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# Situational and Trait Self-Handicapping among Grandiose and Vulnerable Narcissists

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### Abstract

Self-handicapping is an effective strategy for self-enhancement and self-protection in situations in which one's self-image is evaluated. Previous studies have shown that grandiose narcissists use self-handicapping for self-enhancement, while research on vulnerable narcissists' use of self-handicapping is still scarce. In this study, we examined trait, behavioural, and proclaimed self-handicapping among the two forms of narcissism. After questionnaire measures were collected, a total of 105 individuals participated in the experimental study, in which they were led to believe they would be doing a hard or an easy ability test. The results showed that grandiose narcissism was only related to trait self-handicapping in achievement situations, while vulnerable narcissism was related to self-handicapping in interpersonal and achievement situations. Experimental results showed that participants did not seize the opportunity for behavioural or proclaimed self-handicapping. Moreover, the use of these strategies was not related to vulnerable or grandiose narcissism. The results are here discussed in the context of self-image maintenance dynamics of individuals with different levels of vulnerable and grandiose narcissism as well as methodological aspects of the study, and the validity of the concept of self-handicapping.

Keywords: self-handicapping, grandiose narcissism, vulnerable narcissism, self-protection, self-enhancement

### Introduction

### **Self-Handicapping**

The traditional concept of self-handicapping (abbr. SH) refers to peoples' tendency to create impediments to performance in order to prepare an excuse for possible failure. The function of such behaviour is to defend and maintain a positive self-image. The SH phenomenon was first described by Berglas and Jones (1978),

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who noted that participants who expected to fail in a task chose to take medication that can inhibit rather than improve their performance. This choice provided them with a ready external attribution if they experienced unsatisfactory performance. A classic example of SH is a student who has an upcoming exam but decides to go to a party instead of studying for the exam. Such behaviour has a protective function in case of poor performance on the exam, since failure could be explained by partying all night. However, if the student passes the exam, his previous behaviour will provide him with an additional benefit for his self-image, due to the success achieved despite partying all night.

Leary and Shepperd (1986) distinguished between two forms of SH: behavioural, where a person actively constructs obstacles, and proclaimed, where a person reports about causes that may affect their performance or searches for alibis for expected failure. The most common behavioural SH examples in the literature include drug and alcohol abuse (Higgins & Harris, 1988; Tucker et al., 1981), choosing to perform the given task in performance-inhibiting conditions (Rhodewalt & Davison, 1986), and a lack of preparation for the forthcoming assignment (Rhodewalt et al., 1984; Tice, 1991). Proclaimed SH strategies could involve complaining about tiredness (Feick & Rhodewalt, 1997), physical state (Baumeister et al., 1990) or bad mood (Baumgardner et al., 1985), which serves as an excuse for anticipated failure. Both behavioural and proclaimed SH are understood as strategies used in evaluative situations.

However, another conceptualization views SH as a relatively stable personality trait that can be measured by questionnaires (Čolović et al., 2009; Jones & Rhodewalt, 1982). Scales developed for measuring the trait of SH are diverse in terms of their dimensionality (unidimensional [Jones & Rhodewalt, 1982] or bidimensional [Clarke & MacCann, 2016]) and life domains in which SH occurs (e.g., interpersonal relations and achievement situations; Čolović et al., 2009).

# **Motives for Self-Handicapping**

The traditional conceptualizations of SH imply that its primary function is to *protect* the potentially threatened self-image from the negative implications of failure or negative social evaluation. For example, a person may use a lack of preparation as an excuse for anticipated failure. However, more recent research has suggested that it can also be used to *enhance* one's self-image (Baumeister et al., 1989). Namely, when success is expected, using performance-inhibiting behaviors or excuses can lead to the perception of even greater abilities, because success was achieved *in spite* of aggravating circumstances. Hence, the use of SH strategies creates a win-win scenario because it simultaneously protects from negative implications in case of failure and enhances one's self-image in cases of success.

Baumeister et al. (1989) found that SH motivation – self-protective or self-enhancing – depends on the person's level of self-esteem. High self-esteem

individuals are primarily motivated by self-enhancement, which means that they strive to get additional credit when expecting success. Low self-esteem individuals are primarily motivated by the protection of their self-image, which is why they use handicaps when anticipating failure.

The exact same results were reported by Tice (1991). In her research, she divided participants into two experimental groups. One group was told that they would be solving a hard test of nonverbal intelligence in which a high score would be an indicator of high abilities, while a low score would not be informative of the participant's abilities (success-meaningful group). The other group was told that they would be solving quite an easy test in which a low score would be an indicator of extremely low abilities, but a high score would not be particularly informative of their abilities (failure-meaningful group). Participants were then given the opportunity to practise for the test as much as they wanted. SH was operationalized as the time they spent practising. The idea behind the experimental instruction was to rule out self-enhancement (in failure-meaningful conditions) or self-protection (in success-meaningful conditions) motives for SH. The results showed that high selfesteem individuals were more prone to SH in success-meaningful conditions in comparison to low self-esteem individuals, while the opposite pattern was detected in the failure-meaningful situation. Results of this study confirmed that low selfesteem individuals use SH strategies in order to protect their self-image, while high self-esteem individuals do it for self-enhancement.

Another personality trait that has been related to the SH in the literature is narcissism (e.g. Rhodewalt et al., 2006). In most descriptions of narcissism, the most central characteristics are positive self-view and high self-esteem (e.g. Brown & Zeigler-Hill, 2004). However, the conceptualizations of narcissism have been revised and widened in the last decade (Miller et al., 2011; Pincus et al., 2009), which opens a question of how different forms of narcissism relate to different motives for SH.

