (Bąk, 2016) of the trait and state anger subscales of the State-Trait Anger Expression Inventory (Spielberger, 1999). The trait subscale contained 10 statements (e.g., *I get angry when I have to wait because of other's mistakes*) that were summed ( $\alpha = 0.80$  to  $0.88$ ), while in the state subscale there were 15 items (e.g., *I feel angry*) that were summed ( $\alpha = 0.93$ ). Participants rated how much they agreed (1 = *strongly disagree*; 4 = *strongly agree*) with each statement. In Studies 4 and 5 we used the Polish translation of the anger subscale of the Aggression Questionnaire (Buss & Perry, 1992). Participants reported the accuracy (1 = *very inaccurate*; 5 = *very accurate*) of seven statements (e.g., *When frustrated, I let my irritation show*) which were summed to create measure of anger ( $\alpha = 0.68$  to  $0.86$ ).

**Hostility.** In Studies 4 and 5, we measured individual differences in hostility using the hostility subscale of the Aggression Questionnaire (Buss & Perry, 1992). It contains eight items (e.g., *I am sometimes eaten up with jealousy*), where participants rate their answers on a five-point scale (1 = *very inaccurate*; 5 = *very accurate*). The items were summed to create the index of hostility ( $\alpha = 0.77$  to  $0.82$ ).

**Early Life Traumatic Experiences.** In Study 6, we assessed individual differences in recalled early life negative experiences. We used Polish version (Sokolowski & Dragan, 2017) of the Early Life Stress Questionnaire (Cohen et al., 2006). Participants reported whether (yes/no) they experienced any of 19 (e.g., negligence, parental death) adverse events in before the age of 12. The sum of adverse events gives a global index of early life trauma ( $\alpha = 0.69$ ).

**Memory Bias.** In Study 7, we assessed biases in memory with a memory recall task. Participants were asked to recall and vividly imagine any memory related to their recent trip or journey. Subsequently, they were instructed to "please write a short story about your recent trip/journey. It could be to anywhere, to a store, another city, or another country. Keep writing until the experimenter says stop." Participants had five minutes to complete the task. The stories provided by the participants were then assessed for valence (1 = *very negative*; 7 = *very positive*) by three independent, blind raters ( $\alpha = 0.96$ ).

### 3.3. Analytic plan

First, for H1a, we calculated effect sizes estimates using meta-analysis of correlation coefficients across seven studies. Next, Hypotheses 1b to 1j were tested using correlation as well as difference in correlations (Steiger's  $z$ ). Because the Big Five traits and grandiose narcissism were assessed in each sample, we report meta-analytically derived correlations for robustness. Hypotheses 2a – 3b were tested using Pearson's correlation, simultaneous linear regression and commonality analyses.

## 4. Results

We first examined the correlation between our two main variables: vulnerable narcissism and negative views of the past. As both variables were included in all studies, we conducted a meta-analysis of their relations. Given the variation across the studies ( $I^2 = 49.1\%$ ), we used the random effects model, which revealed a positive and relatively large association between vulnerable narcissism and past negative perspective (Cohen's  $d = 0.46$  [95% CI 0.39, 0.53];  $p < .001$ ) thus, confirming H1a.

Second, we examine the nomological network of vulnerable narcissism and a negative perspective on one's past (Table 3).<sup>3</sup> Vulnerable narcissism and past negative were associated with four traits from the Big Five model: positively with neuroticism and negatively with extraversion, agreeableness, and conscientiousness (H1b to H1e).

<sup>3</sup> Descriptive statistics, and correlations as well as the raw data and the script of statistical analyses are presented as supplementary material available at the OSF project site ([https://osf.io/j8r73/?view\\_only=b50d2e9e584f41989fc7d6f0b335c0a1](https://osf.io/j8r73/?view_only=b50d2e9e584f41989fc7d6f0b335c0a1)).

**Table 3**

Correlations (with 95% confidence intervals) between vulnerable narcissism and negative view of the past with personality traits.

	Vulnerable Narcissism	Negative View of the Past	Steiger's $z$
Neuroticism	0.49** [0.44, 0.53]	0.52** [0.48, 0.56]	1.24
Extraversion	-0.29** [-0.34, -0.24]	-0.25** [-0.30, -0.19]	1.42
Openness	-0.02 [-0.11, 0.07]	-0.07 [-0.17, 0.03]	1.70
Agreeableness	-0.33** [-0.39, -0.26]	-0.12** [-0.17, -0.06]	7.51**
Conscientiousness	-0.11** [-0.18, -0.03]	-0.20** [-0.28, -0.12]	3.10**
BIS	0.42** [0.30, 0.53]	0.36** [0.23, 0.47]	0.85
BAS-Drive	0.08 [-0.06, 0.21]	-0.12 [-0.25, 0.02]	2.57*
BAS-Fun	0.03 [-0.11, 0.17]	-0.01 [-0.15, 0.13]	0.51
BAS-Reward	0.15* [0.01, 0.29]	-0.02 [-0.16, 0.12]	2.18*
Volatility	0.44** [0.33, 0.54]	0.37** [0.26, 0.47]	1.17
Withdrawal	0.37** [0.26, 0.48]	0.58** [0.49, 0.66]	3.78**
Enthusiasm	-0.25** [-0.36, -0.13]	-0.24** [-0.35, -0.12]	0.15
Assertiveness	-0.14* [-0.26, -0.02]	-0.20** [-0.32, -0.08]	0.90
Intellect	-0.11 [-0.24, 0.01]	-0.08 [-0.20, 0.04]	0.45
Openness	0.14* [0.01, 0.26]	0.23** [0.11, 0.34]	1.36
Compassion	-0.15* [-0.27, -0.03]	0.02 [-0.10, 0.15]	2.55*
Politeness	-0.29** [-0.40, -0.17]	-0.17** [-0.29, -0.04]	1.85
Industriousness	-0.14* [-0.26, -0.02]	-0.32** [-0.43, -0.20]	2.79**
Orderliness	0.10 [-0.03, 0.22]	0.01 [-0.11, 0.14]	1.33
Grandiose Narcissism	0.15** [0.09, 0.20]	-0.09* [-0.17, -0.11]	8.35**

