In the mind of Narcissus: The Mediating Role of Emotional Regulation in the Emergence of Distorted Cognitions

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Abstract

Currently narcissism is considered one of the most widespread modern "diseases". As a consequence, its different types (grandiose and vulnerable narcissism) have been approached from several different perspectives. The present research attempts to investigate the differences between the two types of narcissism and their links with different cognitive components that are connected to these personality traits. The primary aim of our study is to investigate the maladaptive schemas (entitlement, vulnerability, emotional deprivation) and cognitive evaluation systems (self-esteem, systemizing-empathizing) associated with narcissism. In order to ensure the associations of the observed constructs, we used correlational and a specific form of structural equation modelling (SEM), pathway analysis.

The results show that the early maladaptive schemas have a large impact on the development of narcissism and on the empathizing system. The different subtypes of narcissism have different effects on self-esteem, while gender and age have a minor effect on self-esteem and the empathizing system too. Hopefully, these empirical results can be applied in counselling as well as in clinical practice.

Highlights

The two forms of narcissism (grandiose and vulnerable) differently affect a person's cognitive evaluation system. Grandiose narcissism has positive connection with self-esteem, while vulnerable narcissism has negative. Both grandiose and vulnerable narcissism were associated with entitlement early maladaptive schema. Lack of empathy, emotional deprivation, and vulnerability to harm were only correlated with vulnerable narcissism. Based on our correlational results, the maladaptive schema → narcissism → empathy → self-esteem pathway was tested.

Introduction

In the last decades, narcissism has attracted considerable attention in the field of psychological sciences [1, 2]. For many years, narcissism was considered a pathological phenomenon, but as the time went by, it gradually became a more and more widespread personality trait in modern societies [3, 4]. Although the subject of narcissism has been studied thoroughly, the phenotypic diversity of this construct is still just partially known and elaborated. In our paper, we aim to integrate both grandiose and vulnerable narcissism [5] into a common framework with cognitive components connected to these traits.

Grandiose and vulnerable narcissism are not entirely different traits: they share some relevant common features, such as insensitivity to the emotional states of others, exaggerated feelings of self-importance, expectations of excessive admiration, entitlement and fantasies about success [4] Besides these core-components of narcissism, there are several differences between the subtypes. Grandiose narcissism is characterised by extraverted and assertive behaviour, overt expressions of superiority and need of attention, while vulnerable narcissists are more likely to be seen as distant and self-restrained: they are generally introverted and usually described by others as shy [6, 7]. Based on empirical findings, grandiose

narcissism is associated with psychopathy [8, 9, 10,], sensation seeking [11, 12] and cognitive distortions in thinking and reasoning [13, 14], while vulnerable narcissism is connected to neuroticism, anxiety and depression [15, 16], secondary psychopathy [17, 18] and to maladaptive cognitions and emotions as shame [19, 20]. Although several - mostly clinical - aspects of narcissism are well described, the cognitive features of this phenomenon and its subtypes are still not fully explored and organized. One approach that aims to understand the cognitive connotations of narcissism is the schema theory of Jeffrey Young [21]. Schemas consist of feelings, perceptions, memories and cognitions, making them a cognitively oriented basis of personality. Although schema-therapy elaborated some specific features of narcissistic schemas (Emotional Deprivation, Defectiveness, Entitlement, Mistrust, Approval Seeking, Subjugation etc.), the relationship between them and the narcissistic trait is relatively undiscovered [22, 14]. Therefore, we aim to better understand the associations of the two types of narcissism and the early narcissistic maladaptive schemas. In this section we describe only those schemas that have been included in our study. Those are the following: the Emotional Deprivation, the Entitlement and the Vulnerable to Harm and Illness Schemas.

The Emotional Deprivation Schema consists of feelings and perceptions that others - those who are close to the person - will not give them enough emotional support. The Vulnerability to Harm and Illness Schema consists of extreme fears of disasters and diseases. The Entitlement Schema consists of feelings and opinions about the person being superior to others, hence they can break the rules, since those do not apply to them [21]. Another approach to the understanding of the way people are thinking about the world around them is the theory of systemizing-empathizing proposed by Simon Baron-Cohen [23]. The approach of systemizing-empathizing highlights the two- partly - antagonistic cognitive systems of our mind and problem-solving strategies. Systemizing is a useful approach to understand the laws of the universe and predict the probability of certain events, while empathizing is more suitable for understanding our social relationships. Empathizing encourages us to understand the emotions and mental states of others in order to succeed more easily in the social world, while systematization helps us to understand systematic rules and to control and manipulate the behaviour of others. Based on the aforementioned antagonistic nature of the two systems, it is possible that a higher level of one of the systems will presumably have a lower level of the other. On the one hand, relatively low number of empirical studies investigated the nature of relationship between narcissism and the systemizing-empathizing model [24], however, on the other hand there is a solid scientific consensus about the intercorrelation of low level of empathy and narcissism [13].