### **Grandiose and Vulnerable Narcissism**

Narcissism is a personality trait characterized by a grandiose sense of self and the use of antagonistic interpersonal strategies. Recently, psychologists have started discriminating between two distinct forms of narcissism: grandiose and vulnerable (Miller et al., 2011; Pincus et al., 2009). Grandiose narcissism is manifested through dominant behaviour, over-expressed positive thinking about oneself and one's own abilities and an aggressive communication style with a sense of superiority and distinctness (Miller et al., 2011). Although it is often assumed that grandiose narcissists' feeling of extreme self-worth implies that they possess high self-esteem, empirical evidence is mixed, with some findings indicating null correlations between grandiose narcissism and self-esteem (e.g., Alhiani, 2019). Therefore, some authors claim that grandiose narcissism and self-esteem differ in their origins, development, and consequences (Brummelman et al., 2016).

In the vulnerable form of narcissism, vulnerability is expressed in the form of hypersensitivity, which is accompanied by passivity and inertness in social relationships and the need for attention and confirmation from others. This form of narcissism is often manifested through self-blame and the constant need to sacrifice oneself for the sake of others and take responsibility for them even when it is not necessary. Research has indicated that vulnerable narcissists possess a negative self-image manifested through negative affect, low self-esteem, and feelings of incompetence and inadequacy (Miller et al., 2011).

When it comes to similarities and differences between the two subtypes of narcissism, vulnerable narcissism is associated with sensitivity and irritability in various life contexts, self-absorption, and entitlement paired with psychological distress, while grandiose narcissism is related to aggressive behaviour, exhibitionistic tendencies, and entitlement with callousness and immodesty (Freis, 2018; Wink, 1991). Shared characteristics of the two subtypes include excessive orientation solely on one's own needs, low tolerance to criticism, entitlement, self-absorption, and interpersonal antagonism (Freis, 2018; Wink, 1991).

# Two Forms of Narcissism and Self-Handicapping

One of the key characteristics of grandiose narcissism is self-enhancement (Raskin et al., 1991). The dynamics of grandiose narcissists' self-image maintenance include a range of self-enhancing cognitive and behavioural strategies that are employed in image-threatening situations (for review see Morf & Rhodewalt, 2001). Horvath and Morf (2010) agree that both narcissists and high self-esteem individuals use self-enhancement strategies, but their goals are distinct. While high self-esteem individuals prefer to be valued by the social community, narcissists are motivated to confirm their superiority by increasing self-ratings on positive traits. Thus, they suggest that the examination of uniquely narcissistic behaviours requires controlling for self-esteem.

Several studies have directly addressed the question of the relationship between SH and grandiose narcissism. In a study by Rhodewalt et al. (2006), narcissists claimed that their ability was the cause of their namely good performance even when the test for measuring performance was unsolvable and the circumstances were unexpected, which distinguished them from non-narcissists. In other words, it seems that narcissists are convinced of their high abilities even when reality does not offer grounds for such a conclusion. Since they were overconfident in their abilities in uncertain circumstances, narcissists chose to self-handicap on the subsequent ability testing to secure undeserved credit in case of success, or in other words, to self-enhance (Rhodewalt et al., 2006).

Studies of vulnerable narcissists' reactions to self-image threats have mostly examined affective reactions. Besser and Priel (2010) compared grandiose and vulnerable narcissists' emotional reactions to threats involving achievement failure

and interpersonal rejection. They found that negative affect was provoked by different situations among the two forms of narcissism. Namely, grandiose narcissists experienced negative affect in reaction to potential threats and failures in cases when their achievement was assessed, while vulnerable narcissists reacted with negative affect in the face of potentially shameful interpersonal experiences.

There has been only one study that directly examined behavioural SH among grandiose and vulnerable narcissists. Alhiani (2019) examined SH in an organizational context and found that when offered an opportunity to compensate for previous poor performance, both grandiose and vulnerable narcissists self-handicapped by selecting an easier task rather than choosing to work harder.

In conclusion, rare findings regarding vulnerable narcissists' reactions to self-image threats suggest that they are primarily motivated by self-protection and that they might be more sensitive to threats related to the interpersonal domain than to achievement situations. However, with only one study directly addressing vulnerable narcissists' use of SH, further research is needed to shed light on their use of behavioural, proclaimed, and trait SH.

## **Research Aims and Hypotheses**

As indicated in the literature review, grandiose narcissists readily use available strategies such as SH to enhance their already inflated self-image (Morf et al., 2011). Although researchers agree that vulnerable narcissists are primarily motivated to protect their self-image and not to enhance it (Freis, 2018), answers are still needed regarding the behavioural or proclaimed SH strategies they use or their trait SH in different life domains (achievement and/or interpersonal relations). Additionally, previous studies failed to reveal whether SH in narcissists could be explained solely by their self-esteem level or whether there is a specific self-regulatory dynamic related to narcissism that contributes to SH. Finally, no study has determined whether different conceptualizations of SH – trait, behavioural, and proclaimed – converge and represent the same construct.

The aim of this study was to examine grandiose and vulnerable narcissists' behavioural, proclaimed, and trait SH tendencies in different life domains. To this end, we included different conceptualizations of trait SH – trait SH related to achievement and interpersonal situations as well as situationally-provoked behavioural and proclaimed SH in achievement situations. By creating two different meanings of achievement – success indicative of high abilities and failure indicative of low abilities – we aimed to discover whether situational (behavioural and proclaimed) SH would be motivated by self-enhancement or self-protection. Since it is theoretically important to distinguish the effect of narcissism from the effect of self-esteem, we examined whether grandiose and vulnerable narcissism would be related to SH over and above the level of self-esteem. Finally, by including different

measures of SH (trait, behavioural and proclaimed), we were able to assess the construct validity of these different conceptualizations of SH.

We hypothesized that grandiose narcissism would be related to trait SH in achievement situations (Besser & Priel, 2010). We further expected to find correlations between grandiose narcissism and more behavioural and proclaimed SH in the scenario in which participants expected a hard test on which success would be indicative of high abilities, since such success would offer an opportunity for self-enhancing (Morf & Rhodewalt, 2001). As for vulnerable narcissism, we expected that it would primarily be related to trait SH in the interpersonal domain (Besser & Priel, 2010). When offered an opportunity for situational SH, we expected vulnerable narcissists to use behavioural and proclaimed SH when expecting an easy test where failure would be indicative of low abilities, i.e., we expected them to self-handicap for self-protective reasons (Freis, 2018). We hypothesized that the relationship between narcissism subtypes and SH would remain significant over and above the contribution of self-esteem.

