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Not all players are equally motivated: The role of narcissism.

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5 **Not all players are equally motivated: The role of narcissism**
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Abstract

Research on motivational climates consistently demonstrates that mastery-focused climates are associated with positive outcomes and ego-involving performance climates lead to maladaptive outcomes. However, the role of personality within such a framework has been largely ignored. To redress this imbalance, we examined the potential role of narcissism in moderating the effects of different motivational climates on leader inspired extra effort (LIEE) in training. Training is where rugby players spend most of their rugby time and we were keen to examine the combination of personality and climate that might maximize the yield of such training environments. Female rugby players (n = 126) from 15 clubs completed measures of narcissism, motivational climate and effort. Moderated regression analyses revealed that narcissism moderated the relationship between motivational climate and effort. Increases in either performance or mastery climates were associated with increases in effort for narcissists; no such relationship was revealed for low narcissists. The findings demonstrate the importance of considering personality within rugby training environments, as it is clear that not every player will respond the same way to specific training conditions. Coaches who understand this and are able to tailor individualized motivational climates will likely gain the greatest benefits from their different players.

Keywords: *Narcissist, coaching, effort, performance climate, mastery climate, PROCESS*

1 **Not all players are equally motivated: The role of narcissism**

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3 Coaches play a substantial role in shaping the thoughts, feelings and behaviors of their
4 athletes (e.g., Gould, Greenleaf, Chung, & Guinan, 2002). The impact of coaching is
5 particularly apparent in training contexts, as it is training where an athlete spends most of
6 his/her time and the quality of training is well known to impact the quality of athletic
7 performance (Gould et al., 2002; Hardy, Jones, & Gould, 1996). Within the literature, one
8 aspect of coaching that has been the subject of considerable research is the influence of the
9 coach-created motivational climate.

10 Stemming from Achievement Goal Theory (e.g., Ames, 1992; Nicholls, 1989),
11 motivational climate refers to an individual's perception of situational cues and structures that
12 are evident within an achievement setting (Ames, 1992). Within the literature, two
13 motivational climates have been operationalized. A *mastery climate* is characterized by the
14 demonstration of task mastery and by rewarding effort more than ability (Nicholls, 1989;
15 Newton, Duda, & Yin, 2000). Success depends on athletes making improvements in skill
16 development, and learning via trial and error is encouraged to offer an opportunity for self-
17 evaluation (Weiss, Amorose, & Wilko, 2009). Conversely, an *ego climate* (or *performance or*
18 *outcome climate*) underscores the importance of outperforming others (e.g., O'Rourke,
19 Smith, Smoll, & Cumming, 2014). In performance climates learning is seen as a means to an
20 end , and success is evaluated via interpersonal comparison (Nicholls, 1989), where mistakes
21 are seen as failure (O'Rourke et al., 2014; Weiss et al., 2009).

22 Based on these conceptualizations the motivational climate literature has consistently
23 demonstrated that mastery climates lead to more desirable outcomes than performance
24 climates. For example, mastery climates are associated with greater effort, enjoyment,
25 satisfaction, persistence, and lower anxiety (e.g., Ames, 1992; Nicholls, 1989; O'Rourke et
26 al., 2014; Pensgaard & Roberts, 2002). However, one factor that appears to have been

1 overlooked in this body of research is the role of individual differences. While some
2 motivational climate research has examined interactions between dispositional goal
3 orientations and motivational climate (e.g., Standage, Duda, & Ntoumanis, 2003),
4 fundamental dimensions of personality appear to have been ignored. This is a surprising
5 omission, as conceptual models of peak performance (e.g., Hardy et al., 1996) suggest that
6 personality plays a fundamental role in psychological preparation, and has a moderating
7 influence over various environmental factors . Supporting this suggestion, evidence from a
8 number of domains supports the moderating influence of personality in performance contexts
9 (e.g., see Roberts & Woodman, in press a, b for recent reviews). One particular personality
10 variable that holds considerable promise for motivational climate research, and which is
11 starting to receive increased research attention by performance focused psychology
12 researchers is narcissism.

