

HOW DO NARCISSISTIC PEOPLE USE DEFENSE STYLES? THE IMPORTANCE OF FOCUSING ON THE HEDONISTIC PRESENT OR THE NEGATIVE PAST*

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Narcissism affects how people interpret and react to psychological stressors. How stressful events are processed with temporal categories may play a role in the adaptivity of the defense mechanisms used. This study aimed to test whether the connection of narcissism with adaptive and maladaptive defense styles is mediated by present hedonistic and past negative time perspectives—two perspectives related to the characteristics of narcissism. $N = 719$ participants from the general population took part in the online panel-based questionnaire study. The results show that narcissism relates positively to adaptive and maladaptive defense styles. This relationship is mediated by the present hedonistic time perspective in both models and the past negative time perspective only in the case of maladaptive defense style as a dependent variable. The results show empirical evidence for the twofold nature of narcissism and present hedonism in coping with stressors. They also hint at using time perspective themes in the therapeutic work on defense mechanisms in people with high narcissism. This is the first study to assess time perspectives in the context of defense mechanisms and narcissism performed on a large sample. It is valuable for scientific and practical settings given the high prevalence of narcissistic traits in the population.

Keywords: Dark Triad; defense styles; narcissism; present hedonistic time perspective; past negative time perspective

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* This work was supported by the Ministry of Science and Higher Education through a subsidy for maintenance and development of research potential at the Maria Grzegorzewska University in 2020. Data used for this manuscript are openly available at osf.io/hbkav.

Handling editor: ANETA BORKOWSKA, Maria Curie-Skłodowska University. Received 5 Dec. 2025. Received in revised form 6 Feb. 2026. Accepted 15 Feb. 2026. Published online 20 March 2026.

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For many years, narcissism was perceived as a clinical construct (Pincus & Lukowitsky, 2010). However, today narcissism is described both as a personality structure or configuration of traits and, in the extreme, as a personality disorder (Krizan & Herlache, 2018). Moreover, different forms of narcissism are distinguished, for example: pathological (a negative consequence of parent–child relationships), “normal” (sustaining positive self-esteem; Morf & Rhodewalt, 2001) as well as grandiose and vulnerable (Pincus & Lukowitsky, 2010).

In the current paper, we focus on narcissism as an element of the Dark Triad of personality (Jonason & Webster, 2010; Paulhus & Williams, 2002). In addition to narcissism, the Dark Triad includes Machiavellianism and sub-clinical psychopathy—all related to lack of empathy, impulsivity, emotional coldness, aggressiveness, and self-promotion, all perceived as socially undesirable traits (Paulhus & Williams, 2002).

Narcissism in this conceptualization is related to how people deal with the challenges of modern reality (Jonason et al., 2020). Narcissistic traits show normative longitudinal changes across the lifespan, with mean levels declining but individual differences remaining relatively stable, suggesting narcissism is an enduring disposition that can shape later functioning (Orth et al., 2024), including coping strategies or defense styles. For example, narcissism fosters avoidance, especially in humiliation situations (Besser & Zeigler-Hill, 2010; Ruggiero et al., 2017). Narcissism is also associated with using specific, often maladaptive, defense mechanisms (Imamoglu & Durak Batigun, 2020; Masterson, 2000). Previous research suggests that a lack of empathy (characteristic of narcissism) promotes using maladaptive coping strategies (Sun et al., 2019). Nevertheless, grandiose narcissists are flexible in coping with stress (Ng et al., 2014), suggesting that not only maladaptive functioning patterns might be observed in people who display narcissism. Despite this evidence, little is known what mechanisms may drive people of high narcissism to develop adaptive or maladaptive defense styles, and this is the research gap we aim here to address.

Defense mechanisms are automatic, unconscious psychological processes taking part in the reactions of individuals to stressors and emotional conflicts, protecting the ego from distress, internal conflicts, and the awareness of threats (Cramer, 2006). Defense mechanisms are important to understand when studying psychological adaptation processes. Some defense mechanisms are considered less, and some are more mature than others (Cramer, 2008). They can be advantageous or detrimental to psychological functioning, depending on how often, how flexibly and in what context they are used. Exces-

sive usage of specific defense mechanisms can distort the perception of reality but, in turn, can result in comfortable functioning (Cramer, 1987).