Note. BIS = Behavioral inhibition system; BAS = Behavioral activation system. \* $p < .05$ , \*\* $p < .01$ .

Additionally, vulnerable narcissism was more strongly correlated with agreeableness, whereas past negative was more strongly linked with conscientiousness. Both vulnerable narcissism and past negative were positively correlated with BIS (H1f). Additionally, vulnerable narcissism was correlated with BAS Reward (H1g). Grandiose narcissism was weakly associated with both constructs (H1h); however, we found a small positive correlation for vulnerable narcissism and a small negative one for past negative. The analysis of the Big Five facets revealed that vulnerable narcissism and past negative tap slightly different aspects of neuroticism, since the latter showed stronger correlation with withdrawal (H1j), while for volatility we did not find differences in correlations (H1i).

Third, we considered how vulnerable narcissism and negative views of the past are related to intrapersonal and interpersonal processes (Table 4). Vulnerable narcissism and past negative were generally negatively related to the indicators of well-being (H2a – H2e), except for a null association with positive affect. Additionally, they also correlated negatively with self-esteem and positively with the indicators of antagonism. The associations did not differ in most cases; however, past negative was more strongly correlated with life satisfaction than vulnerable narcissism.

Fourth, given the correlation between vulnerable narcissism and negative view of the past, we also tested simultaneous linear regression and commonality analyses (Table 4). We report the results of the commonality analysis, which allocates the total variance explained by the two predictors into variance unique to each predictor and their common variance. We only interpreted the commonality coefficients of the significant models. The results revealed several patterns. Individual differences in having negative views of one's past was the dominant predictor of well-being (both affect and life satisfaction) and self-esteem (our largest effects at 57%), apart from energetic arousal. In contrast, individual differences in vulnerable narcissism were the dominant predictor of antagonism (anger and hostility). Vulnerable narcissism and

**Table 4**  
Correlations between vulnerable narcissism and negative past to well-being, self-evaluation, and antagonism.

	VN	NP	z	VN	NP	R <sup>2</sup>	Unique (%)		Common (%)
	r [95 %CI]	r [95 %CI]		$\beta$	$\beta$		VN	NP	
<i>Well-Being</i>									
Positive Affect	0.03 [-0.01, 0.15]	-0.07 [-0.19, 0.06]	1.48	0.07	-0.10	0.00	-	-	-
Negative Affect	0.21** [0.10, 0.32]	0.23** [0.11, 0.35]	0.30	0.13	0.18**	0.06	20.42	37.40	42.18
Energetic Arousal	-0.34** [-0.45, -0.20]	-0.28** [-0.40, -0.14]	-0.68	-0.26**	-0.17**	0.13	43.92	18.83	37.25
Tense Arousal	0.10 [-0.04, 0.24]	0.16* [0.02, 0.29]	-0.77	0.05	0.14	0.02	-	-	-
Hedonic Tone	-0.36** [-0.47, -0.23]	-0.44** [-0.54, -0.32]	1.14	-0.22**	-0.35**	0.22	18.01	44.98	37.02
Life Satisfaction – Global	-0.26** [-0.38, -0.14]	-0.51** [-0.60, -0.41]	3.98***	-0.07	-0.48**	0.26	1.75	73.49	24.77
Life Satisfaction – Past	-0.25** [-0.37, -0.11]	-0.55** [-0.64, -0.44]	4.49**	-0.04	-0.54**	0.30	0.37	80.45	19.18
Life Satisfaction – Present	-0.16* [-0.29, -0.02]	-0.47** [-0.57, -0.36]	4.42**	0.03	-0.48**	0.22	0.33	88.88	10.79
Life Satisfaction – Future	-0.16* [-0.30, -0.03]	-0.34** [-0.51, -0.27]	3.30**	-0.01	-0.39**	0.15	0.08	82.93	16.99
<i>Self-Evaluation</i>									
Self-esteem	-0.51** [-0.61, -0.40]	-0.56** [-0.65, -0.46]	0.94	-0.28**	-0.40**	0.36	14.40	29.01	56.60
<i>Antagonism</i>									
Anger-Trait AQ (Sample 4)	0.34** [0.22, 0.46]	0.34** [0.21, 0.45]	0.00	0.25**	0.23**	0.15	31.33	27.97	40.70
Anger-Trait AQ (Sample 5)	0.34** [0.23, 0.45]	0.31** [0.19, 0.42]	0.48	0.26**	0.20**	0.14	35.64	21.61	42.75
Anger-State STAXI	0.22** [0.10, 0.34]	0.26** [0.14, 0.38]	0.91	0.14*	0.21**	0.08	18.84	42.83	38.33
Anger-Trait STAXI	0.39** [0.27, 0.49]	0.33** [0.21, 0.44]	-0.72	0.30**	0.21**	0.18	41.44	19.95	38.61
Hostility (Sample 4)	0.51** [0.41, 0.61]	0.61** [0.51, 0.68]	-1.55	0.32**	0.47**	0.45	19.08	41.44	39.49
Hostility (Sample 5)	0.43** [0.33, 0.53]	0.41** [0.30, 0.51]	0.34	0.32**	0.27**	0.24	32.93	24.32	42.75
<i>Processes</i>									
Trauma	0.22* [0.01, 0.42]	0.22* [0.01, 0.42]	0.00	0.06	0.06	0.34	27.90	27.77	44.33
Recalled Memory Bias	-0.25* [0.45, 0.03]	-0.34** [-0.53, -0.12]	0.92	-0.07	-0.31**	0.10	2.51	49.46	48.02