Finally, we expected that different conceptualizations of SH would be at least mildly correlated, because they constitute the same concept. However, since the measures of behavioural and proclaimed SH in this study were related to achievement situations, we expected to obtain stronger correlations with trait SH in achievement situations than with trait SH in the interpersonal domain.

### Method

### **Participants**

A total of 120 psychology students from the University of Novi Sad participated in the first phase of the study. A majority of the participants (86.7% or n = 104) were female. The age range within the sample was from 18 to 24 years, with a mean of 19.98 (SD = 0.94). Correlational analyses regarding trait SH and narcissism were carried out on this sample.

There were 105 participants who took part in the second phase and whose data from the two phases of the study were successfully linked. The experimental sample comprised 90 females (85.7%), 14 males (13.3%), and one participant who did not state their gender. Participant age ranged from 19 to 24 years (M = 19.96, SD = 0.95). This sample served for the analyses of experimentally induced SH.

#### Instruments

Self-Handicapping Scale (Čolović et al., 2009) consists of 34 items with a 5-point Likert-type scale, which is originally developed in Serbian language. It measures four facets of SH conceptualized as a personality trait: internal and external

strategies in situations of achievement (abbr. ISHS - 7 items and ESHS - 5 items) and internal and external SH strategies in interpersonal relationships (abbr. ISHIR - 12 items and ESHIR - 10 items). The typical items from the four subscales are: "My preoccupation with details slows me down in various activities." for ISHS, "Poor cooperation with colleagues makes my career advancement difficult." for ESHS, "I would have had a larger circle of friends if I hadn't been withdrawn." for ISHIR, and "I don't get to dedicate to friends because I have a lot of responsibilities." for ESHIR. The reliability of individual subscales obtained in this study was unsatisfactory (.63, .87, .66, and .58 for ESHIR, ISHIR, ISHS, and ESHS, respectively). Thus, we aggregated scores into two higher-order subscales that were theoretically relevant for this study – SH in interpersonal relationships (abbr. SHIR) and SH in achievement situations (abbr. SHAS)¹. The correlation between the two newly formed subscales was .57 and the reliability of these subscales was satisfactory (.81 and .76, respectively), indicating that these scores could be used in further analyses.

Five-Factor Narcissism Inventory (Dinić et al., 2021; Glover et al., 2012) was created to measure two forms of narcissism – grandiose and vulnerable narcissism. The scale consists of 60 items, which measure 15 facets in total, every with 4 items. We used the official Serbian version of the questionnaire, which was validated in the study of Dinić et al. (2021). In this research, we used only global scores, because our hypotheses refer only to the two forms of narcissism and not their facets. Cronbach's alpha coefficients were .93 for grandiose (48 items, e.g., "I deserve to receive special treatment.") and .83 for vulnerable narcissism (16 items, e.g., "I feel awful when I get put down in front of others.").

Rosenberg Self-Esteem Scale (Rosenberg, 1965) is the most widely used measure of self-esteem, consisting of 10 items (e.g., "On the whole, I am satisfied with myself.") with a 5-point Likert scale. Cronbach's alpha obtained in this study was .85.

Experimental Self-Handicapping Measures. We designed three measures of SH for capturing three possible explanations for expected failure or success: behavioural measure – (in)sufficient preparation for the ability test operationalized as the number of trials on the practice test – and two proclaimed measures – (a lack of) motivation

<sup>1</sup> The intercorrelation of the original four subscales did not suggest that generating subscales for achievement and interpersonal situation would be the optimal statistical decision. Namely, the subscale ESHAS, aside from having the lowest reliability, had the lowest correlations with all other subscales (see Supplementary analyses, Table 1; https://doi.org/10.17605/OSF.IO/KX5W2). In such situation we decided to lean on the theoretical relevance as a criterion for forming the higher-order subscales, resulting in forming the subscales self-hendicapping in achievement situation and self-hendicapping in

interpersonal situations. We discuss the problem of the scale content validity and reliability in the section on the limitations of the study.

and the (adverse) mental state experienced before the "real" testing. These measures were designed for the purpose of this study.

Although some previous studies measured similar constructs, their experimental procedures were different and, therefore, their measures were not applicable to our study.

Number of Trials on the Practice Test. The computer-mediated ability test consisted of 18 items from the Figural Test of Abilities constructed at the Department of Psychology in Novi Sad. To solve an item, participants needed to discover the logic behind a series of figures in order to fill the missing field. For every item, there were 4 possible answers, i.e., figures were offered and participants answered by choosing the one they thought fit the logic of the previous series. Participants' real scores, i.e., right answers were not recorded. We only recorded the number of trials, i.e., items that participants tried to solve regardless of whether the answer was correct. There were 18 items in total. Participants could stop practising whenever they wanted by closing the application.

Motivation for the Forthcoming Test was a self-report measure of proclaimed SH. On the two items ("I plan to do my best on the forthcoming test of non-verbal reasoning.", "How motivated are you to perform well on the forthcoming test?"), participants used a 5-point Likert-type scale to indicate their motivation and the effort they plan to invest in the forthcoming test. The correlation between the two items was .72, indicating that it was acceptable to combine them into one measure.

Mental State Prior to Testing was another self-report measure of proclaimed SH and it consisted of one question – "How do you assess your current mental state (fatigue, anxiety, feeling sick, etc.)?" – with a 5-point answering scale  $(1-Ifeel\ very\ good,\ 5-Ifeel\ very\ bad)$ . Higher scores were indicative of more adverse mental states.

