Clinical Neuropsychiatry (2023) 20, 3, 161-172

RESEARCH PAPER

MALADAPTIVE PERSONALITY TRAITS AND INTERNALIZING AND EXTERNALIZING PROBLEMS: THE ROLE OF BORDERLINE AND NARCISSISTIC FEATURES IN ADOLESCENCE

Ilaria Maria Antonietta Benzi, Andrea Fontana, Rossella Di Pierro

Abstract

Objective: Research has shown the importance of delving into the variables associated with externalizing and internalizing behaviors in adolescence, highlighting gender-related differences in their presentations. This two-wave longitudinal study aims to address gaps in understanding the concurrent contribution of borderline and narcissistic personality traits to the presence and maintenance of internalizing and externalizing problems in adolescence.

Method: We recruited 705 adolescents (65% females; age range 13-19 years old; Mage = 15.84, SD = 1.31) to self-report on behavioral problems (YSR-112), borderline (BPFSC-11) and narcissistic traits (PNI) at baseline and again on behavioral problems after 12 months.

Results: Data highlighted significant differences between males and females for all variables except externalizing problems. Hierarchical regression models showed that borderline traits are a prominent risk factor for all behavioral problems in males and females at baseline and after 12 months. Moreover, regardless of gender, higher grandiose narcissism contributes to lower internalizing problems only when the direct contribution of vulnerable presentations of narcissism is considered. Grandiose narcissism is also a risk factor for externalizing problems after 12 months in females, whereas vulnerable narcissism significantly increases the likelihood of internalizing trajectories improving over 12 months.

Conclusions: This study provides more evidence of the associations between maladaptive personality traits and adolescent internalizing and externalizing problems: (1) confirming that borderline traits are crucial beyond gender, (2) stressing the importance of considering both grandiose and vulnerable narcissistic traits, and (3) highlighting the adaptive value of narcissistic vulnerability in capturing the adolescent crisis. The implications for clinical practice and intervention are also discussed.

Key words: adolescence, grandiose narcissism, vulnerable narcissism, borderline traits, internalizing problems, externalizing problems

Ilaria Maria Antonietta Benzi[1], Andrea Fontana[2], Rossella Di Pierro[3]

[1] Department of Brain and Behavioral Sciences, University of Pavia, Pavia, Italy
[2] Department of Human Science, LUMSA University, Rome, Italy
[3] Department of Psychology, University of Milano-Bicocca, Milan, Italy

OPEN ACCESS

Citation: Benzi, I. M. A., Fontana, A., Di Pierro, R. (2023). Maladaptive personality traits and internalizing and externalizing problems: the role of borderline and narcissistic features in adolescence. *Clinical Neuropsychiatry, 20*(3)*,* 161-172.

doi.org/10.36131/cnfioritieditore20230301

Funding: None.

Competing interests: None.

Author contributions: Ilaria Maria Antonietta Benzi and Andrea Fontana have contributed equally to this work.

Corresponding author
Ilaria M.A. Benzi
University of Pavia, Department of Brain and Behavioral Sciences, Piazza Botta Adorno Antoniotto, 11, 27100, Pavia, Italy
E-Mail: ilariamariaantonietta.benzi@unipv.it

Introduction

Adolescence is a sensitive period for developing internalizing and externalizing problems. Indeed, at this developmental stage that involves the structuring of bodily and psychological identity and brain maturation, adolescents are more prone to anxiety, depression, somatization issues, and aggressive and rule-breaking behaviors (Casey et al., 2008; Caspi et al., 2014; Hopwood & Grilo, 2010). Overall, extensive research has shown that internalizing and externalizing problems can significantly impact adolescents' present and future lives. Indeed, several contributions have emphasized the longitudinal association between adolescent behavioral problems and problematic alcohol or substance use (Meque et al., 2019). Moreover, internalizing and externalizing symptoms are significant risk factors for developing personality pathology and psychopathology in general (Caspi et al., 2014; Hopwood & Grilo, 2010; Stepp et al., 2016; Wright et al., 2016).

In addition, research has shown significant gender differences in the manifestation of behavioral problems (Hayward & Sanborn, 2002; Hicks et al., 2007). For example, a study reported that internalizing problems are more common among girls, particularly in the clinical manifestations of depression, anxiety, and eating disorders, with a prevalence between 12% and 23%. On the other hand, externalizing problems seem more common in males, generally characterized by difficulties in regulating aggression, with a prevalence be-

tween 5% and 10% (Herpertz-Dahlmann et al., 2013). Other studies have pointed out that differences emerge particularly in middle adolescence (14-16 years) and follow specific trajectories depending on the disorder considered (Achenbach et al., 2016; Hayward & Sanborn, 2002; Hicks et al., 2007). In this scenario, while acknowledging the evidence of a gendered prevalence for these behaviors, the literature emphasizes the importance of considering the determinants of internalizing and externalizing problems in this developmental phase (Achenbach et al., 2016; Herpertz-Dahlmann et al., 2013; Sharp & Wall, 2018).

The contribution of borderline personality traits

In recent years, research on the development of personality pathology in adolescence has significantly focused on identifying borderline traits: emotional dysregulation, instability of self-image, and turbulent interpersonal relationships are just some of the characteristics considered (Bleiberg et al., 2012; Chanen et al., 2017). Interestingly, normative versions of these traits, namely the ability to regulate emotions, identity construction, and investment in meaningful relationships, are all crucial tasks of the adolescent phase (Benzi et al., 2022, 2023; Shiner, 2009). In this sense, borderline traits are adolescents' most apparent indicators of maladaptive personality structuring (Chanen & Kaess, 2012; Miller et al., 2008). Evidence supports the importance of investigating borderline personality features in adolescents (Sharp & Fonagy, 2015). Traits associated with borderline personality disorder have been connected to substantial risk, public health concerns, and functional impairments across different age groups (Feenstra et al., 2012). These traits can predict future self-harm and suicide attempts, surpassing the impact of other mental health conditions (Yen et al., 2013). Additionally, even subthreshold BPD features have been related to considerable risk and dysfunction in adolescents (Thompson et al., 2019) and adults (Zimmerman et al., 2011).

Research has highlighted a complex interplay between behavioral problems and borderline traits (Stepp et al., 2016; Wright et al., 2016). On the one hand, it has been shown that internalizing and externalizing problems are significant predictors of borderline traits (Caspi et al., 2014; Sharp & Wall, 2018). On the other hand, however, several studies have shown an association between borderline traits and the persistence of internalizing and externalizing problems. For example, the association between emotional dysregulation, self-instability, and anxious, depressive, and somatic aspects is primarily witnessed in the literature (Eisenberg et al., 2006; Wright et al., 2016). Likewise, the impact of borderline traits on externalizing behaviors are recognized in several contributions (Hicks et al., 2007; Hopwood & Grilo, 2010).

Moreover, research highlights gender differences in borderline traits in adolescence, with boys showing more aggressive and antisocial features and girls displaying more impulsivity, acting out, and identity disturbance (Banzhaf et al., 2012; Bradley et al., 2005; Goodman et al., 2013; Keenan et al., 2010). Also, as gender specificities are not always accounted for, additional research is needed (Guilé et al., 2018).

"Entitled, but still fragile."

A challenging area in the last decade has been the topic of maladaptive narcissistic traits in adolescence. Overall, the construct of narcissism has historically been the subject of fervent debate in an attempt to reach a comprehensive definition and identification of its different presentations: on the one hand, the more grandiose, arrogant, and entitled manifestations, and on the other, the more vulnerable and fragile ones (Cain et al., 2008; Pincus & Lukowitsky, 2010).