Defense mechanisms can be variously classified into defense styles. Prout et al. (2018) suggested an alternative aggregation of defense mechanisms into the maladaptive and adaptive. Generally, mature and adaptive defense mechanisms and/or styles can promote better health (both physical and mental), whereas immature and maladaptive can inhibit it and lead to psychopathological symptoms (Andrews et al., 1989; Blaya et al., 2006). For example, both antisocial and narcissistic personality disorders share devaluation, classified as maladaptive mechanisms (Perry et al., 2013).

Pathological narcissism is associated with an immature and neurotic defense style, which includes, e.g., autistic fantasy, projection, and splitting (Mielimaka et al., 2018; Perry et al., 2013). However, only the neurotic style mediates the relationship between narcissism and interpersonal problems (Mielimaka et al., 2018). Similarly, subclinical types of narcissism—grandiose and vulnerable—are predicted by an immature and neurotic style, as well as a defensive splitting mechanism measured independently (Imamoglu & Durak Batigun, 2020). Moreover, self-esteem instability—a fundamental aspect of narcissism (especially the vulnerable type) is significantly and positively correlated with immature defense mechanisms. Interestingly, the relationship between mature defenses and self-esteem instability appeared to be moderated by the level of self-esteem. The more mature mechanisms, the greater stability in the low self-esteem group (Zeigler-Hill et al., 2008).

Also, time perspectives are related to self-esteem (Zimbardo & Boyd, 1999). However, there is a lack of research combining all of these constructs—narcissism, defense mechanisms, and time perspectives—and systematizing the connections between them.

Time perspective (TP) can be defined as a process of assigning the flow of experiences to particular time frames: past, present, or future (Zimbardo & Boyd, 1999). According to Zimbardo and Boyd (1999, 2008), TPs can be used in various ways and respond to the dynamics of lived experiences. However, when one or more of them are used habitually, they can become relatively stable individual differences. Traditionally, five TPs are distinguished:

- past positive—a nostalgic, favorable view of the past;
- past negative—a discouraged view of the past, remorse and regret;
- present fatalistic—a hopeless view of the present and a feeling of limited capability to influence own life;

- present hedonistic—an attitude toward the present aimed at deriving pleasure from activities and risk-taking just for the sake of it; and
- future—concentration on the consequences of own actions (see Zimbardo & Boyd, 2008). TPs affect how people think, feel and behave (Zimbardo & Boyd, 1999).

Importantly, as discussed above, narcissism is a relatively stable disposition (Orth et al., 2024). In contrast, time perspectives are malleable (Auer et al., 2024) and are suggested to be target of mental health interventions to improve psychological functioning (Zimbardo et al., 2012), suggesting a potential causal pathway between narcissism and specific time perspectives. For narcissism, it was found that especially past negative and present hedonistic are the TPs that are associated with it even after controlling for the Big Five traits (Zajenkowski et al., 2016). The past negative TP was primarily linked to the vulnerable aspect of narcissism. It is worth noting that past negative TP is a predictor of low self-esteem (Zimbardo & Boyd, 1999) and contributes to a bias in recollecting and anticipating negative moods (Stolarski et al., 2014). It is in line with the tendency of vulnerable narcissists to have negative self-images (Zajenkowski et al., 2016). Vulnerable narcissists also have a tendency for narcissistic rage—a mix of shame, anger, and hostility—resulting in distrust and aggressive behavior (Krizan & Johar, 2015). Past negative TP is also found to correlate with hostility (Stolarski et al., 2016). Thus, it may be one of the reasons for the linkages between vulnerable narcissism and past negative TP. The latter can be a form of maladaptive adjustment and is connected to less mature defense styles (Kuznetsova & Petrushova, 2018). Thus, exploring the pathways to their development with narcissism and past negative TP as predictors can be worthwhile.

Another TP—present hedonistic—is correlated with another facet of narcissism—grandiose narcissism (Birkás & Csathó, 2015; Zajenkowski et al., 2016). The possible reason for such an association might be the novelty and reward-seeking tendency, limited consideration of future consequences, an illusion of control, unrealistic optimism, and overconfidence observable in narcissists (Campbell et al., 2004; Zajenkowski et al., 2016). Interestingly, it is reported that an optimal level of self-enhancement (observable in narcissism) and hedonistic orientation might be vital for psychological adjustment (Sedikides et al., 2004). Presumably, a similar pattern can be observed for adaptive defense styles, which are connected to how people cope and adapt to the environment and situations in which they function.

