The Effect of Narcissistic Admiration and Rivalry on Mental Toughness

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Abstract

Are narcissistic athletes mentally tough? Here we examined the effect of narcissistic admiration and rivalry on mental toughness. Based on their contrasting behavioural correlates and cognitive affective-motivational basis, we predicted that admiration (i.e., agentic narcissism) would be positively associated with mental toughness, whereas rivalry (i.e., antagonistic narcissism) would be negatively related to mental toughness. In a sample of elite Thai athletes ($N = 297$), we assessed narcissistic admiration and rivalry, self-esteem, self-reported mental toughness, and coach ratings of mental toughness for a subset of athletes. Narcissistic admiration was positively associated with self and coach-ratings of mental toughness. In contrast, narcissistic rivalry was negatively associated with self and coach-ratings of mental toughness. These effects were independent of self-esteem and stress the importance of considering both the agentic and antagonistic sides of narcissism when addressing narcissism's relationship with mental toughness.

Keywords: Narcissism, Admiration, Rivalry, Mental Toughness

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1.1 Introduction

Why are some athletes more mentally tough than others? An important, yet often overlooked, approach to understanding individual differences in mental toughness is to examine the influence of theoretically relevant personality traits (Roberts & Woodman, 2016; Roberts, Woodman, & Sedikides, 2018). One candidate personality variable that appears highly relevant for predicting mental toughness is narcissism. In the current paper we examine how the agentic and antagonistic aspects of grandiose narcissism relate to mental toughness, a construct broadly reflecting a person's ability to cope with stressors and pressure (Clough, Earle, & Sewell, 2002).

1.2 Agentic and Antagonistic Dimensions of Grandiose Narcissism

Grandiose narcissism is a personality trait characterized by an excessive need for recognition and entitled self-importance (Krizan & Herlache, 2018; Miller, Lynam, Hyatt, & Campbell, 2017). Until recently, narcissistic grandiosity has typically been assessed and conceptualized as a unidimensional construct. This approach has revealed many enigmatic examples illustrating the apparently paradoxical nature of grandiose narcissism. For example, narcissistic individuals are described as being assertive, extraverted, confident and charming, yet they can also be defensive, hostile, and aggressive. Similarly, narcissistic individuals make great first impressions yet are socially toxic and disliked in the long-term (Campbell & Campbell, 2009). However, contemporary theories of narcissism recognise the need to address the heterogenous nature of the cognitions, motivations and behaviors associated with narcissistic grandiosity. One approach with promise for resolving these paradoxes is the Narcissistic Admiration and Rivalry Concept (NARC; Back et al., 2013).

According to the NARC (Back et al., 2013), the fundamental goal of the narcissistic individual is to maintain his/her grandiose self. However, there are separate pathways that narcissistic individuals can engage to achieve this goal, each associated with a distinct set of cognitions, motivations, and behaviors. *Admiration* describes the processes associated with maintaining a grandiose self through assertive self-enhancement strategies. Thoughts of one's own grandiosity trigger self-assured, dominant, and expressive behavioural responses, which in turn lead to positive social outcomes (e.g., praise, acceptance as a leader, etc.). In contrast, *rivalry* describes the processes associated with protecting against anticipated threats to one's grandiose self-image. A focus on regaining and/or defending a superior status over others lead to hostility, annoyance, and aggression (Leckelt, Küfner, Nestler, & Back, 2015).

Converging evidence supports the existence of a two-dimensional construct of narcissism, comprising both agentic (admiration) and antagonistic (rivalry) dimensions. (Back et al., 2013; Grove, Smith, Girard, & Wright., 2019). Admiration is associated with a range of positive outcomes (e.g., high self-esteem, assertiveness), whereas narcissistic rivalry is associated with relatively negative outcomes (e.g., unstable self-esteem, arrogance; Back et al., 2013; Geukes et al., 2017; Leckelt et al., 2015). Admiration and rivalry are also associated with different motivational styles to avoid inferiority (Grove et al., 2019). Admiration is associated with a secure non-striving style such that individuals believe they will be valued irrespective of success or failure. In contrast, rivalry is associated with an insecure striving style that is driven by a fear of inferiority and increased stress and anxiety (Grove et al., 2019). Admiration predicts the use of strategies oriented around gaining status through displaying competence whereas rivalry predicts the use of strategies where status is more readily gained through conflict and displaying dominance (Zeigler-Hill et al., 2018). Admiration and rivalry also show contrasting

effects on emotional adjustment and well-being. Rivalry is associated with greater negative affect, emotion regulation difficulties, rumination and lower well-being, whereas admiration has an inverse (i.e., more adaptive) association with each variable (Grove et al., 2019). Thus, rather than grandiose narcissism being a unidimensional construct, it comprises both agentic (admiration) and antagonistic (rivalry) dimensions (Back et al., 2013).