Added to this, in adolescence, the opportunity to cultivate one's "sense of self," to develop it "narcissistically", corresponds to an essential developmental stage: adolescents contribute to the construction of their identity by valuing parts of themselves that can be publicly shared and protecting others that are more unstable and fragile (Barry et al., 2007; Clarke et al., 2015; Roche et al., 2013). Thus, research has acknowledged the need to consider adaptive and maladaptive narcissistic traits: again, as adolescents develop, it is crucial to collect meaningful data on sub-threshold conditions that might, in the future, grow in clinically relevant manifestations (Di Pierro et al., 2019). Recent research suggests that pathological narcissistic traits can emerge during adolescence (Barry et al., 2019, 2020; Chopik & Grimm, 2019). Adolescents displaying primarily grandiose narcissistic traits are prone to using interpersonal manipulation and aggression to establish dominance and validate their exaggerated self-perception. Additionally, clinical and empirical studies have recognized vulnerable narcissistic traits as another dimension of pathological narcissism (Kaufman et al., 2020). These traits are marked by unstable self-esteem, increased interpersonal sensitivity, a sense of emptiness and shame, and the adoption of socially avoidant coping mechanisms. Adolescents demonstrating NV traits may exhibit behavioral problems, including aggressive behavior, internalizing issues, addiction, and a lack of empathy (Bilevicius et al., 2019; Treeby & Bruno, 2012).

Empirical findings suggest that narcissistic traits relate to behavioral problems in adolescence. According to Washburn et al. (2004), for instance, aspects of grandiose narcissism, such as a sense of entitlement, interpersonal exploitation, and a sense of superiority, are associated with externalizing aggressive behaviors in adolescents. Also, traits of vulnerable narcissism show positive associations with anxious and depressive behaviors (Barry & Malkin, 2010; Washburn et al., 2004). However, empirical interest in this topic is scarce and further research is needed to better understand the impact of maladaptive narcissistic traits on internalizing and externalizing problems in adolescence (Benzi et al., 2020). Indeed, given that the conceptualization of narcissism is currently the subject of numerous theoretical and clinical research, it is interesting to investigate these aspects during adolescence, a developmental stage where narcissistic tendencies may be related to forming one's identity, leading to a vulnerable or grandiose self-image (Bleiberg, 1994). Moreover, research lacks findings on distinguishing between healthy and pathological forms of narcissism, as clinical data are prevalent (Barry et al., 2007). Additionally, while the influence of borderline traits on psychosocial and regulatory development during adolescence has been studied, there is currently no evidence of the interaction between borderline and narcissistic features, an emerging aspect of study in adult literature (Diamond et al., 2013). Finally, no studies have examined such associations by considering gender specificities. Moreover, longitudinal studies on narcissism's role in maintaining internalizing and externalizing problems in adolescence are lacking.

The present study

Research has shown the importance of delving into the variables associated with adolescent externalizing and internalizing behaviors. More, maladaptive personality traits showed significant associations with behavioral problems. Indeed, borderline traits and narcissistic grandiose and vulnerable characteristics are essential to study associated with externalizing and internalizing difficulties. In this scenario, accounting for crucial developmental characteristics of adolescence, available research highlighted the importance of accounting for gender specificities in the manifestations of behavioral problems and maladaptive personality traits.

However, to the best of our knowledge, there is a lack of contributions integrating the concurrent contribution of borderline and narcissistic personality traits to explain adolescents' externalizing and internalizing problems in adolescent males and females.

Thus, this contribution aims to address gaps in understanding the concurrent role of borderline and narcissistic traits in internalizing and externalizing problems in adolescent males and females.

The specific objectives are 1) to explore the relationship between borderline and narcissistic traits (grandiose and vulnerable) and internalizing and externalizing problems in males and females adolescents; 2) to examine the longitudinal association between borderline personality traits and grandiose and vulnerable narcissistic traits with externalizing and internalizing problems after 12 months in males and females adolescents; 3) to study the contribution of borderline personality traits and narcissistic traits on the developmental trajectories of behavioral problems (i.e., the longitudinal changes in externalizing and externalizing problems).

First, we hypothesize that borderline traits will be significantly associated with behavioral problems in males and females (Stepp et al., 2016). Second, we hypothesize that grandiose and vulnerable narcissistic traits will be associated only with externalizing and internalizing problems, respectively, over and beyond the contribution of borderline traits (Barry & Malkin, 2010; Washburn et al., 2004). Third, we hypothesize that the associations at baseline will remain stable in predicting internalizing and externalizing problems after 12 months in males and females: borderline traits will predict behavioral problems, and narcissistic traits will predict behavioral problems over and beyond the contribution of borderline traits (Chanen & Kaess, 2012; Di Pierro et al., 2019). Fourth, we hypothesize that borderline and narcissistic traits will impact the longitudinal changes of behavioral problems (Sharp & Wall, 2018; Wright et al., 2016).

Method

Study design and procedures

This is a two-wave longitudinal study: participants were assessed at baseline (T1) and after 12 months (T2). We recruited participants through the cooperation of high school principals and teachers: first, we presented the study to them via a formal invitation to participate, then, we collected informed consent from parents and adolescents willing to enroll in the study. The inclusion criteria for the study consisted of being a high school student between 13 and 19 and fluently speaking Italian. We excluded potential participants if they could not understand the questionnaires due to the presence of certified intellectual disabilities or neurodevelopmental disorders.

Adolescents' participation was voluntary, and no incentive was given. Students received a unique reference code and completed self-report questionnaires via a private web link to ensure anonymity. The survey took approximately 30 minutes. The first wave was collected during school hours (T1). The second wave (T2) was collected via email: school teachers solicited participants, and we sent multiple email reminders to minimize dropout.

The Ethical Committee of the University of Milan-Bicocca approved all materials and procedures.

Participants

Participants were 705 adolescents (65% females; age range 13-19 years old; M*age* = 15.84, *SD* = 1.31) from northern Italy attending public high schools. Most adolescents (81.1%; n=572) lived with both caregivers, 15.5% (n=109) lived with their mothers, 2.3% (n=16) lived with their fathers, and 1.1% (n=8) lived with other relatives or in housing. Participants were mainly Italian natives (92.1%), with a residual percentage of students born in different geographical areas (3.3% in Eastern Europe, 2.6% in North Africa, and 2% in others) fluently speaking Italian. In addition, most participants declared to have one (57.2%) or more siblings (26.8%), while 16% of adolescents did not have siblings.

One hundred eighty-six adolescents participated in the study's second wave (64.5% females; age range 13-19 years old; *M* age = 16.03, *SD* = 1.37). Similarly to the baseline sample, most adolescents lived with both caregivers (78%; n= 145), 17.7% (n= 33) lived with their mothers, and 4.3% (n= 8) lived with their fathers. Participants were all Italian natives fluently speaking Italian. Again, most participants declared to have one (58.1%) or more siblings (24.2%), while 17.7% of adolescents did not have siblings.

516 adolescents did not attend the follow-up assessment (T2), resulting in a participation rate of 26.4%.

Measures

Baseline assessment (T1)

Youth Self Report (YSR). The YSR-112 (Achenbach & Rescorla, 2001) is a 112-item self-report measure that assesses general psychological and behavioral problems. Each item is scored on a 3-point scale (0= "not true" to 2= "very or often true"). The measure yields a Total Problems score of general pathological functioning and two comprehensive Internalizing and Externalizing problems subscales. The Externalizing scale encompasses the subscales of Aggressive behaviors and Rule-breaking behaviors. The Internalizing scale includes the Anxious/Depressed, Withdrawn/Depressed, and Somatic Complaints subscales. We utilized the Externalizing (EXT) and Internalizing (INT) problems scales for this study. Both scales showed good internal consistency: α = .85 (Externalizing problems) to α = .89 (Internalizing problems). Higher scores in these two scales indicate more severe internalizing and externalizing problems.

The Borderline Personality Feature Scale for Children – 11 (BPFSC-11). The BPFSC-11 (Fossati et al., 2019; Sharp et al., 2014) is an 11-item measure of borderline personality traits for children and adolescents between 9 and 18. The BPFSC-11 includes indicators of borderline personality traits such as identity problems, affective instability, and negative interpersonal

relationships. Items' responses are rated on a 5-point Likert scale (1 = "not true at all"; 5 = "always true"). The BPFSC-11 yields a total score (range: 11–55), measuring the overall level of borderline personality features (BPF). The BPFSC-11 showed adequate internal consistency in our sample (α = .79). Higher scores on the BPFSC-11 indicate greater borderline personality traits.