Experimental studies manipulating time perspective further show that shifts in temporal focus causally influence self-regulatory processes: for example, time orientation affects impulse control and delay of gratification, supporting a causal role for time perspective in regulation underlying adaptive behavior (Dreves & Blackhart, 2019), which conceptually resembles defense styles. Classic research also demonstrates that present hedonistic and past negative orientations are associated with differences in affective and behavioral regulation, reinforcing the plausibility of time perspective as a mechanism linking personality traits (such as narcissism) to coping and defense strategies (Zimbardo et al., 1997).

Present Study

People high on narcissism tend to have high yet unstable self-esteem, being very sensitive to feedback from the social environment (Bushman & Baumeister, 1998). They react emotionally to it more extremely than people low on narcissism and try to find ways to weaken the power of the negative feedback they receive (Stucke & Sporer, 2002). Emmons (1987) observed correlations between the extremity of the affect in people with high narcissism and their daily mood variability. The question is whether and how narcissism can be connected to adaptive versus maladaptive ego defense strategies. Based on the literature review presented above, the aim of the current study is thus to find out whether past negative or present hedonistic TPs can mediate the relationship between narcissism and defense styles (adaptive versus maladaptive), so as to better understand why people high on narcissism use particular forms of mental defenses and cope with the problems.

Literature suggests that narcissism has twofold consequences—first, it can promote psychological health, prevent daily sadness and depression, and promote mental and couple well-being (Sedikides et al., 2004), but it also serves as a risk factor for aggression, anger, hostility (e.g., Czarna et al., 2021; Rasmussen, 2016) and unethical decisions and behaviors (Poless et al., 2018). Thus, it might be hypothesized (H1) that narcissism can promote adaptive and maladaptive ego defense forms.

What can be the mechanism underlying these linkages? Based on the literature on narcissism and defense styles mentioned above, TPs can be viewed as promising constructs. We hypothesize that (H2) past negative TP can be linked to decreased adaptive defense mechanisms and increased use of mala-

daptive defenses. Given that past negative TP is also characteristic of narcissism (Zajenkowski et al., 2016), (H3) past negative TP can be a potential mediator of the link between narcissism and ego defenses.

Also, second TP related to narcissism, present hedonistic TP (Zajenkowski et al., 2016), can serve a similar function. Present hedonistic TP, similarly to narcissism, has a two-fold nature. The first is the need to seek and derive pleasure from own experiences, but the second is the risk-taking tendency and readiness to act impulsively to achieve hedonic goals (Stolarski et al., 2017). Thus it can promote both adaptive and maladaptive coping with difficult situations. Therefore, it might be hypothesized that (H4) present hedonistic TP can be linked positively to both adaptive and maladaptive defense styles, and (H5) acts as a mediator between narcissism and both defense styles.

In the current study, all of these hypotheses will be tested by controlling for age and gender, as well as other Dark Triad traits (which, although qualitatively different from narcissism, may co-occur with it and impact the results obtained), and TPs which were measured along the tested predictors.

METHOD

Note on the Dataset

The data were part of a large project, for which raw data can be accessed at osf.io/hbkav. The hypotheses tested in the current study were not reported elsewhere. The sample size was chosen with the assistance of G*Power 3.1 for detecting a small effect of partial R^2 increase of 0.05 ($\alpha = 0.05$) with a power of 0.99 in our planned analyses.

Participants and Procedure

A total of 719 participants aged 25–45 ($M = 34.38$, $SD = 5.71$) took part in the study: 518 females (71.9%) and 201 males (27.9%). Seven individuals (1.0%) had primary school education; 9 (1.3%)—secondary school; 41 (5.7%)—vocational school; 239 (33.2%)—high school; 14 (1.9%) were current higher education students, 407 (56.6%) were university-educated, 2 (0.3%) had another education level. A total of 181 (25.2%) respondents lived in a village; 69 (9.6%)—in a town of less than 20,000 inhabitants; 167 (23.2%)—

in a medium town of 20,000–99,000 inhabitants; 163 (22.7%)—in a city of 100,000–500,000 inhabitants; and 139 (19.3%)—in a larger city (> 500,000 inhabitants). Regarding marital status, 376 (52.3%) participants were married, 160 (22.3%) were in an informal relationship, 143 (19.9%) were single, 29 (4.0%) were divorced, 8 (1.1%) were widowed, and 3 (0.4%) declared another status.