Narcissistic personality traits, various schemas and the systemizing-empathizing system can all affect our self-assessment and self-esteem, which is an important indicator of (subjective) well-being. Self-esteem is connected to both grandiose and vulnerable narcissism, being positively related to grandiose narcissism and negatively to the vulnerable subtype [25, 26, 27]. According to our knowledge, no available sources provided any empirical information about the possible relationship between self-esteem and early maladaptive schemas, and between systemizing-empathizing tendencies and self-esteem. Our research is a first exploration in this topic, aiming to outline the most important connections among these psychological constructs. In our research, self-esteem is handled as a representation of the cognitive and

affective perceptions, which also expresses the person's attitude towards this integrated set of attributes. According to this concept, self-esteem is based on early cognitive experiences. Based on the provided empirical overview we assume that the above-mentioned psychological constructs are interrelated, and their connections with the different types of narcissism are divergent. In the following part we will present our hypothesis and a possible theoretical model which aims to integrate and explain the cognitive connotations of narcissism.

Hypothesis

Based on the prior studies and theories we assume that the early maladaptive schemes are associated with both aspects of narcissism.

We hypothesize that maladaptive schemas are strongly and differently connected to empathic emotional skills. We assume that the level of empathy is related to self-esteem.

We also hypothesize that these associations can be integrated into a complex model, which is able to outline the relative relevance and strength of the above mentioned connections.

We hypothesize that grandiose narcissism is associated with higher level of self-esteem.

According to our previous studies, grandiose narcissism is most often associated with entitlement, extraversion, and emotional fragility. On the other hand, vulnerable narcissism is usually connected to harm, vulnerability, anxiousness and shyness. Based on these, we selected those three schemas that describe the various factors around the two types of narcissism most effectively.

Methods

Participants and procedure

In our study a total of 486 participants were recruited from social media platforms, using convenience sampling. Later 8 participants were excluded from the dataset, as they did not agree to complete the questionnaire, leaving the final sample of 478 participants. Most participants were female (397) while 4 respondents decided not to reveal their gender. The average age was 35 years (SD = 14.97), with a range of 18–76 years. The cooperation was in all cases completely anonymous and voluntary, the respondents did not receive any benefits. Participants could end the cooperation at any point of the investigation. No individual evaluation was performed, data were subject of group analysis only. The data are not accessible to third parties and cannot be used for diagnostic purposes.

Instruments

Narcissistic Personality Inventory (NPI)

NPI [28] is a 40-item self-report measure of trait narcissism. In the current study we used 25 items based on the study of Ackerman et al. [1]. This version is a 25-item self-report measure that assesses the level of authority, grandiose exhibitionism and entitlement/exploitativeness in which the items are scored on a 1 (Disagree strongly) to 5 (Agree strongly) Likert-type scale. The higher scores reflect higher levels of subclinical grandiose narcissism (M = 61.973; SD = 15.573; α = 0.907).

Maladaptive Covert Narcissism Scale (MCNS)

The HSNS [29] is a 23-item self-report measure that assesses the level of hypersensitivity, vulnerability and entitlement in which the items are scored on a 1 (Disagree strongly) to 5 (Agree strongly) Likert-type scale. The higher scores reflect higher levels of hypersensitivity and vulnerability (M = 54.632; SD = 15.219; α = 0.800).

Rosenberg Self-Esteem Scale (RSES)

The RSES [30] is a 10-item self-report measure that assesses the level of self-esteem in which the items are scored on a 1 (Disagree strongly) to 4 (Agree strongly) Likert-type scale. The higher scores reflect higher levels of self-esteem (M = 29.866; SD = 7.193; α = 0.907).

The Young Schema Questionnaire (YSQ-1)

The YSQ-1 [31] is a 244-item measure of 19 different maladaptive schemas in which the items are scored on a 1 (Not at all) to 6 (At all) Likert-type scale. The questionnaire is most often used in clinical procedures, however, its application in scientific context is also possible. In our study we observed only three schemas from the whole YSQ-1: Emotional Deprivation (M = 29.475; SD = 9.750; α = 0.847), Vulnerability to Harm and Illness (M = 35.782; SD = 13.956; α = 0.901), Entitlement (M = 19.144; SD = 10.296; α = 0.938).