### **Procedure**

This research was approved by the Ethics Committee of the Department of Psychology, Faculty of Philosophy, University of Novi Sad (code: 201704161542\_oLti). First-year and second-year psychology students were invited to take part in research on personality traits and intelligence. Students were recruited during their university courses and were offered course credit for participation in the study. Researchers introduced this study as facultative, anonymous, and consisting of two parts. To enable linking participant data from the two phases of the study while protecting their anonymity, participants were asked to create unique codes, which they used as personal identifiers.

The study was conducted in two phases. The first phase of the study consisted of filling out paper-and-pencil questionnaires (listed below). In the second, experimental phase, we followed the procedure developed by Tice (1991). Participants were informed that they would perform a computer-mediated non-verbal

ability test, but that before the actual testing, they would have the opportunity to practise on a similar test. Participants were further separated into two groups, which were given different oral instructions. The allocation of participants into two groups was randomized. The oral instruction given to the groups was designed to persuade participants of different levels of test difficulty with the aim of inducing different SH motivations — self-protective or self-enhancing. Participants from the two groups were told that the "real" test would be indicative of only very high abilities or very low abilities. Then, both groups were offered time to practise and they were told that they could practise as much as they wanted. After they finished practising, participants answered a short survey comprising 3 questions.

When all participants completed the practice test and filled out the survey, they were informed that they would not be solving any "real" test. They were informed about the real objective of the research and debriefing was conducted. A detailed description of the experimental procedure is presented in the Supplementary file (https://doi.org/10.17605/OSF.IO/KX5W2).

### Results

# **Descriptive Statistics and Variable Intercorrelation**

Descriptive statistics and Pearson's correlations among all variables are summarized in Tables 1 and 2. The mean values of most variables are around the theoretical average, except the values of trait self-handicapping which are both somewhat below the theoretical average and the mean score of motivation which is considerably higher than the theoretical mean, indicating that participants were generally motivated for the testing of their abilities. The measures of skewness and kurtosis indicated no significant deviance from the normal distribution for any of the variables.

Vulnerable and grandiose narcissism were not mutually correlated. Vulnerable narcissism correlated negatively with self-esteem, positively with both dimensions of trait SH, and negatively with adverse mental states prior to testing. Grandiose narcissism only showed significant correlations with trait SH in achievement situations (positive) and adverse mental states prior to testing (negative). The two dimensions of trait SH showed a moderately positive mutual correlation and they correlated negatively with self-esteem. SH in interpersonal situations also obtained a low but statistically significant correlation with the number of trials. Motivation for the forthcoming tests correlated positively with the mental state prior to testing, which means that participants who assessed their mental state as more adverse also indicated that they were more motivated for the testing. There were no other correlations between the measures of trait, behavioural, and proclaimed SH. The correlation of self-esteem and experimental measures of SH indicated that high self-

esteem individuals practised more and expressed more adverse mental state prior to the testing.

**Table 1**Descriptive Statistics for all Variables

Variable	Descriptive Statistics						
Variable	M	SD	Min	Max	Skewness	Kurtosis	
Self-esteem	39.61	6.65	18.00	50.00	-1.09	1.51	
Vulnerable narcissism	3.10	0.54	1.56	4.25	-0.32	0.03	
Grandiose narcissism	2.64	0.53	1.52	4.41	0.55	0.38	
Self-handicapping in interpersonal situations	44.76	12.15	22.00	77.00	0.43	-0.46	
Self-handicapping in achievement situations	29.70	7.65	14.00	56.00	0.35	0.34	
No of trials	8.78	4.46	0.00	18.00	0.33	-0.48	
Motivation	7.46	1.61	2.00	10.00	-0.28	0.24	
Adverse mental state	3.39	.91	1.00	5.00	-0.56	0.03	

 Table 2

 Pearson's Correlations between Variables

Variable	2.	3.	4.	5.	6.	7.	8.
1. Self-esteem	35**	.15	51**	55**	27**	.09	.20*
2. Vulnerable narcissism		.12	.52**	.43**	.13	.03	19*
3. Grandiose narcissism			.00	$.22^{*}$	03	03	20*
4. Self-handicapping in interpersonal situations				.57**	.20*	.13	.08
5. Self-handicapping in achievement situations					.08	09	11
6. No of trials						.09	.01
7. Motivation							.35**
8. Adverse mental states							-

<sup>\*</sup> $p \le .05$  level (2-tailed); \*\* $p \le .01$  level (2-tailed).

# Trait Self-Handicapping and Narcissism

To explore the relationship between the two forms of trait SH on the one hand and the two forms of narcissism on the other, hierarchical regression analyses were carried out. The trait SH dimension was treated as a criterion, while grandiose and vulnerable narcissism represented predictor variables. We controlled for self-esteem by adding it in the first step of the regression analysis<sup>2</sup>. This allowed us to estimate

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<sup>&</sup>lt;sup>2</sup> Due to the small number of men in the sample, we could not include gender as a moderator variable in our analyses. We conducted all focal analyses with and without gender as the

the unique contributions of the two forms of narcissism to trait SH over and above the level of self-esteem.

SH in interpersonal relations was moderately and negatively related to self-esteem, which explained 26.3% of its variance (Table 3). When the two forms of narcissism were entered into model 2, they explained an additional 13.3% of the variance. Nevertheless, the results showed that only vulnerable narcissism was related to this form of trait SH, suggesting that individuals with vulnerable narcissism are more prone to SH in interpersonal relations.

Self-esteem explained around 30.7% of SH in the achievement situation, with the results indicating that low self-esteem individuals are more prone to this form of SH (Table 3). After controlling for self-esteem, grandiose and vulnerable narcissism explained an additional 13% of this form of SH. The results suggest that both vulnerable and grandiose narcissism are related to more SH in the achievement situation.