Further, when people are comparing themselves with others (an inevitable feature of competitive sport), admiration is associated with inducing a (benign) form of envy associated with greater willingness to then invest effort towards personal self-improvement, and a greater sense of person control over success (Lange, Crusius, & Hagemeyer, 2016). In contrast, rivalry is associated with greater fear of failure and a (malicious) form of envy, leading to greater frustration and avoidant behaviors. These findings are relevant in the sporting domain, where benign envy predicts adaptive goal setting, positive motivations and, ultimately, better endurance performance in marathon runners (Lange & Crusius, 2015). In contrast, malicious envy predicts greater hostility and greater race disengagement, a likely hallmark of an athlete lacking in mental toughness. Taken together, the evidence suggests that examining narcissism through the lens of the NARC may be important for understanding the nature of the narcissism – mental toughness relationship, as the correlates and motivational dynamics of narcissistic admiration and rivalry indicate their potentially opposing effects on mental toughness.

1.3 Mental Toughness

Mental toughness is a poorly defined construct with limited consensus regarding how it should best be conceptualized and assessed. However, a common approach is to consider mental toughness as a collection of attributes that allow an individual to cope with stressors and pressure. Within this view, the attributes that comprise mental toughness can reflect a collection

of *values, attitudes, emotions and cognitions* that are amenable to self-report questionnaires such as the Mental Toughness Questionnaire-48 (MTQ48; Clough, Earle, & Sewell, 2002), assessing four dimensions labelled control, commitment, confidence, and challenge. Alternatively, more recent efforts suggest that the attributes comprising mental toughness reflect *personal resources* that broadly relate to concepts such as self-efficacy, optimism, attentional regulation, etc. (Gucciardi, Hanton, Gordon, Mallett, & Temby, 2015). Irrespective of the exact nature of the factors underpinning mental toughness, it can be assessed as a self-reported collection of attributes.

1.4 Narcissism and Mental Toughness

Several studies find evidence that agentic aspects of narcissism are positively related to self-reported mental toughness, as assessed using the MTQ48 (Clough et al., 2001). Grandiose narcissism, when assessed using the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979), correlates modestly with the total score from an 18-item short version of the MTQ48 (Sabouri et al., 2016). In a behavioural genetic study (Onley, Veselka, Schermer, & Vernon, 2013), total NPI scores are positively associated with all facets (i.e., control, confidence, commitment, & challenge) of the MTQ48 and these effects are largely explained by the influence of shared environmental factors (e.g., parenting styles, peer groups, etc.). Similarly, narcissism assessed using a subscale from the Short Dark Triad questionnaire (SD3; Jones & Paulhus, 2014) correlates with the total score from the MTQ48 (Papageorgiou, Wong, & Clough, 2017; Papageorgiou, Denovan, & Dagnall, 2019; Vaughan, Carter, Cockroft, & Maggiorini, 2018) and, in a separate study, with a shortened 10-item version of the MTQ48 (Papageorgiou et al., 2018). In addition to these findings, research has also found that narcissistic admiration was negatively

related to cognitive anxiety and positively related to self and observer-rated evaluations of performance in a stressful public speaking task (Manley, Paisarnsrisomsuk, & Roberts, 2018).