Pathological Narcissism Inventory (PNI). The PNI (Pincus et al., 2009; Somma et al., 2020) assesses pathological narcissistic traits in adolescents and adults. It includes 52 items scored on a 6-point scale (0 = "Not at all like me"; 5 = "Very much like me"). In addition, the PNI includes seven first-order scales that load into two second-order scales: Narcissistic Grandiosity (NG) and Narcissistic Vulnerability (NV). NG consists of three subscales: Exploitativeness, Self-Sacrificing Self-Enhancement, and Grandiose Fantasy. The NV scale encompasses four subscales: Contingent Self-esteem, Devaluing, Hiding the Self, and Entitlement Rage. The internal consistency of the two PNI scales and subscales was good, ranging from α = .84 (Narcissistic Grandiosity) to α = .93 (Narcissistic Vulnerability). Higher scores in these two scales indicate higher narcissistic traits.

Assessment after 12 months (T2)

At T2, adolescents were assessed only with the YSR. Again, scales showed good internal consistency: α = .79 (Externalizing problems) to α = .88 (Internalizing problems).

Statistical analyses

We conducted statistical analyses using IBM SPSS Statistics for Macintosh, Version 27.0. First, we examined the dataset for the accuracy of data entry and missing values. Next, we performed Little's MCAR (1988) test to evaluate the null hypothesis that scale scores were utterly missing at random (i.e., MCAR assumption) (Little, 1988). Then, we replaced missing values through expectation maximization (Tabachnick et al., 2013). Next, we explored univariate outliers by inspecting the variable's z scores, box plots, and multivariate outliers through Mahalanobis' distance and subsequent χ^2 test setting p <.001. Afterward, we assessed the distributions' normality by observing the skewness and kurtosis of each variable. Then, we checked assumptions for hierarchical regression, looking at the independence of residuals, linearity of variables relationship, homoscedasticity, multicollinearity, and error distribution.

Finally, we analyzed t-test values to highlight gender differences in relevant variables.

We performed two hierarchical multiple regressions to explore the relationship between borderline and narcissistic traits and internalizing and externalizing problems in males and females.

The first hierarchical regression model included INT as the outcome variable. First, we included BPF as a predictor in Step 1. Then, in Step 2, we added NG to verify its association with INT over and above BPF. Finally, in Step 3, we added NV to test its relationship with INT over and above BPF and NG. The second hierarchical regression model followed the same steps, considering EXT as the outcome variable.

To account for missing data at T2, we conducted binary logistic regressions with possible confounding variables at baseline as predictors (gender, age, INT, EXT, BPF, NG, NV) and a dropout variable as the outcome (no = 0; yes = 1).

We performed hierarchical multiple regressions to examine the longitudinal association between borderline personality traits and grandiose and vulnerable narcissistic traits with externalizing and internalizing problems after 12 months. We conducted hierarchical multiple regression models separately on males and females to account for gender-related patterns of predictions. The first hierarchical regression model included INT at T2 as the outcome variable. In Step 1, we included BPF at T1 as a predictor. In Step 2, we added NG at T2 to verify its contribution over and above BPF. In Step 3, we added NV to the analysis to test its contribution over and above BPF and NG in predicting INT after 12 months. Finally, we performed the same regression models to explore the longitudinal associations of BPF and narcissistic traits with EXT.

To study the contribution of borderline personality traits and narcissistic traits on the developmental trajectories of behavioral problems, we computed Reliable Change Index (RCI) (Jacobson & Truax, 1992). Thus, the sample was divided into three groups: 1) *stable adolescents*, including adolescents that did not display a significant change in INT or EXT from T1 to T2; 2) *worsening adolescents*, including adolescents that displayed a significant worsening pattern from T1 to T2; 3) *improving adolescents*, including adolescents that displayed a significant decrease of INT and EXT from T1 to T2. Finally, we performed a multinomial logistic regression to determine if BPF, controlling for gender, would enhance the odds of displaying a *stable*, *worsening,* or *improving* pattern in behavioral problems (Step 1) and if pathological narcissism would predict this pattern over and above BPF (Step 2).

Results

In all scales, missing values were <7%. Little's MCAR test was not significant $\chi^2_{(190)} = 152.89$, $p < .98$, suggesting that missing data were completely at random. Thus, we replaced missing values through expectation maximization. Afterward, we identified nine (1.2%) adolescents with extremely high z scores on INT, EXT, and NV as univariate outliers and excluded them from the analysis. Through Mahalanobis distance, we identified sixteen other cases (2.3%) as multivariate outliers with p < .001. We excluded all twenty-five outliers from the analyses: the final sample included 680 adolescents (65.7% Females, n=447).

Overall, data showed significant gender differences in BPF, $t(703) = -6.04$, $p < .001$, in NV, $t(703) = -4.10$, $p < .001$, and in INT $t(703) = -6.50$, $p < .001$, and EXT $t(703) = 6.39$, $p < .001$. No significant gender differences emerged for NG, $t(703) = -1.52$, $p = .129$.

We verified that the assumptions were met before conducting the linear regression analysis. Partial regression plots and a plot of studentized residuals against the predicted values verified linearity. The independence of residuals, as assessed by a Durbin-Watson statistic of 1.98 for INT model and 1.89 for EXT model, was respected. There was homoscedasticity, as evaluated by visual inspection of a plot of studentized residuals versus unstandardized predicted values, and no evidence of multicollinearity, as assessed by tolerance values greater than 0.1. Furthermore, the assumption of normality was met, as evaluated by Q-Q Plot and observing skewness and kurtosis of the considered variables.

The results of the hierarchical regression model for INT are in **table 1**. Step 1 showed that BPF significantly predicted INT both in males and females. Step 1 was statistically significant, $R^2 = .17$, $F(1, 244) = 49.97$, $p < .001$ for males and $R^2 = .36$, $F(1, 457) = 262.48$, p

Table 1. *Summary of hierarchical regression analysis for the association between Borderline Personality Features (BPF), Narcissistic Grandiosity (NG), and Narcissistic Vulnerability (NV) with Internalizing problems in males and females*

Males							
		Unstandardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B	
Step		B	Std. Error	Beta	t	Lower Bound	Upper Bound
1	(Constant)	31.83	2.40		13.24***	27.10	36.57
	BPF	6.37	.90	.41	7.07***	4.60	8.15
2	(Constant)	34.09	3.01		11.33***	28.16	40.01
	BPF	6.90	1.00	.45	6.93***	8.87	8.87
	NG	-.98	.79	-.08	-1.24	.57	.57
3	(Constant)	32.26	2.95		10.93***	26.45	38.08
	BPF	3.99	1.21	.26	3.30**	1.60	6.37
	NG	-2.97	.91	-.24	-3.26**	-4.77	-1.17
	NV	5.15	1.28	.37	4.02***	2.63	7.67
Females							
		Unstandardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B	
Step		B	Std. Error	Beta	t	Lower Bound	Upper Bound
1	(Constant)	25.65	1.75		14.67***	22.21	29.09
	BPF	9.59	.59	.60	10.75***	8.43	10.75
2	(Constant)	28.10	2.56		10.96***	23.06	33.14
	BPF	9.85	.63	.62	15.76***	8.63	11.08
	NG	-.85	.65	-.05	-1.31	-2.14	.43
3	(Constant)	28.22	2.48		11.37***	26.45	38.08
	BPF	6.95	.79	.44	8.75***	1.60	6.37
	NG	-2.57	.70	-.15	-3.66***	-4.77	-1.17
	NV	4.23	.75	.31	5.64***	2.63	7.67

Note. * p < .05, ** p < .01, *** p < .001. Internalizing problems = YSR-112 (Achenbach & Rescorla, 2001); BPF = BPFSC-11 (Fossati et al., 2019; Sharp et al., 2014); NG, NV = PNI (Pincus et al., 2009; Somma et al., 2020).