Note. VN = Vulnerable narcissism; NP = Negative view of the past; AQ = Aggression Questionnaire; PN = Past Negative; STAXI = State Trait Anger Expression Inventory; VN = Vulnerable narcissism. All regression models were significant at  $p$ 's < 0.001, besides the model with positive affect and tense arousal ( $p$  > .05). For traumas, we report Poisson regression.

\* $p$  < .05, \*\* $p$  < .01.

past negative had least in common in case of well-being, with one exception of negative affect.

Lastly, we consider two potential processes (i.e., memory bias and experienced trauma) linking vulnerable narcissism and a negative view of the past (Table 2). Our evidence is consistent with the hypotheses, suggesting that those characterized by a tendency to remember more negative events in one's past (H3a) and their immediate life (H3b) were both more vulnerably narcissistic and to have a negative view of one's past, the correlations that did not differ across each trait. Specifically, both predictors shared almost half (48.02%) of the explained variance in the memory bias, however, vulnerable narcissism uniquely explained only marginal amount of variance (2.51%), while past negative perspective explained the lion's share (49.46%) of the memory bias variance. While vulnerable narcissism and past negative uniquely explained some of the experienced trauma's variance, they also had much in common (44.33%).<sup>4</sup>

## 5. Discussion

The idea that past experiences shape individual differences in narcissism is at the heart of various conceptualizations of narcissism, from the early days of psychoanalysis (Freud, 1932; Kernberg, 1975; Kohut, 1971) to contemporary research (Thomaes & Brummelan, 2018). In the current study, we comprehensively examined the relationship between vulnerable narcissism and the tendency to view the past in a negative way. Across seven studies, we found a relatively large association between vulnerable narcissism and negative view of the past. Additionally, these two variables share numerous psychological correlates in terms of personality traits, intra- and interpersonal outcomes, as well as specific memory processes.

We found that vulnerable narcissism and negative view of the past

<sup>4</sup> Although not included in our hypotheses, we also assessed how vulnerable narcissism predicts experienced traumas over grandiose narcissism. Vulnerable narcissism ( $\beta$  = 0.30,  $p$  < .01) and grandiose narcissism ( $\beta$  = 0.37,  $p$  < .01) predicted more early life traumas. Interestingly, they explained different variance of the traumas, having only 5.98% in common.

have similar personality profiles. Specifically, they were equally correlated with high levels of neuroticism and behavioral inhibition along with low levels of extraversion. They were also negatively associated with agreeableness and conscientiousness; however, they were slightly different in the magnitude of the correlations. Vulnerable narcissism was more strongly associated with agreeableness, while negative view of the past was more correlated with conscientiousness. These results suggest that antagonism is more characteristic of vulnerable narcissists, especially low empathy and concern for others as indicated by their lower levels of the compassion facet (Zajenkowski & Szymaniak, 2019). Additionally, in contrast to past negative time perspective, vulnerable narcissism was associated with more reward sensitivity as part of the behavioral activation system, which might underlie its positive link with grandiose narcissism.

Although negative view of the past and vulnerable narcissism had similar personality profiles, they differed in intrapersonal and interpersonal outcomes. In general, the past negative time perspective was more important for well-being than vulnerable narcissism. This is consistent with prior research showing that past negative perspective is a strong predictor of affective states, life satisfaction, and self-esteem even after controlling for other personality traits (Stolarski & Matthews, 2016; Zhang, Howell, 2011). There were no clear differences between past negative and vulnerable narcissism with respect to their unique contributions to other outcomes. However, we observed their high degree of overlap in explaining the variance of some variables. The most striking were the models with self-esteem and hostility where both predictors explained relatively large part of the variance, while having also much in common.