Despite the apparent weight of this evidence, there are important constraints in the extent to which these findings assess the nature of the narcissism – mental toughness relationship. First, narcissism is treated as a unidimensional construct and assessed with measures that primarily (but not exclusively) tap in to the agentic qualities of narcissism, leaving it entirely unclear how the more antagonistic side of narcissism (i.e., rivalry) contributes to mental toughness, a limitation explicitly noted in past research (Onley et al., 2013). Although the NPI contains a few items that relate to the antagonistic element (e.g., entitlement), the NPI primarily captures the extraverted and agentic side of narcissism (Wright & Edershile, 2018). Similarly, the narcissism items from the SD3 also captures agentic tendencies associated with admiration (Moshagen, Hilbig, & Zettler, 2018). Second, mental toughness has only been assessed using self-report measures that capture mentally tough cognitions and attitudes. Self-report measures are problematic because narcissistic individuals may be especially liable to possess inflated self-views that fail to match reality and/or engage in ego-protection strategies when completing self-report measures. In other words, they may be motivated to respond to items based on whether they reflect positive (i.e., socially desirable) qualities, rather than answering truthfully (Kowalski, Rogoza, Vernon, & Schermer, 2018). Third, there has been no effort to control for the effects of self-esteem. This is important because admiration and agentic narcissism are consistently associated with higher self-esteem (Back et al., 2013; Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004), whereas rivalry is negatively related to self-esteem (Back et al., 2013; Geukes et al., 2017), and self-esteem correlates highly with factors that at least partially underpin self-reported mental toughness, such as confidence (St Clair-Thompson et al., 2015).

Taken together, these issues suggest that the positive relationship between narcissism and mental toughness may only relate to the agentic dimension, may be an artefact of socially desirable responding, and may be conflated with the effects of self-esteem.

1.5 Present Study

Here, we examined the effect of narcissistic admiration and rivalry on self and informant-rated mental toughness in a sample of elite Thai athletes. Athletes completed self-report measures of mental toughness, and narcissistic admiration / rivalry. To address any potential confounds caused by response biases, we also measured mental toughness using informant (coach) ratings. To examine whether athletes actually displayed more mentally tough behaviour (rather than simply possessing particular attitudes or cognitions associated with mental toughness), we asked coaches to rate how consistently each athlete was able to maintain a high level of performance across a range of challenging situations (Hardy, Bell & Beattie, 2014). We also assessed athlete's self-esteem, thereby allowing us to examine whether any (positive or negative) effects of admiration and rivalry are more parsimoniously explained due to shared variance with self-esteem, rather than via their unique effect on mental toughness.

We predicted that admiration would be positively associated with both self and coach-rated measures of mental toughness. This prediction is based on evidence that measures tapping in to the agentic side of narcissism (i.e., NPI / SD3) positively relate to mental toughness, and also by considering the motivational dynamics and positive correlates of admiration (e.g., hope for success, secure striving styles, lower anxiety, etc.). In contrast, based on the antagonistic motivational dynamics and correlates of rivalry (fear of failure, increased rumination, emotion regulation difficulties, etc.), we predicted that rivalry (i.e., the antagonistic side of narcissism) would be negatively related to both self and coach-rated measures of mental toughness.

2. Methods

Data and analysis scripts are available on the Open Science Framework:

<https://osf.io/4jxbz/>

2.1 Participants

We contacted coaches via telephone to explain the purpose of the research and invite them to participate. Upon invitation by coaches, data collection was conducted during the weeks preceding the 2017 South East Asian games. Both coaches and athletes provided informed consent and the study was approved by the local institutional review board (ethics: 086.1/60). We recruited a total of 309 athletes (180 males) from Thai national squads featuring able ($n = 224$) and disabled ($n = 85$) athletes, across 38 different sports. We approached twenty-four coaches (20 males, 2 females; 2 did not report) across different sports to provide athlete ratings, all 24 agreed to participate and they rated a subset of 139 athletes on the Mental Toughness Inventory (Hardy, Bell, & Beattie, 2014). Because of some athlete's time constraints during data collection, not all athletes completed all of the measures. Consequently, the final sample comprised 297 athletes for the analysis of self-rated mental toughness, and 122 athletes for analysis of coach-rated mental toughness.

2.2 Measures

Participants completed measures assessing narcissistic admiration and rivalry, self-esteem and mental toughness. To translate each measure, a bilingual speaker first translated English items to Thai and a second bilingual speaker, who was blind to the original version, translated the Thai to English. The translation for each item was then compared to the original for meaning and language and both translators agreed upon any further changes to items.

2.2.1 Narcissistic Admiration and Rivalry. We assessed narcissistic admiration and rivalry using the 18-item Narcissistic Admiration and Rivalry Questionnaire (NARQ; Back et al., 2013). Nine items measured narcissistic admiration (e.g., “Being a very special person gives me a lot of strength”); nine items measured narcissistic rivalry (e.g., “I secretly take pleasure in the failure of my rivals”). Admiration and rivalry reflect stable individual differences in the tendency to engage in these different behavioural dynamics and, although admiration and rivalry positively correlate, their effects are largely independent of each other (Back, 2018; Back et al., 2013). Responses were measured on a six-point Likert scale from 1 (*strongly disagree*) to 6 (*strongly agree*). Based on theoretical reasons and a strong negatively skewed distribution of one item score, we removed the item “I will someday be famous” from the admiration scale of the NARQ. Given that most athletes in the present sample had already reached a degree of public recognition, this item was inappropriate to include. Although we omitted this item from the final analysis, whether it was included or excluded had no substantial influence on any of the effects reported.