 Table 3

 Results of Regression Analyses for Predicting the Two Forms of Self-Handicapping

Predictors		icapping in nal relations β	Self-handicapping in achievement situations β		
	Model 1	Model 2	Model 1	Model 2	
Self-esteem	51***	38***	55***	52***	
Vulnerable narcissism		.39***		.22**	
Grandiose Narcissism		.01		.27***	
$\Delta R^2$	.26	.13	.31	.13	
$\Delta F$	42.48***	12.83***	52.83***	13.66***	
$df_1/df_2$	1/119	2/117	1/119	2/117	

<sup>\*\*</sup>p < .01; \*\*\*p < .001.

# **Experimentally Induced Self-Handicapping and Narcissism**

In order to test if individuals with different levels of grandiose and vulnerable narcissism use different strategies to self-handicap before a particularly hard or

control variable and the main results did not change. Plain gender differences in SH were not obtained for any form of SH except for the variable of mental state prior to testing, where females were shown to use this kind of excuse more frequently (t (105) = -2.08, p = .040,  $AM_M$  = 2.93,  $AM_F$  = 3.46). Gender differences also appeared in grandiose narcissism (t(118) = 3.22, p = .002,  $AM_M$  = 3.02,  $AM_F$  = 2.58). Nevertheless, gender differences on these variables did not modify the results regarding the relationship between narcissism and SH. Thus, we decided to present all focal analyses without gender to keep regression models parsimonious. See the detailed presentation of the results on gender differences in Supplementary analyses, Table 2 (https://doi.org/10.17605/OSF.IO/KX5W2).

extremely easy ability test, we applied a series of moderator regression analyses. In these analyses, self-esteem was a control variable, grandiose or vulnerable narcissism was treated as a predictor variable (in separate analyses), expected test difficulty (hard vs. easy, between-group factor) was treated as a moderator, while the three measures of SH (number of trials, motivation, and adverse mental state) were treated as criterion variables.

### Vulnerable Narcissism

The moderator regression analysis with vulnerable narcissism, test difficulty, and their interaction as predictors of the number of trials yielded a statistically significant model (R = .37, F(4, 98) = 4.00, p = .005). The results indicated that test difficulty did not influence the number of trials (B = -4.39, p = .370, 95% CI = [-14.06, 5.29]). Neither vulnerable narcissism (B = -0.70, p = .780, 95% CI = [-5.66, 4.26]) nor its interaction with test difficulty was related to the number of trials (B = 0.64, P = .678, 95% CI = [-2.41, 3.69]). However, self-esteem, which was controlled for in the analysis, was related to the number of trials (B = -0.14, P = .043, 95% CI = [-.285, -.004]).

Regression models predicting motivation for the forthcoming test and the adverse mental state prior to testing based on vulnerable narcissism, test difficulty, their interaction, and self-esteem (as a control variable) were not statistically significant (for motivation as a criterion (R = .13, F(4, 98) = 0.43, p = .784) and for adverse mental state as a criterion (R = .30, F(4, 98) = 2.36, p = .059).

### Grandiose Narcissism

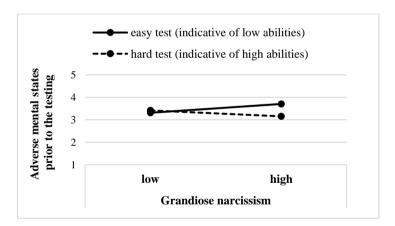
The moderator regression analysis including self-esteem as a control variable and grandiose narcissism, test difficulty, and their interaction as predictors of the number of trials on the practice test resulted in a statistically significant model (R = .35, F(4, 98) = 3.47, p = .011). Experimental groups who believed to be practicing for a hard vs. easy test did not differ in the number of practice trials (B = -4.81, p = .616, 95% CI = [-23.79, 14.17]). Grandiose narcissism (B = -.013, p = .983, 95% CI = [-12.62, 12.35]) and its interaction with test difficulty (B = 0.06, p = .986, 95% CI = [-7.08, 7.21]) were not statistically significant predictors, but the simple effect of self-esteem was (B = -0.30, p = .030, 95% CI = [-.57, -.03]).

The regression model with motivation for the forthcoming test as a criterion and the same set of predictors (grandiose narcissism, test difficulty, their interaction, and self-esteem as a control variable) was not statistically significant (R = .11, F(4, 98) = 0.29, p = .884).

The third model with adverse mental states as a criterion variable was statistically significant (R = .35, F(4, 98) = 3.36, p = .013). Grandiose narcissism did not predict the adverse mental state before testing (B = 0.72, p = .238, 95% CI =

[-.48, 1.91]), nor did test difficulty (B = 0.06, p = .712, 95%CI = [-.28, .41]), but their interaction term reached marginal statistical significance (B = -0.62, p = .077, 95%CI = [-1.30, .07]). The interaction effect explained 3% of criterion variance. Simple slope tests showed that grandiose narcissism was related to adverse mental states when participants expected to solve a difficult test (B = -0.52, p = .009, 95%CI = [-.91, -.14]), indicating that those with a more grandiose narcissistic trait reported feeling better than those with a less grandiose narcissistic trait (Figure 1). These results indicate that grandiose narcissists did *not* seize the opportunity to claim extraordinary abilities if they succeeded on the particularly hard test. On the other hand, the simple slope test representing the relationship between grandiose narcissism and adverse mental states was not statistically significant for the group that expected to solve an easy test (B = 0.10, p = .732, 95%CI = [-.47, .67]). Finally, the effect of self-esteem as a control variable was statistically significant (B = 0.03, D = .017, 95%CI = [.01, .06]), indicating that individuals with higher self-esteem reported a more adverse mental state prior to testing regardless of the difficulty of the test.

**Figure 1**Differences in Adverse Mental States between Individuals with High and Low Levels of Grandiose Narcissism when Expecting to Solve a Hard vs. Easy Test



Since some Pearson correlations reported in Table 2 showed that self-esteem was related to some measures of situationally-provoked SH, to give more detailed insight into these results, we carried out some additional analyses. We analysed self-esteem as a predictor of behavioural and proclaimed SH in the two experimental situations (hard vs. easy test). These analyses were presented in the Supplementary analyses file (https://doi.org/10.17605/OSF.IO/KX5W2).