The Empathizing Quotient (EQ)

The EQ [23] is a self-report measure of emotional intelligence in which the items are scored on a 1 (Disagree strongly) to 4 (Agree strongly) Likert-type scale. The higher scores reflect higher levels of empathizing and lower levels of systematizing (M = 125.448; SD = 12.793; α = 0.844).

Results

Correlations and pathway analysis of the variables

In order to explore the associations of the observed constructs we applied (1) correlational and (2) pathway analysis, a special form of structural equation modelling (SEM). The initial analysis (Spearman correlation) supported our original idea that the two types of narcissism, the early maladaptive schemas, emotional skills and self-esteem are interrelated (see Table 1.). The strength of these effects ranges between weak to moderate, both in a positive and negative way.

We found moderate correlation (r = 0,489) between grandiose narcissism and the entitlement schema, as well as between vulnerable narcissism and entitlement schema (r = 0,584). There was a strong moderate (r = 0,658) connection between vulnerable narcissism and the vulnerability schema. Moreover, moderate correlation (r = 0,469) was found between vulnerable narcissism and emotional deprivation schema, while there was no significant connection between emotional deprivation schema and grandiose narcissism. There was a moderate, negative (r= -0,233) correlation between emotional skills and vulnerable narcissism. We also found a positive, weak connection (r = 0,261) between grandiose narcissism and self-esteem, while moderate, negative connection (r= -0,576) between vulnerable narcissism and self-esteem.

These findings served as a basis for the more complex SEM analysis. Pathway analysis with diagonally weighted least square estimation was applied to check the possible connections among the constructs. The model consists of four levels. In the first level, we can see various maladaptive schemas (Emotional Deprivation, Vulnerability to Harm and Illness, Entitlement) as input variables. In the second level, there are the two types of narcissism (grandiose and vulnerable). The third level consists of the empathizing quotient (emotional skills) and on the fourth level, the output variable is self-esteem. According to the criteria set by Hu and Bentler [32], the test yield an acceptable model fit (χ^2(13) = 51.566; CMIN/DF = 3.966; NFI = 0.981; CFI = 0.986; TLI = 0.972; RMSEA = 0.079; SRMR = 0.045; GFI = 0.987; aGFI = 0.956; MFI = 0.960). Regarding the direct pathways, the maladaptive schemas are in association with the two types of narcissism. The Entitlement and the Vulnerability to Harm and Illness are connected to both types of narcissism, while the Emotional Deprivation schema is only connected to the vulnerable narcissism (see Fig. 1). These connections range from weak to moderate (β= -0.165–0.557) and most of them are positive, except the one between vulnerability and grandiose narcissism. Grandiose narcissism is connected to self-esteem (β = 0.308, p < 0.001). Vulnerable narcissism is in negative association with empathic skills (β= -0.390, p < 0.001) and empathic skills are in positive connection with self-esteem (β = 0.178, p < 0.01). Regarding the indirect pathways, we found that the vulnerability to harm and illness and the entitlement schemas through grandiose narcissism are connected to self-esteem. On the other hand, all three observed schemas through the vulnerable narcissism and through the empathic skills are connected to self-esteem. The first indirect pathway of the vulnerability to harm and illness and the entitlement schemas are in positive connection with self-esteem through the previously discussed components. The second indirect pathway, which concluded all three schemas, is in negative association with self-esteem.

We included gender and age as manifest control variables in our model. Age was associated in a weak negative way with vulnerable narcissism and empathic skills, while in the case of self-esteem a moderate-weak connection was found. Gender is a relevant and significant factor in the case of empathic skills with a medium effect size and a positive direction, highlighting the dominance of females. Based on the explained variance, vulnerable narcissism seems to be a central component of our model, while the role of emotion-related empathic skills is clearly weaker. Possible explanations of these imbalances are provided in the discussion.

Table 1
Correlations of the components

	1.	2.	3.	4.	5.	6.
1. NPI	-					
2.MCNS	0.189***	-				
3.YSQ-ET	0.489***	0.584***	-			
4.YSQ-ED	0.062	0.469***	0.265***	-		
5.YSQ-VH	0.087	0.658***	0.355***	0.361***	-	
6.EQ	-0.001	-0.233***	-0.274***	-0.333***	-0.119**	-
7.RSES	0.261***	-0.576***	-0.097**	-0.366***	-0.546***	0.195***

(NPI - Narcissistic Personality Inventory; MCNS - Maladaptive Covert Narcissism Scale; YSQ-ET - Young Schema Questionnaire Entitlement Schema; YSQ-ED - Young Schema Questionnaire Emotional Deprivation Schema; YSQ-VH - Young Schema Questionnaire Vulnerability to Harm and Illness Schema; EQ - Empathizing Quotient; RSES - Rosenberg Self-Esteem Scale; ***p < 0.001; **p < 0.01; *p < 0.05)