The study was conducted through a large online survey panel Ariadna in autumn 2020. In the panel, there are registered users who, for each completed survey, receive points that accumulate in their user accounts. The appropriate number of points can then be exchanged for a prize available in the catalog. Users received an invitation to the anonymous study, were informed of the nature of the study and the possibility of opting out from it, and agreed to participate.

The study was conducted in accordance with the Declaration of Helsinki (2001) and local requirements of the Maria Grzegorzewska University Research Ethics Committee. The participants provided their written informed consent to participate in this study.

Measures

To measure the level of narcissism, we used the Polish adaptation (Czarna et al., 2016) of the Dirty Dozen Scale (DTDD-P; Jonason & Webster, 2010) measuring Dark Triad traits: narcissism, psychopathy, and Machiavellianism. The tool consists of 12 items, four items per trait. A sample item: “I tend to seek prestige or status” (narcissism subscale). Participants were asked to answer questions using a 5-point Likert response format (1 = *not at all true*, 5 = *extremely true*). Scores were obtained as means of items relevant to each of the subscales. Cronbach’s α reliabilities were: .86 for narcissism, .73 for psychopathy, and .88 for Machiavellianism.

Time perspectives were tested using the Polish Short Version of the Zimbardo Time Perspective Inventory (PS-ZTPI; Przepiorka et al., 2016). The questionnaire contains 20 items and measures four Time Perspectives: past negative, present hedonistic, future, and past positive. Participants were asked to respond to how much they agreed with statements using a 5-point Likert scale (1 = *completely disagree*, 5 = *completely agree*). A sample item: “It’s hard for me to forget unpleasant images of my youth” (past negative subscale). We averaged the relevant items to create indices for these perspectives.

Cronbach's α reliabilities were: .83 for past negative time perspective, .75 for past positive time perspective, .80 for present hedonistic time perspective, and .78 for future time perspective.

Defense styles were measured using the Polish adaptation (Sękowski, 2019) of Defense Style Questionnaire-40 (DSQ-40; Andrews et al., 1993). The tool measures 20 defense mechanisms and consists of 20 statements. Participants indicate how much they agree with each item using a 9-point Likert scale (from 1 = *completely disagree* to 9 = *completely agree*). A sample item: "If I have an aggressive thought, I feel the need to do something to compensate for it" (undoing mechanism subscale). In the original version, the 20 mechanisms were divided into three styles: mature, neurotic, and immature (Andrews et al., 1993). However, recent studies (Prout et al., 2018; Sekowski, 2022) has shown that it is more appropriate to distinguish two styles: the maladaptive style (MDS), including the following defenses: autistic fantasy, somatization, passive aggression, displacement, acting out, projection, undoing, devaluation, splitting, denial, dissociation, and reaction formation and the adaptive style (ADS) including suppression, humor, rationalization, anticipation, sublimation, pseudoaltruism, idealization, and isolation). We used the latter classification of styles. We computed scores for mechanisms and styles by adding relevant items according to the key. Cronbach's α reliabilities were: .74 for adaptive defense style and .87 for maladaptive defense style.

Analytic Strategy

All analyses were performed in IBM SPSS 26.0.0.1 for Windows with Andrew F. Hayes PROCESS 3.5 macro (Hayes, 2018). Andrew F. Hayes Model 4 for mediation was used as the focal test in the current study. Bootstrapping for $N = 5,000$ was employed during the analysis. The level of $p < .05$ was considered significant.

RESULTS

Descriptive statistics and correlation (Pearson's r) analyses were performed to gain initial insight into the examined variables. Table 1 presents the results of this investigation.

NARCISSISM, DEFENSE STYLES, AND TIME PERSPECTIVES

Table 1
Correlations Between Age, Dark Triad, Time Perspectives, and Defense Styles