2.2.2 Self-Rated Mental Toughness. We assessed self-rated mental toughness using the eight-item Mental Toughness Index (Gucciardi et al., 2015), example item is, “I consistently overcome adversity”. Participants were asked to indicate on a five-point Likert scale from 1 (*False 100% of the time*) to 5 (*True 100% of the time*) how each statement indicates their typical thoughts, feelings and behaviors.

2.2.3 Coach-Rated Mental Toughness. We assessed coach-rated mental toughness using a 6-item Mental Toughness Inventory (Hardy et al., 2014). The Mental Toughness Inventory was developed to assess mental toughness through observer ratings of an athlete’s performance across stressful situations and has previously reported good fit and reliability (Hardy et al.,

2014). Because the scale was developed to examine mental toughness in the context of cricket, not all items on the original scale were applicable for all athletes across different sports in the present sample. After reviewing the items we removed the following two questions: “When he has to perform at a high level all day” and “When the opposition are using aggressive tactics”. For each of the six items, coaches were asked to indicate how often the player is able to maintain a high level of performance in competition when: e.g., “... there are a large number of spectators present”. Responses were measured on a seven-point Likert scale from 1 (*never*) to 7 (*always*).

2.2.4 Self-esteem. We assessed self-esteem using the ten-item Rosenberg Self-Esteem Scale (Rosenberg, 1965). Responses were measured on a four-point Likert scale from 1 (*strongly disagree*) to 4 (*strongly agree*). An item example is “I feel that I have a number of good qualities”.

2.3 Procedure

In a single session, coaches completed mental toughness ratings and athletes completed all measures assessing narcissism, self-esteem and self-rated mental toughness. All athletes were informed that their involvement in the research was voluntary and they could withdraw at any time. We informed athletes that their coach would not have access to any of their responses and instructed coaches that athletes would not have access to their mental toughness ratings.

Questionnaires were completed using pen and paper.

2.4 Analysis

The narcissism and mental toughness measures were hierarchically organized across two levels with athletes nested within their participating sport (when considering self-rated mental toughness) or coach (when considering coach-rated mental toughness). To account for the multilevel nature of the data we performed linear mixed effects analysis using the lme4 package

(Bates, Mächler, Bolker, & Walker, 2015) in *R*. To assess the effect of narcissistic admiration and rivalry on self and coach-rated mental toughness, we entered narcissistic admiration and rivalry as predictors in Model 1, and then added self-esteem in Model 2. We specified random intercepts and fixed slopes for all models. Fitting a random slopes model for self-rated mental toughness resulted in a singular fit, and likelihood ratio tests indicated that a random slopes models was not a significant improvement compared to model with a random intercept and fixed slopes for the coach-rated mental toughness model. All predictors were grand-mean centered prior to analysis. Statistical significance of the fixed effects were tested using the lmerTest package (Kuznetsova, Brockhoff, & Christensen, 2017) in *R*, with Satterthwaite approximations to degrees of freedom.

3. Results

Narcissistic admiration and rivalry were positively correlated. Zero-order correlations between self-esteem and narcissistic admiration were positive, whereas between self-esteem and rivalry there was a negative relationship; these effects are each consistent with what has been previously observed in studies with European participants (e.g., Back et al., 2013).

Table 1.

Means, standard deviations and zero-order correlations of narcissism variables and mental toughness

	1	2	3	4	5
1. Narcissistic Admiration	-				
2. Narcissistic Rivalry	.48	-			
3. Self-Esteem	.16	-.34	-		
4. Coach-Rated Mental Toughness	.09	-.08	.21	-	
5. Self-Rated Mental Toughness	.15	-.26	.45	.32	-
<i>M</i>	3.00	1.90	3.29	5.31	4.04
<i>SD</i>	0.94	0.87	0.39	1.00	0.63
<i>α</i>	.84	.88	.71	.93	.90
<i>Scale Bounds</i>	1-6	1- 6	1- 4	1- 7	1- 5

Note. Statistically significant correlations ($p < .05$) are indicated in boldface. α = Cronbach's alpha for scale reliability.