#### Discussion

In this study, we focused on trait self-handicapping and situationally-provoked self-handicapping among individuals with different levels of grandiose and vulnerable narcissism. The results regarding trait self-handicapping supported most of our hypotheses, but the same was not true for the results on situationally-provoked self-handicapping.

Consistent with previous studies, individuals with higher levels of grandiose narcissism showed a stable (trait) tendency towards using self-handicapping justifications in achievement situations, but not in the interpersonal domain. This finding supports the view of individuals with higher levels of grandiose narcissism as prone to protecting the unrealistically positive self-image – especially in the field of their exceptional achievements (Rhodewalt et al., 2006). The results indicate that grandiose narcissism is characterized by the cognitive schemes used for justifying inefficacy or failure and these schemes, which can refer to incompetent associates or a lack of support from others. When it comes to interpersonal relations, we believe that our results suggest that individuals with higher levels of grandiose narcissism do not necessarily believe that other people are important, nor do they try to justify the failure of an intimate relationship or a lack of close friends. This supports the notion that grandiose narcissism is related to insensitivity to others' needs and feelings (Urbonaviciute & Hepper, 2020).

Contrary to our expectation that individuals with higher levels of vulnerable narcissism would primarily be motivated to use self-handicapping in the interpersonal domain (Besser & Priel, 2010), the results suggest that they are strongly motivated to protect their self-image by using any available excuse either for interpersonal failures or for low achievement. Put differently, it seems that such excuses are used as justifications for failures, regardless of the domain they pertain to. Although it might seem that self-blame, which is the prominent characteristic of vulnerable narcissism, cannot perform a self-protective function, we believe that individuals with higher levels of vulnerable narcissism use self-handicaps to attract attention and get protection and recognition for their self-sacrificing (Miller et al., 2011; Pincus et al., 2009). Hypersensitivity related to vulnerable narcissism comes from the frustrated need for social confirmation. Therefore, the self-handicapping attributional style characterized by interpersonal inertness and making excuses for constantly anticipated shameful experiences can be an effective cognitive strategy for remaining in the vicious circle of self-blame. Finally, it is their self-sacrifices that give them special status and a sense of entitlement.

It is important to emphasize that our study showed that both forms of narcissism are related to trait self-handicapping over and above the mere effect of self-esteem. Additionally, results confirmed that vulnerable narcissism is usually accompanied by low self-esteem (Miller et al., 2011; Pincus et al., 2009), but the results regarding grandiose narcissism are in line with the findings that suggest that it is not necessarily related to positive self-views (Brummelman et al., 2016; Morf & Rhodewalt, 2001).

In the experimental part of the study, we examined the use of behavioural and proclaimed self-handicapping strategies in situations in which success would be an indicator of high abilities or failure would be an indicator of rather low abilities. We expected grandiose narcissism to be related to the use of self-handicapping strategies in the success-meaningful situation, because this would offer self-enhancement through claiming to have extraordinarily high abilities. On the other hand, we assumed that individuals with higher levels of vulnerable narcissism would use self-handicapping for self-protection, i.e., when failure on the forthcoming test would be indicative of low abilities. Our results did not confirm either of these hypotheses.

Out of the three possible strategies of situational self-handicapping, individuals with higher levels of grandiose narcissism reported experiencing *less* adverse mental states, which was contrary to our expectations. Instead of using an adverse mental state as a possible impediment in case of success in order to create an impression of extraordinary abilities, they did the exact opposite. As for the other measures of behavioural and proclaimed self-handicapping, our results showed that their use was not in the least related to grandiose narcissism. These findings are not in line with previous studies, which mostly showed that narcissists seize every opportunity for self-enhancement (Rhodewalt et al., 2006). The zero-order correlation between grandiose narcissism and self-esteem indicated that the reason for unexpected results cannot be attributed to the level of self-esteem being controlled in the analyses.

Likewise, vulnerable narcissism was not related to the use of any available behavioural or proclaimed SH strategy in the situation of expected evaluation. Contrary to our hypothesis, individuals with higher levels of vulnerable narcissism did not use self-handicapping strategies to protect their fragile self-image, nor did they use them to get additional credit through self-enhancement. When we take into account trait and situational self-handicapping tendencies of vulnerable narcissists, our findings seem inconsistent. The results regarding trait self-handicapping suggest that individuals with higher levels of vulnerable narcissism tend to interpret life events in a self-handicapping manner, but experimental data indicate that when faced with a situation in which they could and should reach for excuses to protect their self-image, they do not do so. One explanation could be that among individuals with higher levels of vulnerable narcissism, fragile self-image is maintained via post hoc self-handicapping interpretations of life events rather than through behaviours of proclaimed handicaps they actually use. In other words, their self-protective dynamics are maintained via their cognitive style rather than actual behaviours.

Since the results of the experimental part of the study did not support any of our hypotheses, we carried out supplementary analyses regarding the self-esteem differences in situationally-provoked self-handicapping (see Supplementary analyses, https://doi.org/10.17605/OSF.IO/KX5W2). We will briefly discuss all findings regarding self-esteem and self-handicapping, since they may shed additional light on the validity of our experiment. First, our findings showed that the tendency to use stable (trait) self-handicaps in both interpersonal and achievement situations

is primarily related to a negative self-image, which speaks to the self-protective motivation of low self-esteem individuals. Interestingly, results have also indicated that low self-esteem individuals did practise more than high self-esteem individuals. Moreover, the differences between high and low self-esteem individuals were pronounced only when they expected an easy test i.e., the test on which it is hard to fail, but the failure would indicate extremely low abilities. This finding confirms the well-documented claim that low self-esteem individuals are primarily motivated by self-protection, not by self-enhancement (Baumeister et al., 1989; Tice, 1991). It should also be noted that self-esteem was positively correlated to the adverse mental state, meaning that high self-esteem individuals claimed to experience more adverse mental states prior to the testing, regardless of the difficulty of the test. It seems that high self-esteem individuals used the low-effort strategy of self-handicapping, because it is easier to say that you feel tired than to actually take action and practise. This might suggest the lack of motivation for this task, but it's hard to interpret the motives for these claims since it was used as much in a success-meaningful as failuremeaningful situation.