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Gender (0 = Female, 1 = Male)	—	—	—									
2. Age	34.38	5.71	.17***	—								
3. Narcissism	2.39	.89	.09*	-.05	—							
4. Psychopathy	2.13	.75	.26***	-.00	.48***	—						
5. Machia- villianism	1.98	.85	.16***	.04	.62***	.67***	—					
6. Past negative time perspective	3.27	.83	.00	-.05	.14***	.06	.13***	—				
7. Past positive time perspective	3.71	.67	-.11**	.08*	-.05	-.20***	-.15***	-.20***	—			
8. Present hedonistic time perspective	2.88	.73	.01	.03	.23***	.17***	.19***	.14***	.19***	—		
9. Future time perspective	3.72	.64	-.12**	.04	-.02	-.17***	-.16***	-.08*	.41***	-.01	—	
10. Adaptive defense style	80.42	15.02	.07	.06	.21***	.17***	.12**	.04	.23***	.27***	.21***	—
11. Maladaptive defense style	102.85	25.33	.07	.02	.34***	.37***	.42***	.44***	-.19***	.30***	-.15***	.48***

Note. Descriptive statistics are provided for unstandardized variables.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

As shown in Table 1, gender and age were not significantly related to the dependent variables (adaptive and maladaptive defense styles), thus, were not taken into account in further analyses. All Dark Triad traits were significantly associated with both adaptive and maladaptive defense styles. Narcissism significantly correlated with past negative and present hedonistic time perspec-

tives. Moreover, all of them were significantly associated with adaptive and maladaptive defense styles, except for the lack of significant correlation between past negative time perspective and adaptive defense style. Thus, past negative time perspective fulfilled the requirement of inclusion in mediation analysis only for the model with maladaptive defense style as a dependent variable. Another hypothesized mediator, present hedonistic time perspective, showed significant associations with narcissism and both defense styles, fulfilling the requirement of inclusion in mediation analyses with both adaptive and maladaptive defense styles as dependent variables.

Next, to test the focal hypotheses, a mediation analysis was performed. Prior to this stage of analysis, all variables were standardized to z-scores. Table 2 presents the results of the simple slopes analysis predicting adaptive defense style with narcissism as an independent variable and present hedonistic TP as a mediator, with other Dark Triad traits and time perspectives, except for past negative TP, controlled (see correlations in Table 1).

Table 2

Testing Mediation Effect of Present Hedonistic Time Perspective in Relationship Between Narcissism and Adaptive Defense Style (Other Dark Triad Traits and Time Perspectives, Except for Past Negative, Controlled)

Dependent variable: Present hedonistic time perspective, $F(5, 714) = 18.85, p < .001$					
	<i>B</i> [95% CI]	<i>SE</i>	<i>t</i>	<i>p</i>	R^2_{adj}
Narcissism	.16 [.07, .25]	.05	3.53	<.001	.110
Psychopathy	.10 [.00, .19]	.05	1.97	.049	
Machiavellianism	.06 [-.05, .16]	.05	1.08	.282	
Past positive time perspective	.27 [.19, .35]	.04	6.88	<.001	
Future time perspective	-.09 [-.17, -.02]	.04	-2.42	.016	
Dependent variable: Adaptive defense style, $F(6, 713) = 25.30, p < .001$					
	<i>B</i> [95% CI]	<i>SE</i>	<i>t</i>	<i>p</i>	R^2_{adj}
Narcissism	.13 [.05, .22]	.04	3.04	.002	.169
Psychopathy	.19 [.10, .28]	.05	4.09	<.001	
Machiavellianism	-.08 [-.18, .02]	.05	-1.60	.110	
Past positive time perspective	.16 [.08, .23]	.04	4.00	<.001	
Present hedonistic time perspective	.19 [.12, .26]	.04	5.38	<.001	
Future time perspective	.17 [.09, .24]	.04	4.40	<.001	
Indirect effect on adaptive defense style					
	Effect [95% CI]	Boot <i>SE</i>			
Narcissism → Present hedonistic time perspective → Adaptive defense style	.03 [.01, .06]	.01			

As shown in Table 2, of the independent variables introduced to the model, narcissism ($B = .13$; 95% CI [.05, .22]), psychopathy ($B = .19$; 95% CI [.10, .28]), past positive TP ($B = .16$; 95% CI [.08, .23]), present hedonistic TP ($B = .19$; 95% CI [.12, .26]) and future TP ($B = .17$; 95% CI [.09, .24]) were significant predictors of ADS. All the significant predictors were comparable in terms of the magnitude of their association with the dependent variable (B coefficients ranging from .13 to .19).