3.1 Self-Rated Mental Toughness. We first examined an unconditional model, where the dependent variable (self-rated mental toughness) is entered without any predictors, and sport is specified as the level 2 variable. The intra-class correlation coefficient from this model indicated that 2.76% of the variance in self-rated mental toughness scores could be explained at the between-sport level. There was a positive effect of narcissistic admiration and a negative effect of narcissistic rivalry on self-rated mental toughness in Model 1 and these effects remained after including self-esteem in Model 2, see Table 2.

Table 2.

Multilevel model of the effect of narcissistic admiration and rivalry to predict self-rated mental toughness.

	Model 1			Model 2		
	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>
Fixed Effects						
Intercept, β_{0ij}	4.04	0.04	< .001	4.04	0.04	< .001
Admiration β_1	0.25	0.04	< .001	0.16	0.04	< .001
Rivalry β_2	-0.32	0.04	< .001	-0.20	0.05	.001
Self-Esteem β_3				0.51	0.09	< .001
Random Effects						
Residual (σ^2)		0.31			0.29	
Intercept (τ_{00}), Sport		0.02			0.02	

Note. n (athletes) = 297, n (Teams) = 37

3.2 Coach-Rated Mental Toughness. We ran an unconditional model, with coach-rated mental toughness entered without any predictors, and coach specified as the Level 2 variable. The intra-class correlation coefficient from this model indicated that 78.88% of the variance in coach-ratings of mental toughness scores could be explained at the between-coach level. In Model 1, narcissistic admiration predicted higher coach-rated mental toughness, whereas a

negative effect was observed for rivalry and mental toughness., see Table 3. Including self-esteem in Model 2, indicated that self-esteem was not a significant predictor of coach-rated mental toughness and did not attenuate the effects of narcissistic rivalry and admiration on mental toughness.

Table 3.

Multilevel model of the effects of narcissistic admiration and rivalry to predict coach-rated mental toughness.

	Model 1			Model 2		
	<i>B</i>	<i>SE</i>	<i>p</i>	<i>B</i>	<i>SE</i>	<i>p</i>
Fixed Effects						
Intercept, β_{0ij}	5.17	0.20	< .001	5.17	0.04	< .001
Admiration β_1	0.13	0.05	.007	0.11	0.05	.033
Rivalry β_2	-0.22	0.07	< .001	-0.20	0.07	.004
Self Esteem, β_3				0.13	0.13	.295
Random Effects						
Residual (σ^2)		0.18		0.18		
Intercept (τ_{00}), Coach		0.86		0.85		

Note. *n* (athletes) = 122, *n* (coaches) = 24

4. Discussion

In the present study we asked whether narcissistic athletes are more mentally tough than their non-narcissistic counterparts. Previous research examining the narcissism – mental toughness relationship focused mainly on the effect of agentic narcissism, using measures that are susceptible to response bias and with no effort to consider self-esteem. Here, after including the effects of self-esteem, we found consistent effects across both self and coach-rated measures that narcissistic admiration had a positive effect on mental toughness whereas rivalry had a negative effect, and these effects were independent of self-esteem.

We expect that admiration benefit mental toughness by contributing towards the emergence of an athlete that is agentic, assertive, and focused on striving to reach the goal of

being admired by others and recognized for the greatness of their talents (Back et al., 2013). Confidence, optimism, and striving are key characteristics of self-reported mental toughness (Gucciardi et al., 2015) and, alongside the previous evidence examining agentic narcissism and mental toughness (e.g., Papageorgiou et al., 2018; Sabouri et al., 2016; Vaughan et al., 2018), it is unsurprising that we observed a positive relationship between admiration and mental toughness at the self-report level. An important finding was that this same effect was present when mental toughness was assessed using coach ratings. This suggests that individuals high in narcissistic admiration are not inflating their self-perceptions of mental toughness, they are also perceived by observers as more mentally tough. In contrast to the benefits of admiration, the antagonistic side of narcissism (rivalry) had a negative effect on both measures of mental toughness, this is an important contribution to the narcissism – mental toughness literature because it qualifies previous findings that grandiose narcissism is always associated with increased mental toughness. The negative effects of rivalry likely arise from the heightened anticipation of and attention to threat that drives greater rumination, anxiety, and defensive behaviors that detract focus from performance.

