





# Grandiose Narcissism Reduces Indirectly Symptoms of Stress and Depression through Mental Toughness and Physical Activity

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# Highlights

From Narcissism to Higher MT and Physical Activity...

Grandiose Narcissism Mental Toughness (MT)

Control

Confidence Commitment

Challenge

**Physical Activity** 

...to Reduced Perceived Stress & Symptoms of Depression

Grandiose Narcissism: Resilience factor against symptoms of psychopathology

#### INTRODUCTION

- Narcissism: an enigmatic trait, including self enhancing tendencies and a proneness to distress (1)
- Grandiose Narcissism: Exhibitionism, lack of humility/modesty, and interpersonal dominance (2)
- <u>Vulnerable Narcissism</u>: Negative affect, distrust, selfishness, and need for attention and recognition (2)
- Grandiose Narcissism reduces indirectly perceived stress and symptoms of depression via MT (3, 4)
- Vulnerable Narcissism increases indirectly perceived stress and symptoms of depression via MT (3, 4)
- ➤ Both narcissism and MT associate positively with Physical Activity (PA) (5)
- Recent meta-review: PA improves depressive symptoms with effects comparable to those of antidepressants and psychotherapy (6)

# HYPOTHESES Grandiose narcissism increases MT and

PA

- contributing to lower perceived stress and symptoms of depression

  2. Vulnerable narcissism decreases MT and PA
- contributing to higher perceived stress and symptoms of depression

# METHOD

Questionnaires: Five Factor Narcissism Inventory -

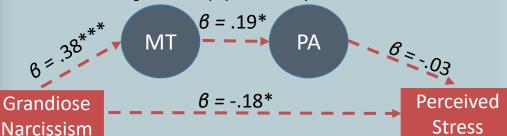
 $\triangleright$  Sample: 144 adults (M = 22.08, SD = 5.5)

1.

- FFNI (7); a = .92 and .84 for grandiose and vulnerable narcissism, respectively; Mental Toughness Questionnaire MTQ48 (8); a = .92; International Physical Activity Questionnaire IPAQ (9); a = .72; Perceived Stress Scale PSS (10); a = .88; Beck Depression Inventory II BDI-II (11); a = .90
- Statistical Analyses: Hierarchical regression analyses were performed using the PROCESS macro for SPSS (12). We used 5,000 bootstrap resamples.

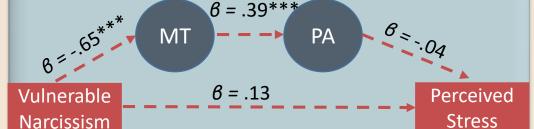
# **RESULTS**

Figure 1. Mediation model of the effect of grandiose narcissism on perceived stress via mental toughness and physical activity



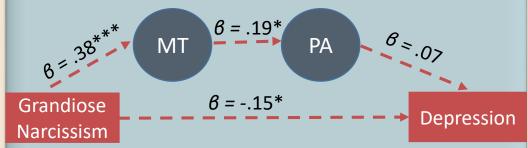
*Total Indirect Effect:*  $\theta = -.27$  [95% CI (-.40, -.16)]

Figure 2. Mediation model of the effect of vulnerable narcissism on perceived stress via mental toughness and physical activity



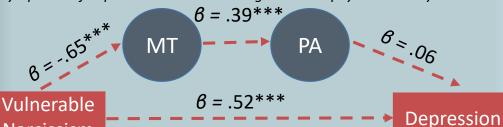
*Total Indirect Effect:*  $\theta$  = .37; [95% CI (.24, .53)]

Figure 3. Mediation model of the effect of grandiose narcissism on symptoms of depression via mental toughness and physical activity



*Total Indirect Effect:*  $\theta = -.24$ ; [95% CI (-.36, -.14)]

Figure 4. Mediation model of the effect of vulnerable narcissism on symptoms of depression via mental toughness and physical activity



**Narcissism** 

*Total Indirect Effect:*  $\theta$  = .33; [95% CI (.22, .48)]

\*p < .05; \*\*p < .01; \*\*\*p < .001;  $\theta$  's = the standardized regression coefficients

## DISCUSSION

Grandiose narcissism associated indirectly, through MT and PA, with lower symptoms of depression and perceived stress. Vulnerable narcissism associated with higher symptoms of psychopathology. The total indirect effects were driven mainly by the mediating effect of MT rather than the effect of PA. The current (and previous) findings, suggest that including narcissism into the dark triad, as a trait that links to toxic psychosocial outcomes, requires revision. Narcissism is a complex trait involving both positive (grandiose) and negative (vulnerable) aspects. Exploring its relation to prosocial traits, such as MT, can be particularly helpful when trying to identify and promote narcissism's adaptive tendencies.

#### **ACKNOWLEDGEMENTS**

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