The present hedonistic TP partially mediated the relationship between narcissism and ADS. The total effect of narcissism on ADS ($B = .16$; 95% CI [.08, .25]) was reduced ($B = .03$; 95% CI [.05, .22]). Narcissism was positively related to present hedonistic TP ($B = .16$; 95% CI [.07, .25]), and then present hedonistic TP was positively related to ADS ($B = .19$; 95% CI [.12, .26]). Figure 1 presents a visualization of the mediation analysis for adaptive defense style as the dependent variable, with rest of the Dark Triads and time perspectives (except for past negative) controlled.

Figure 1

Results of Mediation Analysis: Effect of Narcissism on Adaptive Defense Style with Present Hedonistic Time Perspective as Mediator

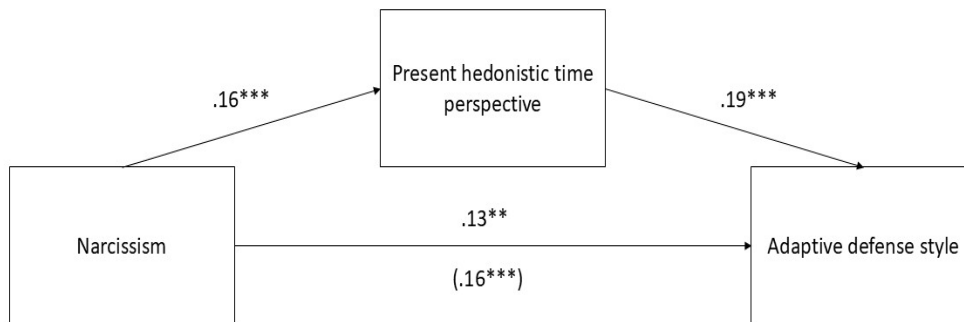


Table 3 presents the results of simple slopes analysis predicting maladaptive defense style with narcissism as an independent variable and two parallel mediators: past negative and present hedonistic TPs, with other Dark Triad traits and time perspectives (see correlations in Table 1), controlled.

Table 3

Testing the Mediation Effect of Past Negative and Present Hedonistic Time Perspectives in the Relationship Between Narcissism and Maladaptive Defense Style (Other Dark Triad Traits and Time Perspectives Controlled)

Dependent variable: Past negative time perspective, $F(5, 714) = 9.97, p < .001$					
	<i>B</i> [95% CI]	<i>SE</i>	<i>t</i>	<i>p</i>	R^2_{adj}
Narcissism	.13 [.04, .22]	.05	2.76	.006	.059
Psychopathy	-.10 [-.20, -.00]	.05	-2.00	.046	
Machiavellianism	.09 [-.02, .19]	.06	1.57	.117	
Past positive time perspective	-.20 [-.28, -.12]	.04	-5.04	<.001	
Future time perspective	.00 [-.08, .08]	.04	.01	.992	
Dependent variable: Present hedonistic time perspective, $F(5, 714) = 18.85, p < .001$					
	<i>B</i> [95% CI]	<i>SE</i>	<i>t</i>	<i>p</i>	R^2_{adj}
Narcissism	.16 [.07, .25]	.05	3.53	<.001	.110
Psychopathy	.10 [.00, .19]	.05	1.97	.049	
Machiavellianism	.06 [-.05, .16]	.05	1.08	.282	
Past positive time perspective	.27 [.19, .35]	.04	6.88	<.001	
Future time perspective	-.09 [-.17, -.02]	.04	-2.42	.016	
Dependent variable: Maladaptive defense style, $F(7, 712) = 63.68, p < .001$					
	<i>B</i> [95% CI]	<i>SE</i>	<i>t</i>	<i>p</i>	R^2_{adj}
Narcissism	.06 [-.02, .13]	.04	1.53	.128	.385
Psychopathy	.15 [.07, .23]	.04	3.58	<.001	
Machiavellianism	.18 [.09, .27]	.05	4.07	<.001	
Past negative time perspective	.36 [.30, .42]	.03	11.62	<.001	
Past positive time perspective	-.08 [-.15, -.01]	.03	-2.32	.020	
Present hedonistic time perspective	.19 [.13, .25]	.03	6.07	<.001	
Future time perspective	-.03 [-.09, .04]	.03	-.88	.377	
Indirect effects on maladaptive defense style					
	Effect [95% CI]	Boot <i>SE</i>			
Narcissism → Past negative time perspective → Maladaptive defense style	.05 [.01, .08]	.02			
Narcissism → Present hedonistic time perspective → Maladaptive defense style	.03 [.01, .05]	.01			
Total indirect effect	.08 [.03, .12]	.02			