Taking into account all findings of the experimental part of the study, we could argue if methodological aspects of the study were the causes of the inconsistencies. We adopted the experimental procedure developed in the study of Tice (1991), although she used somewhat different measures of self-handicapping (time spent practising, the choice of ability inhibiting or enhancing music, and attribution of success/failure). One possible explanation for the lack of support for our main hypotheses could be that the experimental situation was not convincing enough, especially for psychology students who may be familiar with experimental research and therefore more sceptical. However, to our defence, the findings regarding low self-esteem individuals do align with the literature (Baumeister et al., 1989; Tice, 1991), at least to some point. We can also argue whether our study was statistically underpowered with a sample of only 105 participants. Nevertheless, none of the four samples in the study of Tice (1991) was larger - they ranged from 40 to 76 participants. Therefore, future studies should strive to validate this experimental paradigm as well as to include more naïve subjects and a larger sample in order to grasp the targeted phenomena.

Finally, this was the first study that offered an opportunity for examining the construct validity of different conceptualizations of self-handicapping by analysing relationships between the three types of self-handicapping measures – trait, behavioural, and proclaimed. We obtained a significant correlation between the two measures of trait self-handicapping and between the two measures of proclaimed self-handicapping, but even some of these relations did not seem logical. Results showed that participants who claimed to be motivated for testing also claimed to feel worse prior to the testing. Moreover, trait self-handicapping in interpersonal situations was related to more practising for the forthcoming test. These findings bring more confusion than an explanation to the construct of self-handicapping. A

part of the problem might lay in the one- or two-item measures that were created ad hoc for this experiment, which might suffer from lower validity. As for other measures of self-handicapping measures, there were no statistically significant correlations between them, meaning that individuals who have a stable (trait) self-handicapping explanatory cognitive style do not necessarily use the strategies of proclaimed or behavioural SH when their self-image is evaluated. Even more surprising is the finding that measures of behavioural and proclaimed SH, which were related to the same achievement situation, were not mutually related. These results seem to indicate that stronger correlations are rather the consequence of the method of measurement than the construct similarities. Our results raise the question of whether it is justified to use the same umbrella term for all these measures or, even more, if SH is a theoretically sustainable construct.

To conclude, this study showed that vulnerable and grandiose narcissism are related to making self-handicapping excuses in different life domains. However, it seems that this is the way individuals with narcissistic traits tend to interpret and attribute their life events post hoc, but not necessarily how they behave in achievement situations. Our findings might be useful for practitioners who work with narcissistic individuals, who may focus their work on the origins and consequences of their specific cognitive styles. This might be especially important for individuals with characteristics of vulnerable narcissism, whose self-blaming cognitive style might be perpetuating and reinforcing their personality structure, which could be the core of their life problems.

### **Limitations and Future Direction**

The sample on which this study was carried out was biased in a few ways. First, it consisted primarily of females. Although additional analyses showed that gender did not moderate the results of the study, greater and more gender-balanced samples are needed to make more reliable conclusions. Furthermore, the sample consisted of psychology students, making our conclusions ungeneralizable to a wider population. Some findings, such as the one showing that participants preferred to practise instead of self-handicap, could have been the consequence of the characteristics of this sample. We assume that students could be described as more educated, industrious and determined to succeed than the average person who did not choose to continue to the higher levels of education. Our sample was, also, somewhat small and, therefore, the effect of low statistical power could have not been caught.

Furthermore, there were also certain problems with measures used in this study. The Self-Handicapping Scale (Čolović et al., 2009) showed unacceptable subscale reliability and low correlations between certain subscales. Therefore, further validations of this instrument are necessary. Most experimental studies of self-handicapping use ad hoc created measures of proclaimed self-handicapping, often in the form of one or two items, which was the case in our study, too. Although such

measures are widely used in experiments in social psychology, they may suffer from lower validity. Besides, creating ad hoc measures make comparisons and generalizations of the results complicated, especially if we take into account the lack of significant and theoretically expected relationship between them.

Since our study mostly showed that different types of self-handicapping do not correlate mutually, we call for future research that would include the different conceptualizations of self-handicapping with the aim to answer if we could speak about the same, similar or completely different phenomena.

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### SUPPLEMENTARY ANALYSES

Table 1 Intercorrelations of the Subscales from the Self-Handicapping Scale

	Internal SH in interpersonal situation	External SH in achievement situation	Internal SH in achievement situation
External SH in interpersonal situation	.231*	.386**	.286**
Internal SH in interpersonal situation		.471**	.453**
External SH in achievement situation			.568**
Internal SH in achievement situation			-

Table 2 Gender Differences in all Variables

Variable	t	df	p	$M_M(SD)$	$M_F(SD)$
Self-esteem	-0.43	118	.668	38.88 (7.27)	39.64 (6.57)
Vulnerable narcissism	-0.69	118	.490	3.01 (0.65)	3.11 (0.52)
Grandiose narcissism	3.22	118	.002	3.02 (0.48)	2.58 (0.51)
SH in interpersonal	0.83	118	.410	47.13 (15.89)	44.41 (11.59)
situations					
SH in achievement	0.93	118	.354	31.38 (9.86)	29.45 (7.32)
situations					
No of trials	-0.18	101	.855	8.57 (5.42)	8.81 (4.35)
Motivation	-0.25	105	.803	7.36 (1.69)	7.47 (1.61)
Adverse mental state	-2.08	105	.040	2.93 (1.07)	3.46 (0.87)

*Note.* SH – self-handicapping.

<sup>\*</sup> Correlation is significant at the .05 level (2-tailed). \*\* Correlation is significant at the .01 level (2-tailed).