< .001 for females. In Step 2, NG did not significantly predict INT in males and females. Accordingly, explained variance of Step 1 did not significantly increase when entering NG (ΔR^2=.01 for males, ΔR^2=.00 for females). Notably, in Step 3, BPF, NG, and NV predicted INT in males and females, significantly increasing the explained variance of Step 1 (ΔR^2=.004). Step 3 was statistically significant, R^2 = .23, F(1, 242) = 23.68, p < .001 for males and R^2 = .41, F(1, 455) = 104.74, p < .001 for females.

Results highlighted higher scores of INT for females compared to males. Moreover, the higher BPF, the greater INT in adolescents. Also, NG was negatively associated with INT, while a higher NV was associated with greater INT.

The results for hierarchical regression for EXT are in **table 2**.

Step 1 showed that BPF significantly predicted EXT both in males and females. Step 1 was statistically significant, R^2 = .06, F(1, 244) = 16.67, p < .001 for males and R^2 = .19, F(1, 457) = 109.77, p < .001 for females. In Step 2, NG significantly predicted EXT only in females. Accordingly, explained variance of Step 1 did not significantly increase when entering NG in males (ΔR^2=.00) and significantly increased in females (ΔR^2=.02). Step 2 was statistically significant, R^2 = .06, F(1, 243) = 8.17, p < .001 for males and R^2 = .22, F(1, 456) = 63.42, p < .001 for females. In Step 3, BPF and NG but not NV predicted EXT only in females but not in males, with no significant increase in explained variance in both groups (ΔR^2=.00 for males and ΔR^2=.00 for females). Step 3 was statistically significant, R^2 = .07, F(1, 242) = 6.31, p < .001 for males and R^2 = .41, F(1, 455) = 42.70, p < .001 for females.

Results highlighted no significantly higher scores of EXT for females compared to males. Moreover, the higher BPF, the greater EXT in adolescents. Also, NG was associated with EXT only in females, while NV was not associated with EXT in both groups.

Binary logistic regressions for handling missing data at T2 highlighted that gender (OR=.965, 95%CI [.680, 1.371]), INT at T1 (OR=1.001, 95%CI [.988, 1.024]), EXT at T1 (OR=1.000, 95%CI [.978, 1.022]), BPF (OR=.983, 95%CI [.754, 1.282]), NG (OR=.988, 95%CI [.726, 1.345]), NV (OR=1.035, 95%CI [.780, 1.372]) were not associated with an increase in the likelihood of dropout at T2. In addition, data showed that a younger age at T1 was associated with higher odds of dropout at T2 (OR=.859, 95%CI [.755, .978]).

In the longitudinal sample, missing values were <1%. Little's MCAR test was not significant $\chi^2_{(10)}$ = 4.548, p < .92, suggesting that missing data were completely at random. Thus, we replaced missing values through expectation maximization. Afterward, we identified three adolescents with extremely high z scores on EXT at T2 and one with extreme values on INT at T2 as univariate outliers. Through Mahalanobis distance, we identified four other cases (2.3%) as multivariate outliers (p <.001). We excluded these participants (N = 8) from the statistical analyses: the final sample included 177 adolescents (females: 64.4%; n = 114).

We verified that the assumptions were met before conducting the linear regression analysis. Partial regression plots and a plot of studentized residuals against the predicted values verified linearity. The independence of residuals was assessed by a Durbin-Watson statis-

Table 2. *Summary of hierarchical regression analysis for the association between Borderline Personality Features (BPF), Narcissistic Grandiosity (NG), and Narcissistic Vulnerability (NV) with Externalizing problems in males and females*

Males							
		Unstandardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B	
Step		B	Std. Error	Beta	t	Lower Bound	Upper Bound
1	(Constant)	43.21	2.62		16.51***	38.06	48.37
	BPF	3.95	.98	.25	4.02***	5.88	5.88
2	(Constant)	42.27	3.28		12.87***	35.81	48.74
	BPF	3.73	1.09	.24	3.42***	1.58	5.87
	NG	.41	.86	.03	.48	-1.29	2.11
3	(Constant)	41.47	3.31		12.52***	34.95	48.00
	BPF	2.45	1.36	.15	1.80	-.23	5.12
	NG	-.46	1.02	-.04	-.45	-2.48	1.56
	NV	2.26	1.44	.16	1.57	-.57	5.08
Females							
		Unstandardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B	
Step		B	Std. Error	Beta	t	Lower Bound	Upper Bound
1	(Constant)	36.10	1.31		27.53***	33.52	38.68
	BPF	4.65	.44	.44	10.48***	3.78	5.52
2	(Constant)	30.92	1.90		16.30***	27.19	34.64
	BPF	4.09	.46	.39	8.83***	3.18	5.00
	NG	1.81	.48	.16	3.74***	.86	2.76
3	(Constant)	30.90	1.90		16.29***	27.17	34.62
	BPF	4.52	.61	.43	7.44***	3.33	5.71
	NG	2.06	.54	.19	3.84***	1.01	3.12
	NV	-.63	.57	-.07	-1.10	-1.76	.50

Note. * p < .05, ** p < .01, *** p < .001. Externalizing problems = YSR-112 (Achenbach & Rescorla, 2001); BPF = BPFSC-11 (Fossati et al., 2019; Sharp et al., 2014); NG, NV = PNI (Pincus et al., 2009; Somma et al., 2020).

tic of 1.92 for INT model in males and 1.82 for INT in females, and 2.02 for EXT model in males and 1.93 in females. Thus, the assumption of independence of residuals was respected. In addition, there was homoscedasticity, as assessed by visual inspection of a plot of studentized residuals versus unstandardized predicted values, and no evidence of multicollinearity, as evaluated by tolerance values greater than 0.1. Furthermore, the assumption of normality was met, as assessed by Q-Q Plot and observing skewness and kurtosis of the considered variables.

Hierarchical regression results for INT are presented in **table 3**. Step 1 showed that BPF at T1 significantly predicted INT at T2 in males and females. Step 1 was statistically significant, $R^2 = .15$, $F(1, 61) = 11.022$, $p < .002$ for males and $R^2 = .29$, $F(1, 112) = 46.60$, $p < .001$ for females. Moreover, neither NG nor NV at T1 significantly predicted INT at T2 in males and females. Accordingly, explained variance of Step 1 did not significantly increase when entering NG (ΔR^2=.00 for males, ΔR^2=.00 for females) and NV (ΔR^2=.00 for males, ΔR^2=.00 for females), respectively.

Hierarchical regression results for EXT (**table 4**) highlighted that BPF at T1 significantly predicted EXT at T2 in males and females. NG at T1 predicted higher EXT in females but not in males. NV at T1 did not predict levels of EXT at T2, both in males and females. Accordingly, the inclusion of NG (Step 2) significantly increased the explained variance of the regression model (Step 1) predicting EXT in females (ΔR^2=.04), while the inclusion of NV (Step 3) did not (ΔR^2=.00).

Finally, after computing the Reliable Change Index for INT and EXT, the sample was divided into *stable*, *worsening*, and *improving* adolescents. Considering INT, 65% of adolescents remained stable after 12 months (i.e., no significant change in INT from T1 to T2 was found), 25.4% improved (i.e., a considerable decrease in INT from T1 to T2 was found), while 9.6% worsened (i.e., a significant increase in INT from T1 to T2 was found) (**table 5**). Considering EXT, 84.2% of adolescents remained stable after 12 months, 11.9% improved, while 4% significantly worsened their condition (**table 6**). Results showed no association between BPF or NG and longitudinal changes in INT and EXT. However, data highlighted that adolescents with higher NV at T1 were four times more likely to improve in INT over 12 months.