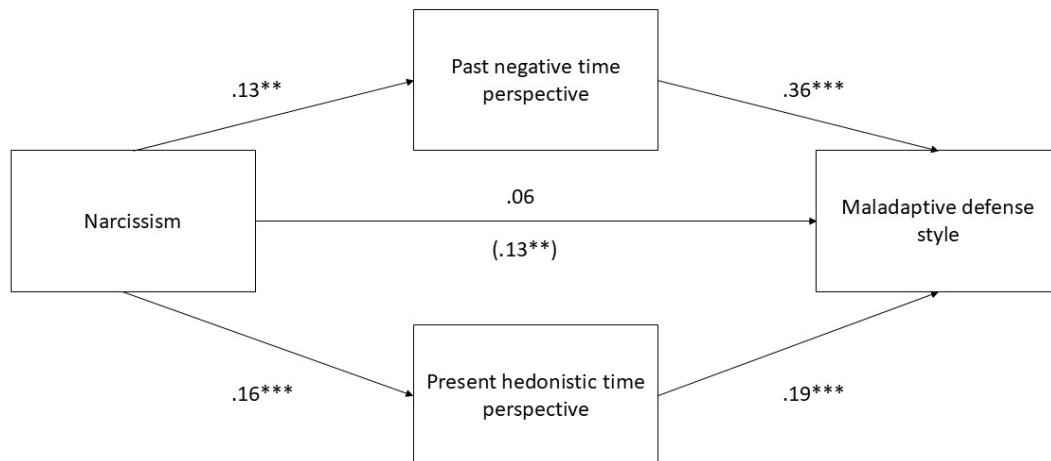
As shown in Table 3, out of the independent variables introduced to the model, psychopathy ($B = .15$; 95% CI [.07, .23]), Machiavellianism ($B = .18$; 95% CI [.09 to .27]), past negative TP ($B = .36$; 95% CI [.30, .42]), past positive TP ($B = -.08$; 95% CI [-.15, -.01]) and present hedonistic TP ($B = .19$; 95% CI [.13, .25]) were significant predictors of MDS. Past negative TP was

the predictor displaying the strongest association with maladaptive defense style out of all of the tested variables.

The past negative and present hedonistic TPs mediated the relationship between narcissism and MDS. The total effect of narcissism on MDS ($B = .13$; 95% CI [.05, .22]) was reduced and made insignificant ($B = .06$; 95% CI [-.02, .13]). Narcissism was positively related to past negative TP ($B = .13$; 95% CI [.04, .22]), which was positively related to MDS ($B = .36$; 95% CI [.30, .42]). Similar pattern was observed for the other examined time perspective: narcissism was positively related to present hedonistic TP ($B = .16$; 95% CI [.07, .25]), which was also positively related to MDS ($B = .19$; 95% CI [.13, .25]). Figure 2 presents a visualization of the mediation analysis results.

Figure 2

Results of the Mediation Analysis: Effect of Narcissism on Maladaptive Defense Style With Past Negative and Present Hedonistic Time Perspectives as Mediators



DISCUSSION

The current study aimed to investigate whether the relationship between narcissism and defense styles (adaptive, ADS, versus maladaptive, MDS) can be mediated by past negative or present hedonistic TPs. Generally, the detected associations were weak. Only the relationship between past negative

TP and MDS was moderate, which led us to formulate cautious interpretations, suggesting some tendencies to consider in future studies.

The current study showed that narcissism might be positively related to past negative TP, which in turn might positively relate to MDS (but not ADS). Discouraging views of the past, remorse and regret present in this TP (Zimbardo & Boyd, 2008) may presumably lower mood, threaten self-esteem and distort the perception of reality in the group of narcissists. We suppose that in a situation of limited cognitive resources, they may need a higher level of self-deception which might produce a false sense of control over events (Sahdra & Thagard, 2003) and be inclined to use more “automatic” and involuntary defense mechanisms. In particular, based on the characteristics of past negative time perspective we might hypothesize that their focus on the negative past may trigger such defense mechanisms as undoing (making affords to alter the past to make some particular misfortune not have happened, and it is linked with counterfactual thinking, Baumeister et al., 1998), reaction formation (defending against esteem threat by exhibiting an exaggerated or extreme reaction in the opposite direction; Baumeister et al., 1998) and/or idealization (one attributes exaggeratedly positive qualities to the self or others; Leduc-Cummings, 2020), which are maladaptive.