The possibility that there might be common processes underlying vulnerable narcissism and a negative view of the past was further explored in two studies. We found that people with high levels of vulnerable narcissism and those with especially negative views of their past reported more traumas; both variables explained 34% of the variance in early traumatic experiences with almost equal unique and relatively large, common contribution. The results are consistent with previous research showing that vulnerable narcissists recall more negative experiences from their childhood (Crawford & Wright, 2007;

Kim & Cicchetti, 2010; Rogosch & Cicchetti, 2004; Nguyen & Shaw, 2020), and display maladaptive attachment styles (Miller et al., 2011). Likewise, the negative view of the past has been linked to a more negative relationship with parents (Kostić et al., 2017) and more severe symptoms after a traumatic event (Stolarski & Cyniak-Cieciura, 2016). However, no study has tested the direct association between negative view of the past and the recalled traumas until now.

Although the questionnaire we used to measure recalled traumas asked about relatively objective events from one's childhood (e.g., parents' divorce), it might have captured also, at least in some cases (e.g., negligence, emotional abuse), the subjective interpretation of the past. Indeed, the concept of past negative perspective implies that the source of an aversive attitude toward the past might be real traumatic experience, or it can be a consequence of negative reconstruction of the past events (Zimbardo & Boyd, 1999). Thus, the question is to what extent vulnerable narcissism and past negative are associated with a memory bias of focusing on negative events. In the last of our studies, we asked participants to recall an event (without indicating its emotional content) from their recent past. People scoring high on vulnerable narcissism and people with higher scores on negative view of the past spontaneously recalled more negative memories than people with low levels of these traits.

Our study was the first to directly examine people's tendency to remember more negative events of one's immediate life in relation to past negative time perspective as well as vulnerable narcissism. This finding contributes to the literature in several ways. First, it supports the concept that people with a highly past negative perspective tend to retrieve from their memory events that are aversive and negative (Zimbardo & Boyd, 1999). Second, past negative and vulnerable narcissism largely overlapped in explaining memory bias (almost 50%) and vulnerable narcissism did not add much (2.5%) beyond the common variance. Thus, it is possible that the process underlying memory bias in vulnerable narcissists might be like the one described among those with a highly past negative perspective. It has been suggested that there might be specific processes of autobiographical memory among people oriented on the negative past (Matthews & Stolarski, 2015). The theory of autobiographical memory suggests two functions in the forms of adaptive correspondence (i.e., accurate records of experience) and self-coherence (i.e., the need to be consistent with self-concept; Conway, Singer, & Tagini, 2004). These two functions are in tension, because self-coherence distorts experiences and reconstructs them to fit the self-schema. A negative view of the past might be associated with the availability or accessibility of memories consistent with the pessimistic self-concept (Matthews & Stolarski, 2015). Likewise, vulnerable narcissists might have easier access to negative memories. An illustrative example might be one of the stories rated as highly negative, written by a participant with a relatively high level of vulnerable narcissism (i.e., the top quartile):

*Recently, I went to the city to earn some money. While going, I was thinking: what is for all this, nothing makes sense, the same thing over and over again, getting up early, slaving etc., no prospect for a better life, I feel like vomiting on all this; the others are resting, they lead a nice life, and here only gray, boring everyday life.*

On average, such negative stories were more available for vulnerable narcissists. However, the interaction between self-concept and memory might be dynamic and reciprocal, as the retrieval of negative events may influence the person's sense of who they are currently (Conway & Pleydell-Price, 2000). Thus, the vulnerable narcissists' current self-concept reconstructs past memories and the past reconstructs their self (Conway & Pleydell-Price, 2000).

Collectively, our findings revealed the importance of individual differences in the negative view of the past to understand individual differences in vulnerable narcissism. We found that the two constructs overlapped especially in the case of antagonism (i.e., hostility) and low

self-esteem. It is likely that the concentration on adverse experiences from one's past drives malevolence and negative self-evaluation among vulnerable narcissists. Such a possibility has already been suggested for anger rumination which may lead to aggressiveness in vulnerable narcissists (Ghim et al., 2015; Krizan & Johar, 2015). Our findings further support this view by showing that vulnerable narcissists tend to recall negative events from their immediate life as well as their childhood. However, we examined each outcome in a separate study, thus, more research including all important variables (i.e., memory bias, recalled traumas, hostility etc.) is needed to fully understand the role of concentration of the negative past in vulnerable narcissism.

## 6. Limitations and conclusions

Our research provided new insights into how vulnerable narcissism is related to the negative view of one's past, it was nonetheless, limited. First, our studies were correlational and examined each association between vulnerable narcissism, negative view of the past, and various outcomes in independent samples. Thus, we were not able to test models including several variables of interest or draw causal conclusions. Future studies should use an experimental procedure to examine whether, for instance, biases in memory lead to more hostile interpersonal style among vulnerable narcissists.