Discussion

This contribution addressed gaps in understanding the concurrent role of borderline and narcissistic traits in externalizing and internalizing problems in adolescent males and females.

First, we explored the association of borderline and narcissistic traits (grandiose and vulnerable) with internalizing and externalizing problems.

Our data showed significant differences between males and females for all variables except externalizing problems. Higher internalizing problems for females align with the literature that indicates adolescent girls are more prone to anxious and depressive manifestations (Achenbach et al., 2016; Hopwood & Grilo, 2010). However, our sample showed no significant gender differences in externalizing problems: this could be explained by the nonclinical sample and, thus, the

Table 3. *Summary of hierarchical regression analysis for the longitudinal association between Borderline Personality Features (BPF), Narcissistic Grandiosity (NG), and Narcissistic Vulnerability (NV) at baseline and Internalizing problems after 12 months in males and females*

Males							
		Unstandardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B	
Step		B	Std. Error	Beta	t	Lower Bound	Upper Bound
1	(Constant)	30.49	4.84		6.30***	20.82	40.18
	BPF	5.96	1.79	.39	3.32**	2.37	9.56
2	(Constant)	32.42	6.12		5.29***	20.17	44.68
	BPF	6.23	1.88	.41	3.31**	2.47	10.00
	NG	-.71	1.37	-.06	-.52	-3.46	2.04
3	(Constant)	31.89	6.25		5.10***	19.38	44.41
	BPF	5.48	2.41	.36	2.27*	.65	10.31
	NG	-1.08	1.57	-.10	-.69	-4.23	2.06
	NV	1.18	2.37	.09	.50	-3.56	5.93
Females							
		Unstandardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B	
Step		B	Std. Error	Beta	t	Lower Bound	Upper Bound
1	(Constant)	30.17	3.00		10.04***	24.21	36.12
	BPF	6.99	1.02	.542	6.83***	4.96	9.02
2	(Constant)	30.72	4.34		7.08***	22.12	39.31
	BPF	7.10	1.20	.551	5.90***	4.72	9.49
	NG	-.23	1.32	-.016	-.18	-2.84	2.38
3	(Constant)	30.72	4.36		7.05***	22.09	39.36
	BPF	7.25	1.68	.56	4.31***	3.92	10.59
	NG	-.17	1.41	-.01	-.12	-2.96	2.62
	NV	-.19	1.51	-.02	-.13	-3.19	2.81

Note. * p < .05, ** p < .01, *** p < .001. Internalizing problems = YSR-112 (Achenbach & Rescorla, 2001); BPF = BPFSC-11 (Fossati et al., 2019; Sharp et al., 2014); NG, NV = PNI (Pincus et al., 2009; Somma et al., 2020).

natural presence of less aggressive behaviors. Differences in borderline traits are present in the literature, with more prominent manifestations in females (Banzhaf et al., 2012; Bradley et al., 2005). Moreover, in line with the literature, males reported higher grandiose narcissism. While for vulnerable narcissism, which is higher for females in our sample, the available evidence does not point to gender differences. These findings align with available data on gendered presentations of narcissism: a meta-analysis highlighted that males are more prone to report higher exploitative and grandiose features, while no difference in vulnerable narcissism were found (Grijalva et al., 2015).

In line with our first hypothesis, data showed that borderline traits are associated with externalizing and internalizing behavioral problems in both males and females. Moreover, borderline traits showed to be predictive of their maintenance over time. This aligns with evidence from the literature suggesting that emotional dyscontrol, self-image instability, and relationship difficulties are associated with psychopathological manifestations (Goodman et al., 2013; Wright et al., 2016).

Conversely, partially in line with our second hypothesis, data highlighted different contributions of narcissistic aspects in males and females, depending on their grandiose or vulnerable manifestations.

Indeed, regardless of gender, grandiose narcissism contributed to internalizing problems only when both presentations of narcissism were considered. This finding suggests that the contribution of grandiose manifestations to anxious, depressive, or somatic problems might be "masked" when we account for borderline features. However, grandiose features can be visible in contributing to internalization only when the more "fragile" aspects are considered (i.e., enhanced sensitivity to interpersonal feedback, insecurity, low self-esteem). This finding is in line with recent literature (Di Pierro et al., 2019, 2022) that stresses the coexistence of both grandiose and vulnerable aspects of narcissism within individuals and, as a consequence, the importance of considering the two presentations together when investigating the effects of narcissism on psychological and behavioral correlates (Barry & Malkin, 2010).

On the other hand, data showed that, for males, there were no association between narcissistic traits and externalizing problems. While for females, grandiose narcissism contributed to externalizing manifestations over and beyond any borderline traits. These findings align with other contributions in the literature (Ensink et al., 2017): one possible explanation is that some grandiose traits play an adaptive role in the development and thus are not associated with externalizing problems for males. On the other hand, for girls, the reliance on grandiose traits, which may be a solution to the developmental challenges of adolescence, may, however, coincide with an increased disposition to behavioral problems of the discontrolled and aggressive kind (Jankowiak-Siuda & Zajkowski, 2013; Obradović et al., 2010).

Third, we examined the predictive roles of borderline and narcissistic traits in maintaining externalizing and internalizing problems over time in male and female adolescents.

Table 4. *Summary of hierarchical regression analysis for the longitudinal association between Borderline Personality Features (BPF), Narcissistic Grandiosity (NG), and Narcissistic Vulnerability (NV) at baseline and Externalizing problems after 12 months in males and females*

Males							
		Unstandardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B	
Step		B	Std. Error	Beta	t	Lower Bound	Upper Bound
1	(Constant)	41.15	4.18		9.85***	32.79	49.50
	BPF	3.91	1.55	.31	2.52*	.81	7.01
2	(Constant)	40.92	5.31		7.72***	30.32	51.52
	BPF	3.87	1.63	.30	2.38*	.62	7.13
	NG	.08	1.19	.01	.07	-2.29	2.46
3	(Constant)	39.68	5.34		7.43***	29.00	50.36
	BPF	2.11	2.06	.17	1.02	-2.01	6.24
	NG	-.79	1.34	-.08	-.59	-3.47	1.89
	NV	2.78	2.02	.25	1.38	-1.26	6.83
Females							
		Unstandardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B	
Step		B	Std. Error	Beta	t	Lower Bound	Upper Bound
1	(Constant)	37.92	2.21		17.13***	33.54	42.31
	BPF	3.33	.75	.38	4.41***	1.83	4.82
2	(Constant)	32.55	3.12		10.45***	26.38	38.73
	BPF	2.25	.86	.26	2.60*	.53	3.96
	NG	2.27	.95	.24	2.40*	.40	4.15
3	(Constant)	32.55	3.13		10.40***	26.35	38.75
	BPF	2.18	1.21	.25	1.80	-.21	4.58
	NG	2.24	1.01	.24	2.22*	.24	4.25
	NV	.08	1.09	.01	.08	-2.07	2.24

Note. * p < .05, ** p < .01, *** p < .001. Externalizing problems = YSR-112 (Achenbach & Rescorla, 2001); BPF = BPFSC-11 (Fossati et al., 2019; Sharp et al., 2014); NG, NV = PNI (Pincus et al., 2009; Somma et al., 2020).

Table 5. *Effects of Borderline Personality Features (BPF), Narcissistic Grandiosity (NG), Narcissistic Vulnerability (NV), and Gender at baseline on different classes of individual-level continuity in Internalizing Problems after 12 months in males and females*

							95% Confidence Interval for Exp(B)	
		B	Std. Error	Wald	df	Exp(B)	Lower Bound	Upper Bound
stable vs. worsening	Intercept	1.26	1.58	.64	1			
	BPF	-.74	.65	1.30	1	.48	.13	1.70
	NG	-.05	.46	.01	1	.95	.39	2.32
	NV	.93	.62	2.26	1	2.54	.75	8.53
	[Gender=1]	-.40	.54	.53	1	.67	.23	1.5
improving vs. worsening	Intercept	-2.01	1.82	1.21	1			
	BPF	-.07	.71	.01	1	.93	.23	3.74
	NG	-.52	.52	1.01	1	.59	.21	1.65
	NV	1.49	.69	4.65*	1	4.45	1.14	17.31
	[Gender=1]	.18	.60	.09	1	1.20	.37	3.92

Note. * p < .05, ** p < .01, *** p < .001. Internalizing problems = YSR-112 (Achenbach & Rescorla, 2001); BPF = BPFSC-11 (Fossati et al., 2019; Sharp et al., 2014); NG, NV = PNI (Pincus et al., 2009; Somma et al., 2020)..