The modest correlation between the self and coach-rated measures of mental toughness also supports the idea that they are measuring different constructs. Whereas the self-report measure focuses on the possession of mentally tough cognitions and feelings, the coach-ratings are indirectly assessing an athlete's ability to display mental toughness at the behavioural level. Thus, admiration and rivalry not only predict mentally tough cognitions, but also mentally tough behaviour. Although informant reports avoid many of the issues of bias with self-report measures, it is necessary to note here that they are do not provide completely objective measures and are, to some degree, susceptible to their own set of (explicit and implicit) biases. For

example, it is easy to imagine that a coach who personally dislikes an athlete may be more likely to attend to and identify the various weaknesses of this athlete.

Consistent with previous research (St Clair-Thompson et al., 2015), self-esteem was positively correlated with self-rated mental toughness. This effect also suggests that approximately a fifth of the variance in self-reported mental toughness is explained by one's positive self-perception, as opposed to whether one is actually mentally tough or not. This reinforces the importance of considering self-esteem here, but also raises the more general question of the utility of self-report mental toughness measures when so much of the variance can be accounted for by other factors such as self-esteem. It was interesting that self-esteem was unrelated to coach ratings of mental toughness; although self-esteem might lead to greater psychological well-being in athletes, this fails to translate to observable differences in mentally tough behaviour. However, the relatively small sample size for assessing the effects of coach-rated mental toughness means that any absence of an effect of self-esteem should be interpreted with caution, requiring future research to confirm.

4.1 Sample and Generalizability

Given the disproportionally small amount of research conducted with individuals (especially athletes) outside of Western cultures (Henrich, Heine, & Norenzayan, 2010), we view the present sample (Thai athletes) a strength of the study. But how generalizable are these effects? Some have argued collectivistic cultures place less importance on the need for self-enhancement (Heine, Lehman, Markus, & Kitayama, 1999), and that enhancement is related to the pursuit of collectivist goals (e.g., being a good friend). However, the empirical evidence suggests that agentic narcissism in Thais is actually associated with self-enhancement processes that are very similar to those found in Western samples, especially for the attraction to agentic

qualities such as status (Tanchotsrinon, Maneesri, & Campbell, 2007). Thus, although some differences may exist, there may be good reason to expect to find the same effects in Western sample of athletes and we encourage future research to examine this.

4.2 Future Directions

The present research is the first to examine the effect of agentic and antagonistic dimensions of narcissism on mental toughness and we have suggested several pathways that might explain why admiration is positively associated with, and rivalry is negatively associated with, mental toughness. However, future research would benefit from examining more closely the dynamic processes through which admiration and rivalry contribute towards mental toughness in athletes. Experience sampling methods that assess athlete's cognitive and affective states over time and in a variety of diverse contexts (e.g., Geukes et al., 2017) would allow researchers to understand how admiration and rivalry affect within-person variability in states and how they relate to performance as a function of the context. Whereas a narcissistic athlete (high in admiration and rivalry) may primarily engage in assertive admiration processes when they are successful and continually reinforced for their efforts, it may be only upon encountering failure and negative feedback that antagonistic processes are engaged (Back, 2018). Thus, understanding how different contextual factors such as negative (or positive) performance feedback and perceived goal progress (or lack of) trigger the activation of admiration and rivalry related processes is an important issue for future research.

4.3 Conclusion.

Are narcissistic athletes mentally tough? Here we showed that the answer depends on the dimension of narcissism. Agentic aspects of narcissism facilitate consistently good performance in stressful situations and are beneficial for athletes. However, the antagonistic and more fragile

341 elements of narcissism appear to be harmful for athletes and likely preclude individuals who are
342 high in narcissistic rivalry from being mentally tough.