Second, our effect sizes were relatively large in most cases (Gignac & Szodorai, 2016). We observed large correlations with some of the personality factors (e.g., neuroticism and behavioral inhibition system) as well as intra- (e.g., self-esteem) and interpersonal outcomes (e.g., hostility). Negative view of the past and vulnerable narcissism jointly explained a relatively large amount of variance (>30%) in self-esteem, hostility, and traumas. However, there were smaller correlations with affect, which may suggest that our main predictors are more related to dispositional factors rather than momentary states. Third, while we had generally good internal consistencies for our measures (i.e.,  $\alpha' \geq 0.70$ ; Nunnally, 1978), some of our scales had only fair internal consistency estimates (i.e.,  $\alpha' s \approx 0.60$ ). However, our findings were consistent with prior research and most of them were replicated across the current studies. Fourth, we did not include any mechanism for identifying invalid responding, while implementing such procedure is recommended, especially for online surveys (like our Studies 3 and 4; Al-Salom & Miller, 2019). Fifth, in the current research only some of the variables (e.g., personality traits) were systematically assessed across all samples. For other variables, we had data from one or two samples and were not able to report meaningful meta-analytic effects for these variables. Lastly, it needs to be acknowledged that both our main variables, vulnerable narcissism, and negative view of the past have been found to highly overlap with neuroticism (Kairys & Liniauskaite, 2015; Miller et al., 2018). However, they also share some specific variance, beyond neuroticism (Zajenkowski et al., 2016). Moreover, while neuroticism is highly associated with general affect (e.g., negative mood, tension), vulnerable narcissism predicts specific states (e.g., anger) over neuroticism (Maciantowicz & Zajenkowski, 2020b). Similar findings pertain to negative view of the past, which predicts well-being over neuroticism (Zhang & Howell, 2011). Nonetheless, future studies could examine more specific content of memories, rather than just simple categorization on negative/positive valence as we did in Study 7. This would reveal whether vulnerable narcissists just concentrate on generally negative events, or events that are also damaging to their sense of self.

In conclusion, the current research revealed that the tendency to concentrate on negative events from the past is a crucial aspect of vulnerable narcissism. This tendency might stem from a bias in memory processes and may influence one's perception of themselves and others. Furthermore, a negative view of the past might explain various characteristics of vulnerable narcissists such as low self-esteem or increased levels of anger and hostility.

The study data and analysis scripts used for this article can be accessed at the OSF project site: [https://osf.io/j8r73/?view\\_only=b50](https://osf.io/j8r73/?view_only=b50)

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## CRediT authorship contribution statement

**Marcin Zajenkowski:** Conceptualization, Data curation, Funding acquisition, Supervision, Writing - original draft, Writing - review & editing. **Radosław Rogoza:** Conceptualization, Formal analysis, Writing - original draft. **Oliwia Maciantowicz:** Conceptualization, Data curation, Methodology, Writing - original draft. **Joanna Witowska:** Conceptualization, Data curation, Methodology, Writing - original draft. **Peter K. Jonason:** Writing - original draft, Writing - review & editing.