Moreover, as we reported in our study, narcissism might be positively related to present hedonistic TP, which in turn might be positively related to both ADS and MDS. The positive link between narcissism and present hedonism is in line with the characteristics of narcissism, which is associated with risk-taking and impulsiveness (O'Reilly & Chatman, 2020). Present hedonistic TP, characterized by the concentration on the pleasure of the moment (but also lower emotional stability, less ego and impulse control; Zimbardo & Boyd, 1999), can be at the same time promoting adaptive forms of ego defense in situations that threaten the unstable self of the people with high narcissism. It is in line with Blomgren et al.'s (2016) finding that under stress, present hedonism might lead to the development of both adaptive or maladaptive forms of coping. It also aligns with the findings on the twofold nature of present hedonistic TP (Stolarski et al., 2016), which was found to coexist with a high positive affect (Desmyter & De Raedt, 2012), but also with depression and anxiety (Davies & Filippopoulos, 2015), as well as risk-taking tendencies (Zimbardo & Boyd, 1999).

Previous empirical studies suggested that hedonistic narcissists can use a variety of DMs, and it may suggest their psychological flexibility—a wide variety of abilities to recognize and adjust to the demands of situations and

change mindsets or behaviors responding to these demands (Kashdan & Rottenberg, 2010). Moreover, psychological flexibility was found to be negatively associated with emotional exhaustion (Onwezen et al., 2014) and positively impacted quality of life (Leonidou et al., 2019). What is more, as the study of Walker and McCabe (2021) has shown, a defense mechanism cannot become pathological as long as its persistent use does not lead to maladaptive behavior. Having a broad range of defensive strategies seems to protect against it.

Alternatively, the wide variety of defense mechanisms may not inevitably translate into the ability to select an adequate defense strategy. The process may be disturbed by too many defensive strategies available simultaneously, and consequently, it leads to adaptive and maladaptive defense mechanisms. Research by Liu and Thompson (2017) has shown that patients with depression can use various strategies for regulating emotions. Moreover, they use them often, but their ability to select an adequate strategy is particularly impaired in this disorder. That would mean that in the group of narcissists present, hedonistic TP does not promote effective coping in all circumstances, and its role depends on other factors.

The current study found that the relationships between narcissism and defense styles mediated by TPs may have some implications for mental health, social communication, and therapy specialists. In the intervention field, when working on the defense styles, it might be useful to consider that people with high narcissism may prefer persuasive communication centered on themselves. Identifying the regulatory functions of the past negative and present hedonistic TP during the therapeutic process might be a promising strategy for the client to employ a more adaptive defense style.

Study Limitations and Future Research Directions

The current study has several limitations that should be considered when understanding the results. First, the study was based solely on self-reports and was correlation-based and cross-sectional, making the results speculative. Future research can involve diaries, interviews or observations, or other forms of qualitative designs, as well as longitudinal studies to investigate how behaviors are shaped and attempt to form causality statements. Furthermore, the narcissism measure was from the concept of the Dark Triad Traits, and the results cannot be understood as representative of people displaying narcissistic personality disorder. The psychological mechanisms (through either the

present hedonistic or the past negative TP) that mediate between narcissism and defense mechanisms may depend on the type of narcissism. The conceptualization that we employed and the narcissism measure used also did not allow to differentiate between vulnerable and grandiose narcissism. Future research is needed to disentangle this issue and investigate the patterns of relationships between narcissistic personality disorder, vulnerable and grandiose narcissism, time perspectives, and defense styles.

An important limitation concerns the assessment of defense mechanisms. Although the concept of defense mechanisms has a long theoretical tradition, their measurement using self-report questionnaires might be debated, as such measures may capture conscious representations or styles of defensive functioning rather than unconscious mechanisms *per se*. Therefore, the present findings should be interpreted as referring to defense styles as operationalized by self-report instruments, rather than to defense mechanisms in the strict psychoanalytic sense.

Other limitations of the current research include the fact that the sample involved only members of a particular research panel, which may be a source of volunteer bias—only registered users of this panel could participate. Narcissism can have different functions and associations depending on the cultural context investigated (Jonason et al., 2020), thus the inclusion of solely Polish participants limits the generalizability of results to significantly different cultures or societies.

CRedit Author Statement

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