References

- Back, M. D. (2018). The Narcissistic Admiration and Rivalry Concept. In A. D. Hermann, A. B. Brunell, & J. D. Foster (Eds.), *The Handbook of trait narcissism: Key advances, research methods, and controversies*. New York, NY, US.
- Back, M. D., Küfner, A. C. P., Dufner, M., Gerlach, T. M., Rauthmann, J. F., & Denissen, J. J. A. (2013). Narcissistic admiration and rivalry: Disentangling the bright and dark sides of narcissism. *Journal of Personality and Social Psychology*, *105*, 1013–1037.
<https://doi.org/10.1037/a0034431>
- Bates, D., Mächler, M., Bolker, B., & Walker, S. (2015). Fitting linear mixed-effects models using lme4. *Journal of Statistical Software*, *67*, 1–48. <https://doi.org/10.18637/jss.v067.i01>
- Campbell, W. K., & Campbell, S. M. (2009). On the Self-regulatory Dynamics Created by the Peculiar Benefits and Costs of Narcissism: A Contextual Reinforcement Model and Examination of Leadership. *Self and Identity*, *8*, 214–232.
<https://doi.org/10.1080/15298860802505129>
- Clough, P., Earle, K., & Sewell, D. (2002). Mental toughness: The concept and its measurement. In I. Cockerill (Ed.), *Solutions in sport psychology* (pp. 32–45). London: Thomson.
- Geukes, K., Nestler, S., Hutteman, R., Dufner, M., Küfner, A. C. P., Egloff, B., ... Back, M. D. (2017). Puffed-Up but Shaky Selves: State Self-Esteem Level and Variability in Narcissists. *Journal of Personality and Social Psychology*, *112*, 769–786.
<https://doi.org/10.1037/pspp0000093>
- Grove, J. L., Smith, T. W., Girard, J. M., & Wright, A. G. (2019). Narcissistic Admiration and Rivalry: An Interpersonal Approach to Construct Validation. *Journal of Personality Disorders*, *33*, 1–25. https://doi.org/http://doi.org/10.1521/pedi_2019_33_374

- Gucciardi, D. F., Hanton, S., Gordon, S., Mallett, C. J., & Temby, P. (2015). The Concept of Mental Toughness: Tests of Dimensionality, Nomological Network, and Traitness. *Journal of Personality*, 83, 26–44. <https://doi.org/10.1111/jopy.12079>
- Hardy, L., Bell, J. J., & Beattie, S. (2014). A Neuropsychological Model of Mentally Tough Behavior. *Journal of Personality*, 82, 69–81. <https://doi.org/10.1111/jopy.12034>
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, 33, 61–83. <https://doi.org/10.1017/S0140525X0999152X>
- Jones, D. N., & Paulhus, D. L. (2014). Introducing the Short Dark Triad (SD3): A Brief Measure of Dark Personality Traits. *Assessment*, 21, 28–41. <https://doi.org/10.1177/1073191113514105>
- Kowalski, C. M., Rogoza, R., Vernon, P. A., & Schermer, J. A. (2018). The Dark Triad and the self-presentation variables of socially desirable responding and self-monitoring. *Personality and Individual Differences*, 120, 234–237. <https://doi.org/10.1016/j.paid.2017.09.007>
- Krizan, Z., & Herlache, A. D. (2018). The Narcissism Spectrum Model : A Synthetic View of Narcissistic Personality. *Personality and Social Psychology Review*, 22, 3–31. <https://doi.org/10.1177/1088868316685018>
- Kuznetsova, A., Brockhoff, P. B., & Christensen, R. H. B. (2017). lmerTest Package: Tests in Linear Mixed Effects Models. *Journal of Statistical Software*, 82. <https://doi.org/10.18637/jss.v082.i13>
- Lange, J., & Crusius, J. (2015). Dispositional Envy Revisited: Unraveling the Motivational Dynamics of Benign and Malicious Envy. *Personality and Social Psychology Bulletin*, 41, 284–294. <https://doi.org/10.1177/0146167214564959>
- Lange, J., Crusius, J., & Hagemeyer, B. (2016). The Evil Queen’s Dilemma: Linking Narcissistic