## Declaration of Competing Interest

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

## References

- Al-Salom, P., & Miller, C. J. (2019). The problem with online data collection: Predicting invalid responding in undergraduate samples. *Current Psychology, 38*, 1258–1264.
- Back, M. D. (2018). The narcissistic admiration and rivalry concept. In A. D. Hermann, A. B. Brunell, & J. D. Foster (Eds.), *Handbook of trait narcissism. Key advances, research methods, and controversies* (pp. 57–67). Cham: Springer.
- Back, M. D., Kufner, A. C., Dufner, M., Gerlach, T. M., Rauthmann, J. F., & Denissen, J. J. A. (2013). Narcissistic admiration and rivalry: Disentangling the bright and dark sides of narcissism. *Journal of Personality and Social Psychology, 105*, 1013–1037.
- Baer, J. C., & Martinez, C. D. (2006). Child maltreatment and insecure attachment: A meta-analysis. *Journal of Reproductive and Infant Psychology, 24*, 187–197.
- Bazińska, R., & Drat-Ruszczyk, K. (2000). *Struktura narcyzmu w polskiej adaptacji kwestionariusza NPI Raskina i Halla*. [The structure of narcissism measured with Polish adaptation of Raskin and Hall NPI]. *Czasopismo Psychologiczne, 6*, 171–187.
- Bąk, W. (2016). Pomiar stanu, cechy, ekspresji i kontroli złości. Polska adaptacja kwestionariusza STAXI-2. [The measurement of state, trait, expression, and control of anger. Polish adaptation of STAXI-2]. *Polskie Forum Psychologiczne, 12*, 93–122.
- Bishop, J., & Lane, R. C. (2002). The dynamics and dangers of entitlement. *Psychoanalytic Psychology, 19*, 739–758.
- Brzozowski, P. (2010). *Polska adaptacja skali PANAS. Podręcznik*. [Polish adaptation of the PANAS. Manual] PTP.
- Buss, A. H., & Perry, M. (1992). The aggression questionnaire. *Journal of Personality and Social Psychology, 63*, 452–459.
- Byra, S. (2011). *Satysfakcja z życia osób z uszkodzeniem rdzenia kręgowego w pierwszym okresie nabycia niepełnosprawności – funkcje wsparcia otrzymanego i oczekiwanego*. [Life satisfaction among patients with spinal cord injury during the first period of acquiring disability – functions of received and expected support]. *Medycyna Ogólna i Nauki o Zdrowiu, 17*, 64–70.
- Caligor, E., Levy, K. N., & Yeomans, F. E. (2015). Narcissistic personality disorder: Diagnostic and clinical challenges. *American Journal of Psychiatry, 172*, 415–422.
- Carver, C., & White, T. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS scales. *Journal of Personality and Social Psychology, 67*, 319–333.
- Cohen, R. A., Hitsman, B. L., Paul, R. H., McCaffery, J., Stroud, L., Sweet, L., et al. (2006). Early life stress and adult emotional experience: An international perspective. *The International Journal of Psychiatry in Medicine, 36*, 35–52.
- Conway, M. A., & Pleydell-Price, C. W. (2000). The construction of autobiographical memories in the self-memory system. *Psychological Review, 107*, 261–288.
- Conway, M. A., Singer, J. A., & Tagini, A. (2004). The self and autobiographical memory: Correspondence and coherence. *Social Cognition, 22*, 491–529.
- Crawford, E., & Wright, M. O. D. (2007). The impact of childhood psychological maltreatment on interpersonal schemas and subsequent experiences of relationship aggression. *Journal of Emotional Abuse, 7*, 93–116.
- Czarna, A. Z., Dufner, M., & Clifton, A. D. (2014). The effects of vulnerable and grandiose narcissism on liking-based and disliking-based centrality in social networks. *Journal of Research in Personality, 50*, 42–45.
- Czarna, A. Z., Marcin Zajenkowski, M., Maciantowicz, O., & Szymaniak, K. (2019). The relationship of narcissism with tendency to react with anger and hostility: The roles of neuroticism and emotion regulation ability. *Current Psychology*. <https://doi.org/10.1007/s12144-019-00504-6>
- Dawood, S., Schroder, H. S., Donnellan, M. B., & Pincus, A. L. (2018). Pathological narcissism and nonsuicidal self-injury. *Journal of Personality Disorders, 32*, 87–108.
- DeYoung, C. G., Quilty, L. C., & Peterson, J. B. (2007). Between facets and domains: 10 aspects of the Big Five. *Journal of Personality and Social Psychology, 93*, 880–896.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment, 49*, 71–75.
- Di Sarno, M., Zimmermann, J., Madeddu, F., Casini, E., & Di Pierro, R. (2020). Shame behind the corner?: A daily diary investigation of pathological narcissism. *Journal of Research in Personality, 85*, Article 103924.
- Freud, Z. (1914). On narcissism: An introduction. In P. Gay (Ed.), *The Freud reader* (pp. 545–562). New York, NY: W. W. Horton.
- Freud, S. (1932). Libidinal types. *The Psychoanalytic Quarterly, 1*(1), 3–6.
- 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*, 1120–1136.