13 In clinical settings, narcissism is defined as “a pervasive pattern of grandiosity, need
14 for admiration, and a lack of empathy” (Diagnostic and Statistical Manual of Mental
15 Disorders, 2000, p. 714). Research in normal (i.e., subclinical) settings has revealed that
16 narcissism¹ is associated with a grandiose, yet fragile, self-view and feelings of entitlement
17 (e.g., Morf & Rhodewalt, 2001). Narcissists consider themselves to be special people who are
18 superior to others (Gabriel, Critelli, & Ee, 1994) Narcissists enjoy competitive environments
19 (More, Weir, & Davidov, 2000), and thrive in difficult and stressful situations where others
20 often choke (e.g., Guekes, Mesagno, Hanrahan, & Kellmann, 2012; Roberts, Callow, Hardy,
21 Woodman, & Thomas, 2010; Roberts, Woodman, Hardy, Davis, & Wallace, 2013; Wallace
22 & Baumeister, 2002; Woodman, Roberts, Hardy, Callow, & Rogers, 2011). Furthermore,
23 they respond well to coach behaviors that are aimed at treating athletes as individuals and less
24 well to coach behaviors that foster a collective sense of unity (Arthur, Woodman, Ong,
25 Hardy, & Ntoumanis, 2011). Competitive environments provide narcissists with an

1 opportunity to demonstrate their (perceived) talents to the world, and so narcissists are keenly
2 aware that different situations offer more or less opportunity for personal glory. When a
3 situation offers the opportunity for personal glory, narcissists are motivated to perform well.
4 When this opportunity is missing, narcissists withdraw effort and perform poorly (Woodman
5 et al., 2011).

6 Narcissists' relentless pursuit of self-enhancement suggests that they may respond
7 more favorably to performance climates. This is because the competitive nature of
8 performance climates provides the narcissist with a clear opportunity for glory. This
9 favorable response might be particularly apparent in training contexts because training
10 typically provides very little opportunity for glory, and narcissists might exert minimal effort
11 (Roberts & Woodman, in press a). How narcissists might perform in a mastery climate is
12 rather less clear. From an ego-involvement perspective, one could argue that the self-
13 referenced nature of mastery climates would result in a weaker opportunity for glory,
14 compared to ego-involving climates. Thus, narcissists might exert less effort in a mastery
15 climate. However, given that narcissists crave the attention of others (Morf & Rhodewalt,
16 2001), they may perform equally well in a mastery climate; this is because they will perceive
17 that they are gaining increased attention from the coach.

18 In contrast, low narcissists are not so motivated by the opportunity for glory, and
19 sometimes choke in pressurized situations (see Roberts et al., 2013; Wallace & Baumeister,
20 2002). Thus, the competitive and anxiety-provoking nature of performance climates
21 (O'Rourke et al., 2014; Pensgaard & Roberts, 2002) may be less attractive for them. As such,
22 these individuals would be more likely to benefit from mastery climates, consistent with
23 much of the motivational climate literature.

24 In the present study we tested this theorizing by examining interactions between
25 narcissism and each climate on leader-inspired extra effort (LIEE) in training. The idea that

1 effective leaders can inspire their athletes to invest extra levels of effort is central to a number
2 of perspectives on leadership and coaching (e.g., Bass, 1985). Because of this, LIEE is an
3 often used outcome measure in coaching and leadership research and evidence exists
4 demonstrating that effective leaders can inspire their followers to increase effort (e.g., Arthur
5 et al., 2011; Rowold, 2006). A focus on LIEE is particularly relevant in the current context as
6 effort appears key to understanding the performance of narcissists (see Wallace &
7 Baumeister, 2002; Woodman et al., 2011). Thus understanding the factors that may influence
8 coaches' ability to increase the effort of narcissists is worthwhile.). We hypothesized that
9 narcissism would moderate the effects of performance climate on LIEE such that increases in
10 performance climate would be associated with increases in LIEE for high narcissists but not
11 for low narcissists. We formulated no specific hypothesis for mastery climate because one
12 could present a sound theoretical argument for an interaction in either direction.