- Admiration and Rivalry to Benign and Malicious Envy. *European Journal of Personality*.
<https://doi.org/10.1002/per.2047>
- Leckelt, M., Küfner, A. C. P., Nestler, S., & Back, M. D. (2015). Behavioral processes underlying the decline of narcissists' popularity over time. *Journal of Personality and Social Psychology*, 109, 856–871. <https://doi.org/10.1037/pspp0000057>
- Manley, H., Paisarnsrisomsuk, N., & Roberts, R. (2018). The Effect of Narcissistic Admiration and Rivalry on Public Speaking Performance. *Manuscript Submitted*.
<https://doi.org/10.31234/osf.io/9xydr>
- Miller, J. D., Lynam, D. R., Hyatt, C. S., & Campbell, W. K. (2017). Controversies in Narcissism. *Annual Review of Clinical Psychology*, 13, annurev-clinpsy-032816-045244.
<https://doi.org/10.1146/annurev-clinpsy-032816-045244>
- Moshagen, M., Hilbig, B. E., & Zettler, I. (2018). The dark core of personality. *Psychological Review*, 125, 656–688. <https://doi.org/10.1037/rev0000111>
- Onley, M., Veselka, L., Schermer, J. A., & Vernon, P. A. (2013). Survival of the scheming: a genetically informed link between the dark triad and mental toughness. *Twin Research and Human Genetics : The Official Journal of the International Society for Twin Studies*, 16, 1087–95. <https://doi.org/10.1017/thg.2013.66>
- Papageorgiou, K. A., Denovan, A., & Dagnall, N. (2019). The positive effect of narcissism on depressive symptoms through mental toughness: Narcissism may be a dark trait but it does help with seeing the world less grey. *European Psychiatry*, 55, 74–79.
<https://doi.org/10.1016/j.eurpsy.2018.10.002>
- Papageorgiou, K. A., Malanchini, M., Denovan, A., Clough, P. J., Shakeshaft, N., Schofield, K., & Kovas, Y. (2018). Longitudinal associations between narcissism, mental toughness and

school achievement. *Personality and Individual Differences*, 131, 105–110.

<https://doi.org/10.1016/j.paid.2018.04.024>

Papageorgiou, K. A., Wong, B., & Clough, P. J. (2017). Beyond good and evil: Exploring the mediating role of mental toughness on the Dark Triad of personality traits. *Personality and Individual Differences*, 119, 19–23. <https://doi.org/10.1016/j.paid.2017.06.031>

Roberts, R., & Woodman, T. (2016). Personality and Performance: Beyond the Big 5. In R. J. Schinke, K. R. McGannon, & B. Smith (Eds.), *Routledge International Handbook of Sport Psychology* (pp. 401–448). Oxford: Routledge.

Roberts, R., Woodman, T., & Sedikides, C. (2018). Pass Me the ball: Narcissism in performance settings. *International Review of Sport and Exercise Psychology*, 11, 190–213. <https://doi.org/10.1080/1750984X.2017.1290815>

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press. <https://doi.org/S0034-98872009000600009>

Sabouri, S., Gerber, M., Bahmani, D. S., Lemola, S., Clough, P. J., Kalak, N., ... Brand, S. (2016). Examining Dark Triad traits in relation to mental toughness and physical activity in young adults. *Neuropsychiatric Disease and Treatment*, 12, 229–235. <https://doi.org/10.2147/NDT.S97267>

Sedikides, C., Rudich, E. A., Gregg, A. P., Kumashiro, M., & Rusbult, C. (2004). Are normal narcissists psychologically healthy?: Self-esteem matters. *Journal of Personality and Social Psychology*, 87, 400–416. <https://doi.org/10.1037/0022-3514.87.3.400>

St Clair-Thompson, H., Bugler, M., Robinson, J., Clough, P., McGeown, S. P., & Perry, J. (2015). Mental toughness in education: exploring relationships with attainment, attendance, behaviour and peer relationships. *Educational Psychology*, 35, 886–907.

<https://doi.org/10.1080/01443410.2014.895294>

Tanchotsrinon, P., Maneesri, K., & Campbell, W. K. (2007). Narcissism and romantic attraction:

Evidence from a collectivistic culture. *Journal of Research in Personality*, 41, 723–730.

<https://doi.org/10.1016/j.jrp.2006.08.004>

Vaughan, R., Carter, G. L., Cockroft, D., & Maggiorini, L. (2018). Harder, better, faster,

stronger? Mental toughness, the dark triad and physical activity. *Personality and Individual*

Differences, 131, 206–211. <https://doi.org/10.1016/j.paid.2018.05.002>

Wright, A. G., & Edershile, E. A. (2018). Issues resolved and unresolved in pathological

narcissism. *Current Opinion in Psychology*, 21, 74–79.

<https://doi.org/10.1016/j.copsyc.2017.10.001>

Zeigler-Hill, V., Vrabel, J. K., McCabe, G. A., Cosby, C. A., Traeder, C. K., Hobbs, K. A., &

Southard, A. C. (2019). Narcissism and the pursuit of status. *Journal of Personality*, 87,

310–327. <https://doi.org/https://doi.org/10.1111/jopy.12392>