- Ghim, S. C., Choi, D. H., Lim, J. L., & Lim, S. M. (2015). The relationship between covert narcissism and relational aggression in adolescents: Mediating effects of internalized shame and anger rumination. *International Journal of Information and Education Technology, 5*, 21–26.
- Gignac, G. E., & Szodorai, E. T. (2016). Effect size guidelines for individual differences researchers. *Personality and Individual Differences, 102*, 74–78.
- Goldberg, L. R. (1992). The development of markers for the big-five factor structure. *Psychological Assessment, 4*, 26–42.
- Gosling, S., Rentfrow, P., & Swann, W. B., Jr. (2003). A very brief measure of the Big Five personality domains. *Journal of Research in Personality, 37*, 504–528.
- Grapsas, E., Brummelman, E., Back, M. D., & Denissen, J. J. A. (2020). The “why” and “how” of narcissism”: A process model of narcissistic status pursuit. *Perspective on Psychological Science, 15*, 150–172.
- Hendin, H. M., & Cheek, J. M. (1997). Assessing hypersensitive narcissism: A reexamination of Murray’s Narcissism Scale. *Journal of Research in Personality, 31*, 588–599.
- Herman, A. D., Brunell, A. B., & Foster, J. D. (2018). *Handbook of trait narcissism*. New York, NY: Springer.
- Jankowski, K. S. (2015). Is the shift in chronotype associated with an alteration in wellbeing? *Biological Rhythm Research, 46*, 237–248.
- Kairys, A., & Liniauskaitė, A. (2015). Time perspective and personality. In M. Stolarski, N. Fieulaine, & W. van Beek (Eds.), *Time perspective theory: Review, research, and application* (pp. 99–113). Cham, Switzerland: Springer.
- Kealy, D., & Rasmussen, B. (2011). Veiled and vulnerable: The other side of grandiose narcissism. *Clinical Social Work Journal, 40*, 356–365.
- Kernberg, O. (1975). *Borderline conditions and pathological narcissism*. New York, NY: Jason Aronson.
- Kim, J., & Cicchetti, D. (2010). Longitudinal pathways linking child maltreatment, emotion regulation, peer relations, and psychopathology. *Journal of Child Psychology and Psychiatry, 51*, 706–716.
- Kohut, H. (1971). *The analysis of the self*. New York, NY: International Universities Press.
- Kostić, A., Pejičić, M., & Chadee, D. (2017). Hugging the past: The way we were and the way we are. In A. Kostić, & D. Chadee (Eds.), *Time perspective* (pp. 143–165). London, England: Palgrave Macmillan.
- Kozak, B., & Mażewski, M. (2007). Past or future?: Functional meaning of time perspective. *Psychological Colloquia, 16*, 225–233.
- Krizan, Z., & Herlache, A. D. (2018). The narcissism spectrum model: A synthetic view of narcissistic personality. *Personality and Social Psychology Review, 22*, 3–31.
- Krizan, Z., & Johar, O. (2015). Narcissistic rage revisited. *Journal of Personality and Social Psychology, 108*, 784–801.
- Lynam, D. R., & Miller, J. D. (2019). The basic trait of antagonism: An unfortunately underappreciated construct. *Journal of Research in Personality, 81*, 118–126.
- Laguna, M., Bąk, W., Purc, E., Mielniczuk, E., & Oleś, P. K. (2014). Short measure of personality TIPI-P in a Polish sample. *Annals of Psychology, 17*, 421–443.
- Maciantowicz, O., & Zajenkowski, M. (2020a). Is narcissistic anger fueled by neuroticism?: The relationship between grandiose and vulnerable narcissism, neuroticism, and trait anger. *Current Psychology, 39*, 1674–1681.
- Maciantowicz, O., & Zajenkowski, M. (2020b). Emotional experiences in vulnerable and grandiose narcissism: Anger and mood in neutral and anger evoking situations. *Self and Identity*. <https://doi.org/10.1080/15298868.2020.1751694>
- Matthews, G., Jones, D. M., & Chamberlain, A. G. (1990). Refining the measurement of mood: The UWIST mood adjective checklist. *British Journal of Psychology, 81*, 17–42.
- Matthews, G., & Stolarski, M. (2015). Emotional processes in development and dynamics of individual time perspective. In M. Stolarski, N. Fieulaine, & W. van Beek (Eds.), *Time perspective theory: Review, research, and application* (pp. 269–286). Cham, Switzerland: Springer.
- Miles, G. J., Smyrniotis, K. X., Jackson, M., & Francis, A. J. P. (2019). Reward-punishment sensitivity bias predicts narcissism subtypes: Implications for the etiology of narcissistic personalities. *Personality and Individual Differences, 141*, 143–151.
- Miller, J. D., & Campbell, W. K. (2008). Comparing clinical and social personality conceptualizations of narcissism. *Journal of Personality, 76*, 449–476.
- Miller, J. D., Dir, A., Gentile, B., Wilson, L., Pryor, L. R., & Campbell, W. K. (2010). Searching for a vulnerable Dark Triad: Comparing factor 2 psychopathy, vulnerable narcissism, and borderline personality disorder. *Journal of Personality, 78*, 1529–1564.
- Miller, J. D., Hoffman, B. J., Gaughan, E. T., Gentile, B., Maples, J., & Campbell, W. K. (2011). Grandiose and vulnerable narcissism: A nomological network analysis. *Journal of Personality, 79*, 1013–1042.