# Self-Esteem Differences in Situational Self-Handicapping

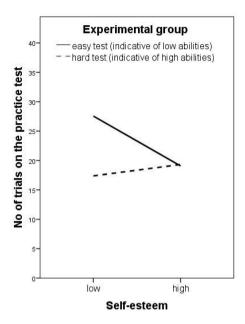
Since self-esteem was statistically significant predictor of some experimental measures of self-handicapping in previous analyses, we opted to additionally inspect whether self-handicapping will depend on the level of self-esteem when participants were expecting to solve an easy vs. hard test. We carried out a series of moderator regression analyses where self-esteem was predictor, test difficulty moderator, while three experimental measures of self-handicapping were criterion variables.

We first tested the model with self-esteem, test difficulty, and their interaction as predictors of number of trials on preparation test. The model was statistically significant (R = .44, F(3, 99) = 8.02, p < .001). Both self-esteem (B = -0.64, p = .001, 95%CI = [-1.03, -.26]) and test difficulty (B = -15.73, p = .003, 95%CI = [-25.80, -5.66]), as well as their interaction (B = 0.34, p = .009, 95%CI = [.09, .58]) significantly predicted the number of trials on practice test. Individuals with lower self-esteem generally tried to solve more items on preparation test, and more items were practised when participants expected to face an easy test. Interaction effect explained 5.8% of criterion variance. Simple slopes test showed that self-esteem was negatively related to the number of trials when participants expected to solve an easy test (B = -0.31, p = .001, 95%CI = [-.48, -.14]) and in that situation individuals with low self-esteem practised more than individuals ith high self-esteem (Figure 1). Simple slope test representing the relationship between self-esteem and the number of trials was not statistically significant when participants expected to solve difficult test (B = 0.03, p = .767, 95%CI = [-.16, .21]).

When criterion variable was motivation for forthcoming test, regression model with self-esteem, test difficulty and their interaction was not statistically significant (R = .098, F(3, 99) = 0.32, p = .809). Finally, the regression model with the same set of predictors of the adverse mental state prior to the testing was also not statistically significant (R = .24, F(3, 99) = 1.95, p = .126).

Figure 1

Differences between High and Low Self-Esteem Individuals in the Number of Trials on the Practice Test when They Expected to Solve Easy vs. Hard Test



### SUPPLEMENTARY FILE

## A Detailed Description of the Experimental Procedure

The study was conducted in two phases. We employed the procedure developed by Tice (1991). The first phase of the study consisted of filling out paper-and-pencil questionnaires. For the second phase of the study, participants were invited to take part in the experimental study conducted in the computer lab. The experiment was organized during university classes in large groups of around 20 students. Participants were informed that their involvement in the research would entail performing a computer-mediated non-verbal ability test. They were told that before taking the actual test, they would have the opportunity to practise on a test with similar items, in order to familiarize themselves with test materials. Nevertheless, this research did not include solving the real non-verbal ability test and participants' actual test achievement was not the subject of measurement. The goal of this bogus instruction was to lead subjects to believe that they would participate in real testing. Participants were further separated into two groups, which were given different oral instructions. The allocation of participants into two groups was randomized. The oral instruction given to the groups was designed to persuade participants of different levels of test difficulty. Such an instruction was intended to induce different selfhandicapping motivations – self-protective or self-enhancing. Participants from the two groups were told that the "real" test would be indicative of only very high abilities vs. very low abilities. The detailed oral instruction used for experimental manipulation is described in the following paragraphs.

The initial oral instruction given to all respondents was designed to induce high involvement in the testing situation, since research has shown that individual differences in self-enhancement motivation appear only in situations of high involvement (Tice, 1991). The general instruction went as follows:

You will be solving a non-verbal ability test. This test measures one aspect of general intelligence – the factor of non-verbal reasoning. Previous research showed that people who scored high on this test also achieved a higher GPA at the university and were more successful later in their professional career than those scoring low on the test. These findings were also obtained from a sample of psychology students.

The second part of the instruction differed by group. In the first experimental group, the instruction suggested that the test was only indicative of poor abilities. This was done in order to induce self-protective self-handicapping, i.e., the strategy aimed at protecting oneself from esteem-threatening implications of failure:

In previous studies, this test was easy for most individuals and most people did very well on the test. Thus, a good result on this test does not necessarily indicate high non-verbal ability. This test is only good for identifying individuals with very low non-verbal abilities. This means that individuals who score high on the test may have above-average or average non-verbal ability – but we would not know that

based on test results. On the other hand, a low score on this test is a sure indicator that non-verbal ability is poorly developed.

The instruction for the second experimental group informed participants that the test was only indicative of high abilities. Such an instruction was given in order to induce self-enhancing motivation for self-handicapping aimed at enhancing success and its implications for self-image:

In previous studies, this test was hard for most individuals and most people did quite poorly on the test. However, a bad result on this test does not necessarily indicate low non-verbal ability. This test is only good for identifying individuals with very high non-verbal ability. This means that individuals who score low on the test may have below-average or average non-verbal ability – but we would not know that based on test results. On the other hand, a high score on this test is a sure indicator that non-verbal ability is highly developed.

After this instruction, participants were told that before solving the "real" test, they would have the opportunity to get familiar with the type of test items by doing a highly similar practice test. Both the practice test and the alleged "real" test (which did not exist) were to be done on a computer. A Java script application with the computer-mediated practice test was created. The total exercise time was 7 minutes (pilot testing indicated that for most people, this is enough time to complete the test), but participants were told that they could practice as much as they wanted and that they could end the exercise at any time by closing the application. The practice test included a maximum of 18 items, but it was made clear that participants could solve as many items as they would like. They were told that after they finish practicing, they should answer a short survey with 3 additional questions and then they could do something else in silence (e.g., browse the internet) until everyone was finished.

When all participants completed the practice test and filled out the survey, they were informed that they would not be solving any "real" test. They were informed about the real objective of the research and debriefing was conducted.

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