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Method

Participants

17 An opportunistic sample of 126 female amateur club-level rugby players ($m = 21.91$,
18 $s = 5.06$) from 15 clubs volunteered to take part in the study. Participants had played for their
19 teams for a mean of 5.35 years ($s = 6.57$), had been with their particular coach for a mean of
20 1.43 years ($s = 1.82$), and trained on average 2.22 times per week ($s = 1.00$). Informed
21 consent was obtained from all participants before participating.

Measures

23 *Narcissism.* Narcissism was assessed using the Narcissistic Personality Inventory
24 (NPI; Raskin & Hall, 1979) and the Hypersensitive Narcissism Scale (HSNS; Hendin &
25 Cheek, 1997). The NPI is a 40-item forced-choice inventory and measures the grandiose
26 component of narcissism. For each item, participants are asked to choose between one
27 narcissistic and non-narcissistic statement. For example:

1 A: I have a natural talent for influencing people

2 B: I am not good at influencing people

3 The number of narcissistic responses is summed to give a total narcissism score, with
4 a range of 0-40.

5 The HSNS measures narcissistic vulnerability. It comprises 10 items (e.g., “My
6 feelings are easily hurt by ridicule or the slighting marks of others”). All items are rated on a
7 five-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Some theorists (e.g.,
8 Campbell & Miller, 2011) recommend that researchers assess both the grandiose and
9 vulnerable components of narcissism. Consequently, we included the HSNS so as to be able
10 to measure narcissism more comprehensively. However, our hypotheses were developed
11 specifically from the perspective of narcissistic grandiosity. As such, the HSNS was included
12 simply as a covariate in each analysis.

13 *Motivational climate.* To assess perceptions of the coach-created motivational
14 climate, we used the Perceived Motivational Climate in Sport Questionnaire – 2 (PMCSQ-2;
15 Newton et al., 2000). The PMCSQ-2 comprises 33 items, 17 of which assess mastery climate
16 (e.g., “On this team the coach wants us to try new skills”) and 16 of which assess
17 performance climate (e.g., “On this team, players are encouraged to outplay the other
18 players”). Items are scored on a 5-point Likert scale from 1 (*not at all*) to 5 (*all the time*).

19 *Leader-inspired extra effort.* We used Arthur et al.’s (2011) 4-item measure of leader-
20 inspired extra effort (LIEE). This measure is based on the original LIEE items from Bass and
21 Avolio’s (2005) Multifactor Leadership Questionnaire, but the items are more focused on
22 coaching behaviors in sport (e.g. “My coach motivates me to work hard”). The items are
23 scored on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

24 *Procedure*

1 the regression model. In each analysis the HSNS was entered as a covariate. The results of
2 the regression analyses are presented in Table II.

3 *Performance climate.* The regression model accounted for 31.8% of the variance in
4 LIEE, $F_{18, 105} = 2.72, P < .001$. Neither performance climate ($B = .06, P = .55, 95\% \text{ CI } [-.12,$
5 $.22]$) nor narcissism ($B = .04, P = .60, 95\% \text{ CI } [-.11, .19]$) predicted LIEE. However, a
6 significant interaction was revealed, $\Delta R^2 = .03, \Delta F_{1, 105} = 5.37, P = .02, 95\% \text{ CI } [.02, .32]$.
7 Figure 1 (top) displays the nature of the interaction. Simple slopes analysis indicated no
8 relationship between performance climate and LIEE when narcissism was low ($B = -.12, P =$
9 $.26, 95\% \text{ CI } [-.33, .09]$), and a positive relationship when narcissism was high ($B = .23, P =$
10 $.07, 95\% \text{ CI } [-.02, .47]$).