(NPI - Narcissistic Personality Inventory; MCNS - Maladaptive Covert Narcissism Scale; YSQ-ET - Young Schema Questionnaire Entitlement Schema; YSQ-ED - Young Schema Questionnaire Emotional Deprivation Schema; YSQ-VH - Young Schema Questionnaire Vulnerability to Harm and Illness Schema; EQ - Empathizing Quotient; RSES - Rosenberg Self-Esteem Scale)

Discussion

In the present study, we examined the mediating role of the two types of narcissism in understanding the relationship between the various maladaptive schemas, emotional skills and self-esteem. Our goal was to get a deeper understanding of the cognitive components related to narcissism.

The initial stage of the model consists of three different schemas. As mentioned in the introduction, those schemas usually develop in the early stages of our life. We hypothesized that there is a connection among the schemas and the two types of narcissism. According to our results (both, correlations and the pathway analysis), there is a moderate relationship between the Entitlement schema and the two types of narcissism. Narcissism is a personality trait that often roots in the childhood experiences hypothesized to be connected to the lack of self-reflection and to unlimited self-worship [33], which can be the result of the development of various maladaptive schemas - especially Entitlement schema. We also assumed that there is a connection between the Vulnerability to Harm and Illness schema and vulnerable narcissism. According to the correlational results and the structural equation model, there is a moderate positive connection between that schema and vulnerable narcissism. Narcissists are usually emotionally wounded, this is especially true for the vulnerable narcissists [34]. Those emotional injuries can be obtained on the basis of emotional abandonment, lack of help and fear of developing intimate

relationships. We also hypothesized that there is a connection between the Emotional Deprivation schema and grandiose narcissism. According to our results, there is no connection between the grandiose narcissism and that schema. This could lead to the conclusion that in the normal population the presence of grandiose narcissism can be more often associated with the positive or adaptive characteristics of narcissism, such as sufficient extraversion and better appearance.

At the second and third level of our model there are the two types of narcissism and emotional skills. We assumed that a higher level of vulnerable narcissism would facilitate a lower level of emotional skills. Vulnerable narcissism is often associated with the lack of empathic skills. This could happen because of various reasons: lack of adaptive social experiences in childhood, emotional rigidity of parents etc. [35]. We assume that based on our results, a possible interventional point for cognitive behavioural approach could be present between the expression of vulnerable narcissism and the development of lack of empathic skills, especially since narcissists are capable of understanding the way people help each other - even if it seems as they do not care [36].

At the fourth level of the model there is self-esteem, we hypothesized that a higher level of grandiose narcissism would facilitate a higher level of self-esteem. Moreover, we also hypothesized that a higher level of vulnerable narcissism would facilitate a lower level of self-esteem. According to our model, grandiose narcissism is in a direct connection with self-esteem, while vulnerable narcissism is in an indirect connection with self-esteem through the role of empathic skills. As the correlations and the model demonstrate, the two types of narcissism have a different association with self-esteem: grandiose narcissism has a positive, while vulnerable has a negative connection with this construct. On the one hand, vulnerable narcissism is often associated with fearfulness, anxiousness and shyness [35]. These personality traits can be indicators of lower level of self-esteem, probably connected to the anxiety the person can experience. Furthermore, grandiose narcissism is often linked with extraversion and eligibility [37]. Those characteristics can cause higher self-esteem, because the person can feel like they are superior or even invincible.

According to the model, the vulnerability schema is in a direct, negative connection with self-esteem. This schema is associated with fearfulness in general: fear of having an accident, losing a job, or getting extremely sick. These fears can affect the evaluation of a person and can result in a lower level of self-esteem.

In general, we can make the conclusion that the cognitive components (emphatic skills, early maladaptive schemas, self-esteem) still need to be investigated more thoroughly in association with the two types of narcissism, while these constructs can be highly important in a healthy development of individuality.

Limitations and further directions

On the one hand, the biggest limitation might be that our study is a cross section analysis which means that our results only refer to a temporally specific state of personality and cognitive functioning. On the other hand, another relevant limitation is the gender ratio, which quite shifted toward women. As previous

studies and observations show [38], grandiose narcissism more often occurs amongst men and is less likely in the case of women, while vulnerable narcissism has the exact opposite relation. Further limitations may come from the fact that the connection between the observed components can be interchangeable, which means we cannot tell enough accurately enough which component affects the other or if that connection would be valid with the opposite direction as well.