Again, our hypotheses were only partially met. Indeed, findings showed that borderline traits are the best predictor of externalizing and internalizing problems after 12 months in both males and females. In addition, a greater presence of borderline traits corresponded to more significant behavioral issues after 12 months. This finding adds to the available literature, underscoring the importance of detecting personality functioning issues as a prognostic factor of future anxiety/depressive and behavioral dyscontrol manifestation (Chanen et al., 2017; Hopwood & Grilo, 2010).

However, once again, narcissistic grandiosity emerged as a significant predictor of externalizing problems for females only when considered together. This could be explained by the similarity of some aspects of borderline traits and narcissistic vulnerability, which have already emerged in the literature (Howard et al., 2010).

Fourth, we studied the contribution of borderline personality traits and narcissistic traits on the develop-

Table 6. *Effects of Borderline Personality Features, Narcissistic Grandiosity, Narcissistic Vulnerability, and Gender at baseline on different classes of individual-level continuity in Externalizing Problems after 12 months in males and females*

							95% Confidence Interval for Exp(B)	
		B	Std. Error	Wald	df	Exp(B)	Lower Bound	Upper Bound
stable vs. worsening	Intercept	4.76	2.58	3.40	1			
	BPF	-.47	.94	.25	1	.62	.10	3.96
	NG	-.40	.67	.35	1	.67	.18	2.49
	NV	.47	.91	.27	1	1.60	.27	9.50
	[Gender=1]	-1.05	.80	1.71	1	.35	.07	1.69
improving vs. worsening	Intercept	-1.73	2.99	.33	1			
	BPF	-.23	1.06	.05	1	.79	.10	6.35
	NG	.19	.77	.06	1	1.21	.27	5.50
	NV	.83	1.03	.65	1	2.29	.31	17.11
	[Gender=1]	-.27	.91	.09	1	.76	.13	4.53

Note. * p < .05, ** p < .01, *** p < .001. Externalizing problems = YSR-112 (Achenbach & Rescorla, 2001); BPF = BPFSC-11 (Fossati et al., 2019; Sharp et al., 2014); NG, NV = PNI (Pincus et al., 2009; Somma et al., 2020).

mental trajectories of behavioral problems. The developmental trajectories of internalizing and externalizing problems seem to follow a developmental pathway that is not directly impacted by maladaptive personality traits. The data suggest that other factors contribute to the worsening, maintenance, or stability of behavioral problems. The first explanation is that greater behavioral problems foster higher internalization or externalization after 12 months (Caspi et al., 2014; Sharp, 2020).

However, an exciting finding emerges for the role of narcissistic vulnerability that significantly impacted the likelihood of the internalizing trajectory to improve rather than worsen. We might argue that this association between narcissistic vulnerability and increasing internalizing problems at T1 might indicate an identity crisis. Indeed, longitudinally, narcissistic vulnerability at T1 predicts and improves rather than worsens internalizing problems at T2. This finding aligns with the possibility that narcissistic vulnerability, especially in community samples, expresses the so-called adolescent crisis (Normandin et al., 2014; Sedikides, 2021). Indeed, at this stage of development, adolescents are structuring their personality in the interaction/balancing of more fragile and secure parts of their functioning, thus implying a potential protective role for feelings of fragility (i.e., narcissistic vulnerability) and crisis during adolescence. Successfully overcoming such a crisis might lead to a more solid sense of identity, contributing to the improvement of internalizing problems over time. As Erikson (1968) proposed, a positively resolved identity vs. role confusion crisis enables individuals to consolidate self-perception images into a stable personal identity and enhance their performance in various roles and commitments. An achieved identity is linked to reduced anxiety (Crocetti et al., 2009) and greater emotional stability (Crocetti et al., 2008), among other positive mental health outcomes. Thus, the findings emphasize the peculiar role of narcissistic vulnerability that might play an adaptive function in diminishing internalizing problems.

Our findings should be interpreted in the context of the study's limitations. First, the main limitation is that meaningful variables were explored via self-report measures. Given the complexity of individual presentations of maladaptive personality traits and behavioral problems, it would be beneficial to use semi-structured interviews and a multi-informant approach. Second, analyses on the first wave are cross-sectional: thus, no causal implications can be made, only associations. Thirdly, the attrition rate at T2 was notably high (73.6%). Although our analysis revealed that none of the variables considered in the study had a confounding effect, the missing data analysis demonstrated a higher likelihood of dropout after 12 months for younger adolescents. Given that T2 data collection was unsupervised (i.e., conducted via email), future research should consider addressing this issue by employing strategies such as incentives or collecting data during school hours, as was done for the T1 assessments.

Fourth, the small sample size at T2 necessitates caution in interpreting our findings. To further examine the developmental trajectories under consideration, future studies should aim to increase the sample size, thereby enhancing the robustness of the results. Finally, although exploring nonclinical populations helps gather data on sub-threshold conditions, the current findings need to be replicated in clinical samples and larger and culturally diverse populations of adolescents.

Conclusions

In conclusion, this study adds further evidence to the discussion on the associations between maladaptive personality traits and adolescent behavioral problems. Moreover, it adds developmentally useful information on females and males.

First, it confirms the importance of considering, beyond gender, the contribution of borderline traits in adolescence in promoting internalizing and externalizing difficulties. Moreover, borderline traits constitute an important risk factor for psychopathology during adolescence. Thus, for a comprehensive understanding of the etiology of psychological problems in this developmental stage, we should also consider personality functioning encompassing interpersonal difficulties, emotional dysregulation, and instability of self-image.

Second, our study contributes to the discussion on narcissistic manifestations in adolescence. Indeed, it emphasizes the importance of accounting for both sides of adolescent narcissistic traits. For example, when considering internalizing manifestations in boys and girls, the association with grandiose traits emerges only when narcissistic features are considered. Moreover,

the inverse association between narcissistic grandiosity and internalization might suggest that grandiosity arises as a way for adolescents to mask their fragility. This is crucial as it might also impact their ability to seek help.

Also, to understand externalization, we have to account for gender differences: indeed, in males, borderline traits contribute to externalization over and beyond narcissistic traits, while in females, narcissistic grandiosity (i.e., grandiose fantasies, exploitativeness) is a longitudinal predictor of externalization, even when accounting for borderline features.

Third, this contribution considers the adaptive value of narcissistic vulnerability, which, in adolescence, could adequately capture the so-called adolescent crisis. Our findings suggest that experiencing narcissistic vulnerability might help reduce the longitudinal trajectory of anxiety, depression, and somatic-related problems.

Eventually, these findings encourage further considerations for clinical practice and intervention. While they stress the importance of interventions focusing on borderline traits in adolescence, they highlight the complexity of narcissistic traits at this developmental stage. Indeed, clinical interventions need to account for gender-related manifestations of grandiose and vulnerable characteristics. More, they suggest the need for future studies on nonclinical and clinical populations to distinguish adolescent identity crisis (i.e., sub-threshold narcissistic vulnerability) from maladaptive narcissistic traits.

References

Achenbach, T. M., Ivanova, M. Y., Rescorla, L. A., Turner, L. V., & Althoff, R. R. (2016). Internalizing/externalizing problems: Review and recommendations for clinical and research applications. *Journal of the American Academy of Child & Adolescent Psychiatry*, *55*(8), 647–656.