11 *Mastery climate.* The regression model accounted for 39.6% of the variance in LIEE,
12 $F_{18, 105} = 3.83, P < .001$. As with the performance climate data, neither mastery climate ($B =$
13 $.11, P = .12, 95\% \text{ CI } [-.02, .25]$) nor narcissism ($B = .06, P = .42, 95\% \text{ CI } [-.08, .20]$) was
14 related to LIEE. However, a significant narcissism \times climate interaction was revealed, $\Delta R^2 =$
15 $.09, \Delta F_{1, 105} = 16.50, P < .001, 95\% \text{ CI } [.14, .40]$. Figure 1 (bottom) displays the nature of
16 the interaction. Simple slopes analysis indicated no significant relationship between mastery
17 climate and LIEE when narcissism was low ($B = -1.6, P = .11, 95\% \text{ CI } [-.36, .04]$), and a
18 significant positive relationship when narcissism was high ($B = .38, P < .001, 95\% \text{ CI } [.20,$
19 $.57]$)

20 **Discussion**

21 We examined the role of narcissism on the relationship between motivational climate
22 and LIEE. As narcissists are driven by self-enhancement and a performance climate is
23 characterised by its competitive and ego-involving function, we hypothesized that increases
24 in performance climates would be associated with higher levels of LIEE for narcissists only.

1 This hypothesis was supported by the data. The findings for mastery climate mirrored those
2 of performance climate; only narcissists respond to a mastery climate with extra effort.

3 The performance climate interaction was expected given that the competitive and ego-
4 focused nature of performance climates provides narcissists with an opportunity for personal
5 glory and a chance to demonstrate their perceived superiority. Interestingly, low narcissists'
6 effort appears unaffected by different levels of performance climate. Performance climates
7 are typically viewed as globally maladaptive (e.g., O'Rourke et al., 2014; Pensgaard &
8 Roberts, 2002). However, in terms of effort invested in training, these rugby data clearly
9 indicate that performance climates can be either beneficial (for narcissists) or simply have no
10 effect (low narcissists). The negative trend for low narcissists somewhat mitigates this data-
11 driven sentiment, however, and more research is needed to determine the degree to which
12 performance climates might affect the motivation of players who are low in narcissism and
13 thus low in the propensity to seek personal glory.

14 Interestingly, the mastery climate effects mirrored those of the performance climate.
15 Only narcissists reported higher levels of effort under mastery climates. Although mastery
16 climates may not offer the same degree of self-enhancement opportunity for narcissists, the
17 increased effort for narcissists is consistent with an attentional explanation. Narcissists crave
18 the attention of others and want to be admired (Morf & Rhodewalt, 2001). The similarity of
19 the performance and mastery effects suggests that narcissists will perceive any climate as
20 worthy of investing extra effort in training because they will perceive that the coach will pay
21 them attention if they perform well within that climate. Conversely, low narcissists failed to
22 report higher levels of effort under mastery climates. This result is in direct contrast to much
23 of the motivational climate literature, where mastery climates are almost ubiquitously viewed
24 as positive (e.g., O'Rourke et al., 2014; Standage et al., 2003), and suggests that low

1 narcissists do not respond with increased effort to coaches' attempts to create a mastery
2 climate. This is potentially very informative and clearly warrants further research.

3 As narcissists appeared to benefit equally from performance and mastery climates it is
4 clear that performance climates are not always *negative*. Although continually focusing on
5 competition, ego-involvement, and punishment for mistakes obviously has drawbacks,
6 allowing athletes to experience these sorts of conditions in training settings, if done properly,
7 might have a positive impact on players' ability to perform under pressure. Indeed,
8 competition is by definition a pressurised ego-involving environment where there are real
9 consequences for making mistakes. If athletes are to be able to deal with these situations then
10 it is likely that they will benefit from training for such situations. In support of this
11 contention, recent research on mental toughness has shown that exposing athletes to
12 punishment-conditioned stimuli in training increases their ability to perform under pressure
13 (cf. Bell, Hardy, & Beattie, 2013).

14 At the very least, the effects for mastery and performance climates in the present data
15 suggest that extolling the virtues of mastery climates at the expense of a performance climate
16 is an erroneous and overly simplistic position, which is potentially damaging to maximizing
17 performance in competitive sport teams. Each motivational climate has merit in terms of
18 maximizing effort from rugby players and further research that targets the effect of the
19 different climates on different aspects of performance is clearly warranted.