Declarations

Ethics approval and consent to participate

All methods were carried out in accordance with relevant guidelines and regulations. Informed consent was obtained from all subjects at the start of the study.

The research fully complied with the ethical rules/principles of the Declaration of Helsinki. The study was conducted following the National Psychological Research Ethic Committee approved this protocol [No. 2022-13, (EPKEB)/2022].

Consent for publication

Not applicable.

Availability of data and materials

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

Competing interests

We have no conflicts of interest to disclose.

Author Contributions Statement

Vida Dorian: theoretical considerations, text editing, data gathering and statistical analysis; Láng András: theoretical considerations and text editing;

Áfra Eszter: theoretical considerations, text editing and data gathering;

Kemény Viktor: theoretical considerations, text editing and data gathering;

Czibor Andrea: theoretical considerations, text editing;

Csapó Gyöngyvér: data gathering and text editing;

Putz Ádám: theoretical considerations and text editing;

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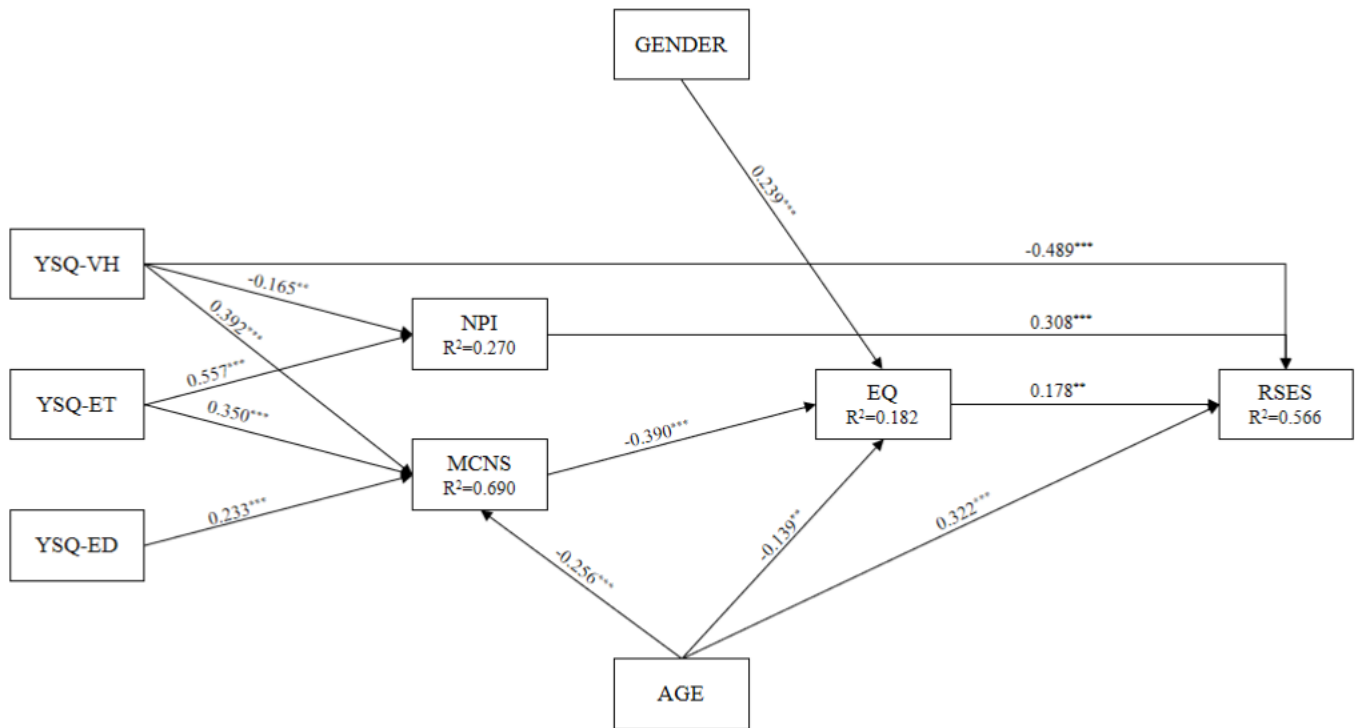
Figures

Figure 1

Pathway analyses model

(NPI - Narcissistic Personality Inventory; MCNS - Maladaptive Covert Narcissism Scale; YSQ-ET - Young Schema Questionnaire Entitlement Schema; YSQ-ED - Young Schema Questionnaire Emotional Deprivation Schema; YSQ-VH - Young Schema Questionnaire Vulnerability to Harm and Illness Schema; EQ - Empathizing Quotient; RSES - Rosenberg Self-Esteem Scale)