Achenbach, T. M., & Rescorla, L. A. (2001). Manual for the ASEBA school-age forms & profiles. *Burling: University of Vermont (Research Center for Children, Youth and Families)*.

Banzhaf, A., Ritter, K., Merkl, A., Schulte-Herbrüggen, O., Lammers, C.-H., & Roepke, S. (2012). Gender differences in a clinical sample of patients with borderline personality disorder. *Journal of Personality Disorders*, *26*(3), 368.

Barry, C. T., Anderson, A. C., & Charles, N. E. (2019). Dimensions of adolescent narcissism. *Journal of Individual Differences*.

Barry, C. T., Frick, P. J., Adler, K. K., & Grafeman, S. J. (2007). The predictive utility of narcissism among childrenand adolescents: Evidence for a distinction betweenadaptive and maladaptive narcissism. *Journal of Child and Family Studies*, *16*(4), 508–521.

Barry, C. T., & Malkin, M. L. (2010). The relation between adolescent narcissism and internalizing problems depends on the conceptualization of narcissism. *Journal of Research in Personality*, *44*(6), 684–690. https://doi.org/10.1016/j.jrp.2010.09.001

Barry, C. T., Sidoti, C. L., & Wong, M. (2020). Peer Perceptions of Communal Narcissism and Communalism in At-Risk Adolescents. *Journal of Individual Differences*.

Benzi, I. M. A., Di Pierro, R., De Carli, P., Cristea, I. A., & Cipresso, P. (2020). All the Faces of Research on Borderline Personality Pathology: Drawing Future Trajectories through a Network and Cluster Analysis of the Literature. *Journal of Evidence-Based Psychotherapies*, *20*(2), 3–30. https://doi.org/10.24193/jebp.2020.2.9

Benzi, I. M., Fontana, A., Di Pierro, R., Perugini, M., Cipresso, P., Madeddu, F., Clarkin, J. F., & Preti, E. (2022). Assessment of personality functioning in adolescence: Development of the adolescent personality structure questionnaire. *Assessment*, *29*(4), 668–685.

Benzi, I. M. A., Fontana, A., Barone, L., Preti, E., Parolin, L., & Ensink, K. (2023). Emerging personality in adolescence: Developmental trajectories, internalizing and externalizing problems, and the role of mentalizing abilities. *Journal of Adolescence*, 95, 537–552.

Bilevicius, E., Neufeld, D. C., Single, A., Foot, M., Ellery, M., Keough, M. T., & Johnson, E. A. (2019). Vulnerable narcissism and addiction: The mediating role of shame. *Addictive Behaviors*, *92*, 115–121.

Bleiberg, E. (1994). Normal and pathological narcissism in adolescence. *American Journal of Psychotherapy*, *48*(1), 30–51. https://doi.org/10.1176/appi.psychotherapy.1994.48.1.30

Bleiberg, E., Rossouw, T., & Fonagy, P. (2012). *Adolescent breakdown and emerging borderline personality disorder.*

Bradley, R., Zittel Conklin, C., & Westen, D. (2005). The borderline personality diagnosis in adolescents: Gender differences and subtypes. *Journal of Child Psychology and Psychiatry*, *46*(9), 1006–1019. https://doi.org/10.1111/j.1469-7610.2004.00401.x

Cain, N. M., Pincus, A. L., & Ansell, E. B. (2008). Narcissism at the crossroads: Phenotypic description of pathological narcissism across clinical theory, social/personality psychology, and psychiatric diagnosis. *Clinical Psychology Review*, *28*(4), 638–656.

Casey, B. J., Getz, S., & Galvan, A. (2008). The adolescent brain. *Developmental Review*, *28*(1), 62–77.

Caspi, A., Houts, R. M., Belsky, D. W., Goldman-Mellor, S. J., Harrington, H., Israel, S., Meier, M. H., Ramrakha, S., Shalev, I., & Poulton, R. (2014). The p factor: One general psychopathology factor in the structure of psychiatric disorders? *Clinical Psychological Science*, *2*(2), 119–137.

Chanen, A. M., & Kaess, M. (2012). Developmental pathways to borderline personality disorder. *Current Psychiatry Reports*, *14*(1), 45–53.

Chanen, A., Sharp, C., Hoffman, P., & for Prevention, G. A. (2017). Prevention and early intervention for borderline personality disorder: A novel public health priority. *World Psychiatry*, *16*(2), 215.

Chopik, W. J., & Grimm, K. J. (2019). Longitudinal changes and historic differences in narcissism from adolescence to older adulthood. *Psychology and Aging*, *34*(8), 1109.

Clarke, I. E., Karlov, L., & Neale, N. J. (2015). The many faces of narcissism: Narcissism factors and their predictive utility. *Personality and Individual Differences*, *81*, 90–95.

Crocetti, E., Klimstra, T., Keijsers, L., Hale, W. W., & Meeus, W. (2009). Anxiety trajectories and identity development in adolescence: A five-wave longitudinal study. *Journal of Youth and Adolescence*, *38*, 839–849.

Crocetti, E., Rubini, M., Luyckx, K., & Meeus, W. (2008). Identity formation in early and middle adolescents from various ethnic groups: From three dimensions to five statuses. *Journal of Youth and Adolescence*, *37*, 983–996.

Di Pierro, R., Costantini, G., Benzi, I. M. A., Madeddu, F., & Preti, E. (2019). Grandiose and entitled, but still fragile: A network analysis of pathological narcissistic traits. *Personality and Individual Differences*, *140*, 15–20. https://doi.org/10.1016/j.paid.2018.04.003

Di Pierro, R., Costantini, G., Fanti, E., Di Sarno, M., Preti, E., Madeddu, F., Clarkin, J. F., Caligor, E., & De Panfilis, C. (2022). Measurement Invariance of the Pathological Narcissism Inventory and Multimethod Examination of Narcissistic Presentations in Community and Clinical Samples. *Assessment*, 10731911221101368.

Diamond, D., Yeomans, F. E., Stern, B., Levy, K. N., Hörz, S., Doering, S., Fischer-Kern, M., Delaney, J., & Clarkin, J. F. (2013). Transference focused psychotherapy for patients with comorbid narcissistic and borderline personality di-