- Miller, J. D., Lynam, D. R., McCain, J. L., Few, L. R., Crego, C., Widiger, T. A., et al. (2016). Thinking structurally about narcissism: An examination of the five-factor narcissism inventory and its components. *Journal of Personality Disorders*, *30*, 1–18.
- Miller, J. D., Lynam, D. R., Vize, C., Crowe, M., Sleep, C., Maples-Keller, J. L., et al. (2018). Vulnerable narcissism is (mostly) a disorder of neuroticism. *Journal of Personality*, *86*, 186–199.
- Morf, C. C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry*, *12*, 177–196.
- Muller, J. M., & Wytykowska, A. M. (2005). Psychometric properties and validation of a Polish adaptation of Carver and White's BIS/BAS scales. *Personality and Individual Differences*, *39*, 795–805.
- Nguyen, K. T., & Shaw, L. (2020). The aetiology of non-clinical narcissism: Clarifying the role of adverse childhood experiences and parental overvaluation. *Personality and Individual Differences*, *154*, Article 109615.
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York, NY: McGraw Hill.
- Pavot, W., Diener, E., & Suh, E. (1998). The temporal satisfaction with life scale. *Journal of Personality Assessment*, *70*, 340–354.
- Pincus, A. L., & Lukowitsky, M. R. (2010). Pathological narcissism and narcissistic personality disorder. *Annual Review of Clinical Psychology*, *6*, 421–446.
- Pincus, A. L., Ansell, E. B., Pimentel, C. A., Cain, N. M., Wright, A. G. C., & Levy, K. N. (2009). Initial construction and validation of the Pathological Narcissism Inventory. *Psychological Assessment*, *21*, 365–379.
- Pistol, M. C. (1995). Adult attachment style and narcissistic vulnerability. *Psychoanalytic Psychology*, *12*, 115–126.
- Raskin, R., & Hall, C. S. (1979). The narcissistic personality inventory. *Psychological Reports*, *45*, 590.
- Rogosch, F. A., & Cicchetti, D. (2004). Child maltreatment and emergent personality organization: Perspectives from the five-factor model. *Journal of Abnormal Child Psychology*, *32*, 123–145.
- Rogoza, R., Ciecuch, J., Strus, W., & Baran, T. (2019). Seeking a common framework for research on narcissism: An attempt to integrate the different faces of narcissism within the Circumplex of Personality Metatraits. *European Journal of Personality*, *33*, 437–455.
- Rogoza, R., Żemajtł-Piotrowska, M., Kwiatkowska, M. M., & Kwiatkowska, K. (2018). The bright, the dark, and the blue face of narcissism: The spectrum of narcissism in its relations to the metatraits of personality, self-esteem, and nomological network of shyness, loneliness and empathy. *Frontiers in Psychology*, *9*, 343.
- Ronningstam, E. F. (2005). *Identifying and understand the narcissistic personality*. New York, NY: Oxford University Press.
- Ronningstam, E. F., & Maltzbreger, J. T. (2010). Pathological narcissism and sudden suicide related collapse. *Suicide and Life-Threatening Behavior*, *28*, 261–271.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton: Princeton University Press.
- Sokolowski, A., & Dragan, W.L. (2017). New empirical evidence on the validity and reliability of the early life stress questionnaire in a Polish sample. *Frontiers in Psychology*, *8*, 365.
- Spielberger, C. D. (1999). *Sate-Trait Anger Expression Inventory-2: STAXI-2. Psychological Assessment Resources*.
- Stolarski, M., & Cyniak-Cieciura, M. (2016). Balanced and less traumatized: Balanced time perspective mediates the relationship between temperament and severity of PTSD syndrome in motor vehicle accident survivor sample. *Personality and Individual Differences*, *101*, 456–461.
- Stolarski, M., & Matthews, G. (2016). Time perspectives predict mood states and satisfaction with life over and above personality. *Current Psychology*, *35*, 516–526.
- Stolarski, M., Matthews, G., Postek, S., Zimbardo, P. G., & Bitner, J. (2014). How we feel is a matter of time: Relationships between time perspectives and mood. *Journal of Happiness Studies*, *15*, 809–827.
- Stolarski, M., Zajenkowski, M., & Zajenkowska, A. (2016). Aggressive from time to time: Uncovering complex associations between time perspectives and aggression. *Current Psychology*, *35*, 506–515.
- Strus, W., Ciecuch, J., & Rowiński, T. (2014). Polska adaptacja kwestionariusza IPIP-BFM-50 do pomiaru pięciu cech osobowości w ujęciu leksykalnym [Polish adaptation of IPIPBFM-50 measuring five personality traits in a lexical approach]. *Roczniki Psychologiczne*, *17*, 327–346.
- Strus, W., Rowiński, T., & Ciecuch, J. (2012). Polish version of Big Five aspects scales from the international personality item pool. *16th European conference on personality*.
- Sukhodolsky, D. G., Golub, A., & Cromwell, E. N. (2001). Development and validation of the anger rumination scale. *Personality and Individual Differences*, *31*, 689–700.
- Thomaes, S., & Brummelman, E. (2018). Parents' socialization of narcissism in children. In A. Hermann, A. Brunell, & J. Foster (Eds.), *The handbook of trait narcissism: Key advances, research methods, and controversies* (pp. 143–148). Cham, Switzerland: Springer.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*, 1063–1070.
- Wetzel, E., Leckelt, M., Gerlach, T. M., & Back, M. D. (2016). Distinguishing subgroups of narcissists with latent class analysis. *European Journal of Personality*, *30*, 374–389.
- Wink, P. (1991). Two faces of narcissism. *Personality and Individual Differences*, *61*, 590–597.
- Witowska, J., & Zajenkowski, M. (2019). Cognitive consequences of timeframe bias: On the link between working memory, cognitive switching, and time perspective. *Current Psychology*, 1–14.
- Zajenkowski, M., Czarna, A. Z., Szymaniak, K., & Dufner, M. (2020). What do highly narcissistic people think and feel about (their) intelligence? *Journal of Personality*, *88* (4), 703–718.
- Zajenkowski, M., & Matthews, G. (2019). Intellect and openness differentially predict affect: Perceived and objective cognitive ability contexts. *Personality and Individual Differences*, *137*, 1–8.
- Zajenkowski, M., Stolarski, M., Witowska, J., Maciantowicz, O., & Łowicki, P. (2016). Fluid intelligence as a mediator of the relationship between executive control and balanced time perspective. *Frontiers in Psychology*, *7*, 1844.
- Zajenkowski, M., & Szymaniak, K. (2019). Narcissism between facets and domains. The relationships between two types of narcissism and aspects of the Big Five. *Current Psychology*. <http://doi.org/10.1007/s12144-019-0147-1>.
- Zajenkowski, M., Witowska, J., Maciantowicz, O., & Malesza, M. (2016). Vulnerable past, grandiose present: The relationship between vulnerable and grandiose narcissism, time perspective and personality. *Personality and Individual Differences*, *98*, 102–106.
- Zeigler-Hill, V., Clark, C. B., & Pickard, J. D. (2008). Narcissistic subtypes and contingent self-esteem: do all narcissists base their self-esteem on the same domains? *Journal of Personality*, *76*, 753–774.
- Zhang, J. W., & Howell, R. T. (2011). Do time perspectives predict unique variance in life satisfaction beyond personality traits? *Personality and Individual Differences*, *50*, 1261–1266.
- Zhang, J. W., Howell, R. T., & Stolarski, M. (2013). Comparing three methods to measure a balanced time perspective: The relationship between a balanced time perspective and subjective well-being. *Journal of Happiness Studies*, *14*, 169–184.
- Zimbardo, P. G., & Boyd, J. N. (1999). Putting time in perspective: A valid, reliable individual-difference metric. *Journal of Personality and Social Psychology*, *77*, 1271–1288.
- Żemajtł-Piotrowska, M., Piotrowski, J., Rogoza, R., Baran, T., Hitokoto, H., & Maltby, J. (2018). Cross-cultural invariance of NPI-13: Entitlement as culturally specific, leadership and grandiosity as culturally universal. *International Journal of Psychology*, *54*, 439–447.