20 These findings offer a number of implications for theory and practice. First, the
21 results demonstrate the importance of considering personality in motivational climate
22 research. Not all athletes respond to particular motivational climates in the same way.
23 Understanding which personality variables impact which motivational climates, and how, is a
24 key direction for future motivational climate research. Variables such as neuroticism,
25 optimism and perfectionism are all likely candidates in this regard. From an applied

1 perspective, practitioners working with coaches and athletes need to think carefully about
2 who their athletes are, and how they best respond, before promoting particular climates, as
3 clearly one motivational climate does not fit all. Second, narcissists report higher levels of
4 effort in training regardless of which climate they perceive the coach to be creating. This
5 demonstrates that coaches can play a substantial role in improving the quality of a narcissist's
6 training, potentially making narcissistic athletes even more potent in competition settings (cf.
7 Roberts & Woodman, in press a). Third, motivational climates do not appear to influence low
8 narcissists, at least in terms of effort. However, this is not to say that coach behaviors have no
9 impact on low narcissists, as transformational coaching behaviors do positively influence
10 these individuals (Arthur et al., 2011). Thus for low narcissists, the behaviors that a coach
11 adopts may well be more important than the environment he or she creates. Finally, it is
12 important to note that despite narcissists' reporting increased effort under both climates and
13 low narcissists reporting no change, this by no means suggests that we view narcissism as
14 inherently good for team functioning and performance and low narcissism as bad. Indeed,
15 narcissists' inflated self views and focus on personal glory at the expense of others certainly
16 does not always lead to positive outcomes (e.g., Campbell & Miller, 2011; Gabriel et al.,
17 1994; Morf & Rhodewalt, 2001; Wallace & Baumeister, 2002). Individuals higher and lower
18 in narcissism both have a role to play in helping teams thrive, they just need to be managed
19 and coached differently.

20 This study is not without its limitations. For example, our decision to use female club
21 rugby players comes at a cost to generalizability, in terms of sex, type of sport and
22 competitive level. The literature surrounding narcissism and sex differences is somewhat
23 equivocal (cf. Morf & Rhodewalt, 2001; Wallace & Baumeister, 2002). Moreover, theoretical
24 accounts on the development of narcissism (e.g., Kohut, 1977) and the impact of narcissism
25 on behavior (e.g., Morf & Rhodewalt, 2001) do not incorporate the need to consider sex

1 differences, as narcissism develops as a result of difficulties during parent-child interactions.
2 However, the sole focus on females does not rule out the possibility that male narcissists may
3 respond differently to motivational climates. Thus future research exploring the responses of
4 male and female athletes is worthwhile. Further, to increase generalizability, examining these
5 relationships in individual sport athletes, as well as athletes from different competitive levels,
6 would also be worth considering. A further limitation of the research is its cross sectional
7 design, and so future research that seeks to replicate these effects in a longitudinal design
8 would be worthwhile. In addition, we used self-report measures of effort and so future studies
9 may wish to include more objective measures and/or informant ratings to forego the reliance
10 on single-source data collection. This would be particularly helpful in the context of
11 narcissism as narcissists are known to engage in ego-protecting strategies (Morf &
12 Rhodewalt, 2001) and so may not always accurately report their levels of effort. Finally, one
13 might argue that our conceptualization of motivational climate was rather narrow and further
14 research that considers the influence of need-supportive and need-thwarting environments
15 (e.g, Quested & Duda, 2010) and coach behaviors (Bartholomew, Ntoumanis, Ryan, &
16 Thøgersen-Ntoumani, 2011) is warranted.

17 In summary, narcissism consistently moderated the effects of motivational climate on
18 effort such that narcissists reported higher levels of effort under each motivational climate;
19 low narcissists' effort was unaffected. Future research would do well to clarify these effects
20 and to investigate more fully the role that personality plays in influencing how athletes
21 respond to different coaching behaviors.