sorder. *Psychoanalytic Inquiry*, *33*(6), 527–551.
Eisenberg, M. E., Neumark-Sztainer, D., & Paxton, S. J. (2006). Five-year change in body satisfaction among adolescents. *Journal of Psychosomatic Research*, *61*(4), 521–527.
Ensink, K., Chretien, S., Normandin, L., Begin, M., Daigle, D., & Fonagy, P. (2017). Pathological Narcissism in Adolescents: Relationships with Childhood Maltreatment and Internalizing and Externalizing Difficulties. *Adolescent Psychiatry*, *7*(4), 300–314. https://doi.org/10.2174/2210676608666180119165731
Feenstra, D. J., Hutsebaut, J., Laurenssen, E. M., Verheul, R., Busschbach, J. J., & Soeteman, D. I. (2012). The burden of disease among adolescents with personality pathology: Quality of life and costs. *Journal of Personality Disorders*, *26*(4), 593–604.
Fossati, A., Sharp, C., Borroni, S., & Somma, A. (2019). Psychometric properties of the Borderline Personality Features Scale for Children-11 (BPFSC-11) in a sample of community dwelling Italian adolescents. *European Journal of Psychological Assessment*, *35*(1), 70.
Goodman, M., Patil, U., Oakes, A., Matho, A., & Triebwasser, J. (2013, November 18). *Developmental Trajectories to Male Borderline Personality Disorder* (world) [Research-article]. Https://Doi.Org/10.1521/Pedi_2013_27_111; Guilford Publications Inc. https://doi.org/10.1521/pedi_2013_27_111
Grijalva, E., Newman, D. A., Tay, L., Donnellan, M. B., Harms, P. D., Robins, R. W., & Yan, T. (2015). Gender differences in narcissism: a meta-analytic review. *Psychological bulletin*, *141*(2), 261.
Guilé, J. M., Boissel, L., Alaux-Cantin, S., & de La Rivière, S. G. (2018). Borderline personality disorder in adolescents: Prevalence, diagnosis, and treatment strategies. *Adolescent Health, Medicine and Therapeutics*, *9*, 199–210. https://doi.org/10.2147/AHMT.S156565
Hayward, C., & Sanborn, K. (2002). Puberty and the emergence of gender differences in psychopathology. *Journal of Adolescent Health*, *30*(4), 49–58.
Herpertz-Dahlmann, B., Bühren, K., & Remschmidt, H. (2013). Growing Up Is Hard. *Deutsches Ärzteblatt International*, *110*(25), 432–440. https://doi.org/10.3238/arztebl.2013.0432
Hicks, B. M., Blonigen, D. M., Kramer, M. D., Krueger, R. F., Patrick, C. J., Iacono, W. G., & McGue, M. (2007). Gender differences and developmental change in externalizing disorders from late adolescence to early adulthood: A longitudinal twin study. *Journal of Abnormal Psychology*, *116*, 433–447. https://doi.org/10.1037/0021-843X.116.3.433
Hopwood, C. J., & Grilo, C. M. (2010). Internalizing and externalizing personality dimensions and clinical problems in adolescents. *Child Psychiatry & Human Development*, *41*(4), 398–408.
Howard, A. L., Galambos, N. L., & Krahn, H. J. (2010). Paths to success in young adulthood from mental health and life transitions in emerging adulthood. *International Journal of Behavioral Development*, *34*(6), 538–546.
Jacobson, N. S., & Truax, P. (1992). *Clinical significance: A statistical approach to defining meaningful change in psychotherapy research.*
Jankowiak-Siuda, K., & Zajkowski, W. (2013). A neural model of mechanisms of empathy deficits in narcissism. *Medical Science Monitor : International Medical Journal of Experimental and Clinical Research*, *19*, 934–941. https://doi.org/10.12659/MSM.889593
Kaufman, S. B., Weiss, B., Miller, J. D., & Campbell, W. K. (2020). Clinical correlates of vulnerable and grandiose narcissism: A personality perspective. *Journal of Personality Disorders*, *34*(1), 107–130.
Keenan, K., Hipwell, A., Chung, T., Stepp, S., Stouthamer-Loeber, M., Loeber, R., & McTigue, K. (2010). The Pittsburgh Girls Study: Overview and Initial Findings. *Journal of Clinical Child & Adolescent Psychology*, *39*(4), 506–521. https://doi.org/10.1080/15374416.2010.486320
Little, R. J. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association*, *83*(404), 1198–1202.
Meque, I., Dachew, B. A., Maravilla, J. C., Salom, C., & Alati, R. (2019). Externalizing and internalizing symptoms in childhood and adolescence and the risk of alcohol use disorders in young adulthood: A meta-analysis of longitudinal studies. *Australian & New Zealand Journal of Psychiatry*, *53*(10), 965–975. https://doi.org/10.1177/0004867419844308
Miller, A. L., Muehlenkamp, J. J., & Jacobson, C. M. (2008). Fact or fiction: Diagnosing borderline personality disorder in adolescents. *Clinical Psychology Review*, *28*(6), 969–981. https://doi.org/10.1016/j.cpr.2008.02.004
Normandin, L., Ensink, K., Yeomans, F. E., & Kernberg, O. F. (2014). Transference-focused psychotherapy for personality disorders in adolescence. In *Handbook of borderline personality disorder in children and adolescents* (pp. 333–359). Springer.
Obradović, J., Burt, K. B., & Masten, A. S. (2010). Testing a Dual Cascade Model Linking Competence and Symptoms Over 20 Years from Childhood to Adulthood. *Journal of Clinical Child & Adolescent Psychology*. https://doi.org/10.1080/15374410903401120
Pincus, A. L., Ansell, E. B., Pimentel, C. A., Cain, N. M., Wright, A. G., & Levy, K. N. (2009). Initial construction and validation of the Pathological Narcissism Inventory. *Psychological Assessment*, *21*(3), 365.
Pincus, A. L., & Lukowitsky, M. R. (2010). Pathological narcissism and narcissistic personality disorder. *Annual Review of Clinical Psychology*, *6*(1), 421–446.
Roche, M. J., Pincus, A. L., Lukowitsky, M. R., Ménard, K. S., & Conroy, D. E. (2013). An integrative approach to the assessment of narcissism. *Journal of Personality Assessment*, *95*(3), 237–248.
Sedikides, C. (2021). In Search of Narcissus. *Trends in Cognitive Sciences*, *25*(1), 67–80. https://doi.org/10.1016/j.tics.2020.10.010
Sharp, C. (2020). Adolescent personality pathology and the Alternative Model for Personality Disorders: Self development as nexus. *Psychopathology*, *53*(3), 198–204.
Sharp, C., & Fonagy, P. (2015). Practitioner Review: Borderline personality disorder in adolescence–recent conceptualization, intervention, and implications for clinical practice. *Journal of Child Psychology and Psychiatry*, *56*(12), 1266–1288.
Sharp, C., Steinberg, L., Temple, J., & Newlin, E. (2014). An 11-item measure to assess borderline traits in adolescents: Refinement of the BPFSC using IRT. *Personality Disorders: Theory, Research, and Treatment*, *5*(1), 70.
Sharp, C., & Wall, K. (2018). Personality pathology grows up: Adolescence as a sensitive period. *Current Opinion in Psychology*, *21*, 111–116. https://doi.org/10.1016/j.copsyc.2017.11.010
Shiner, R. L. (2009). The development of personality disorders: Perspectives from normal personality development in childhood and adolescence. *Development and Psychopathology*, *21*(3), 715–734.
Somma, A., Pincus, A. L., Fontana, A., Cianfanelli, B., & Fossati, A. (2020). Measurement invariance of three versions of the pathological narcissism inventory across gender-matched Italian adolescent high school and young adult university students. *Journal of Psychopathology and Behavioral Assessment*, *42*(1), 38–51.
Stepp, S. D., Lazarus, S. A., & Byrd, A. L. (2016). A systematic review of risk factors prospectively associated with borderline personality disorder: Taking stock and moving forward. *Personality Disorders: Theory, Research, and*

Treatment, *7*(4), 316.
Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2013). *Using multivariate statistics* (Vol. 6). pearson Boston, MA.
Thompson, K. N., Cavelti, M., & Chanen, A. M. (2019). Psychotic symptoms in adolescents with borderline personality disorder features. *European Child & Adolescent Psychiatry*, *28*(7), 985–992. https://doi.org/10.1007/s00787-018-1257-2
Treeby, M., & Bruno, R. (2012). Shame and guilt-proneness: Divergent implications for problematic alcohol use and drinking to cope with anxiety and depression symptomatology. *Personality and Individual Differences*, *53*(5), 613–617.
Washburn, J. J., McMahon, S. D., King, C. A., Reinecke, M. A., & Silver, C. (2004). Narcissistic Features in Young Adolescents: Relations to Aggression and Internalizing Symptoms. *Journal of Youth and Adolescence*, *33*(3), 247–260. https://doi.org/10.1023/B:JOYO.0000025323.94929.d9
Wright, A. G., Zalewski, M., Hallquist, M. N., Hipwell, A. E., & Stepp, S. D. (2016). Developmental trajectories of borderline personality disorder symptoms and psychosocial functioning in adolescence. *Journal of Personality Disorders*, *30*(3), 351.
Yen, S., Gagnon, K., & Spirito, A. (2013). Borderline personality disorder in suicidal adolescents. *Personality and Mental Health*, *7*(2), 89–101. https://doi.org/10.1002/pmh.1216
Zimmerman, M., Chelminski, I., Young, D., Dalrymple, K., & Martinez, J. (2011). Does the presence of one feature of borderline personality disorder have clinical significance? Implications for dimensional ratings of personality disorders. *The Journal of Clinical Psychiatry*, *72*(1), 4652.