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Footnote

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3 1. In the present article, the terms *narcissists* or *high narcissists* are used interchangeably to
4 describe individuals who score relatively highly on valid self-report measures of narcissism such as
5 the Narcissistic Personality Inventory (Raskin & Hall, 1979), as opposed to individuals with
6 narcissistic personality disorder. The term *low narcissist* is used to describe individuals with
7 relatively low scores on such self-report measures.

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Table I. Descriptive Statistics and correlations between study variables (n = 126).

Measure	1	2	3	4	5
1. NPI	-	.02	.11	.18*	.06
2. HSNS		-	.11	.30**	-.13
3. Mastery Climate			-	.64**	.22*
4. Performance Climate				-	.11
5. LIEE					-
Mean	14.32	26.62	59.55	50.60	14.34
SD	8.23	6.87	7.04	8.82	3.25
Alpha	.91	.83	.90	.93	.89

* $p < .05$, ** $p < .001$

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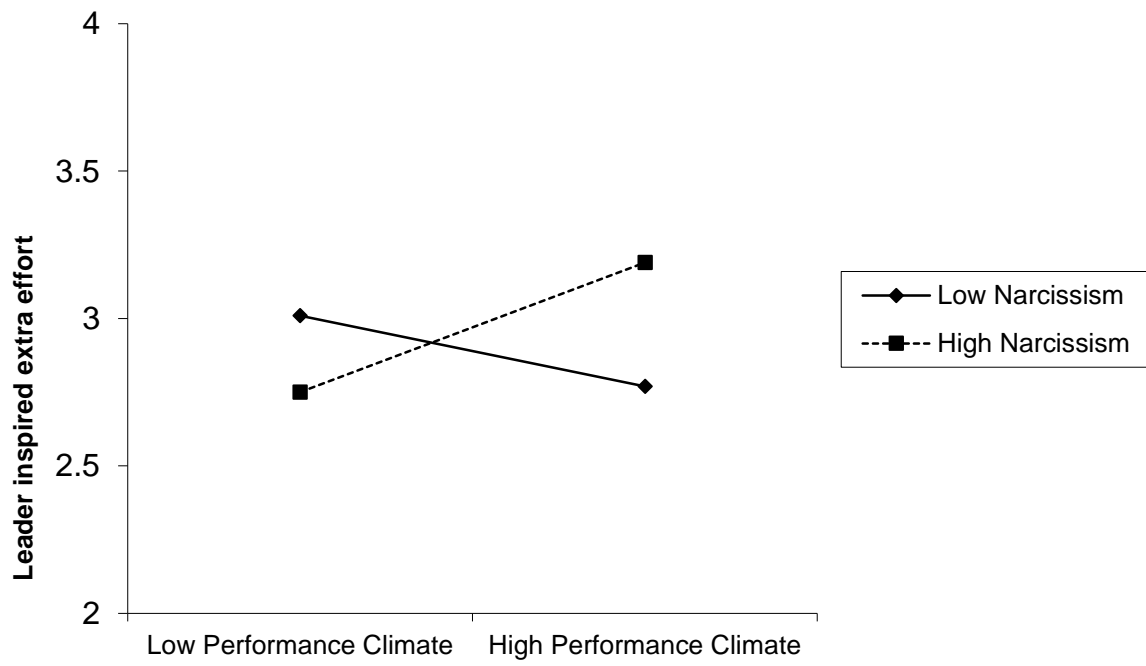
1 Table II. Regression analyses examining interactions between motivational climate and narcissism
 2 on LIEE
 3

Model	B	SE B	t	LLCI	ULCI
<i>Performance Climate</i>					
Constant	2.93	.20	14.79***	2.54	3.31
HSNS	-.10	.08	-1.25	-.26	.06
Performance Climate	.05	.09	.60	-.12	.22
NPI	.04	.08	.52	-.11	.19
NPI × Performance	.18	.07	2.32**	.022	.32
<i>Mastery Climate</i>					
Constant	3.01	.18	16.98***	.66	3.36
HSNS	-.12	.07	-1.71	-.27	.02
Mastery Climate	.11	.07	1.57	-.03	.25
NPI	.06	.07	0.81	-.08	.20
NPI × Mastery	.27	.07	4.06***	.14	.40

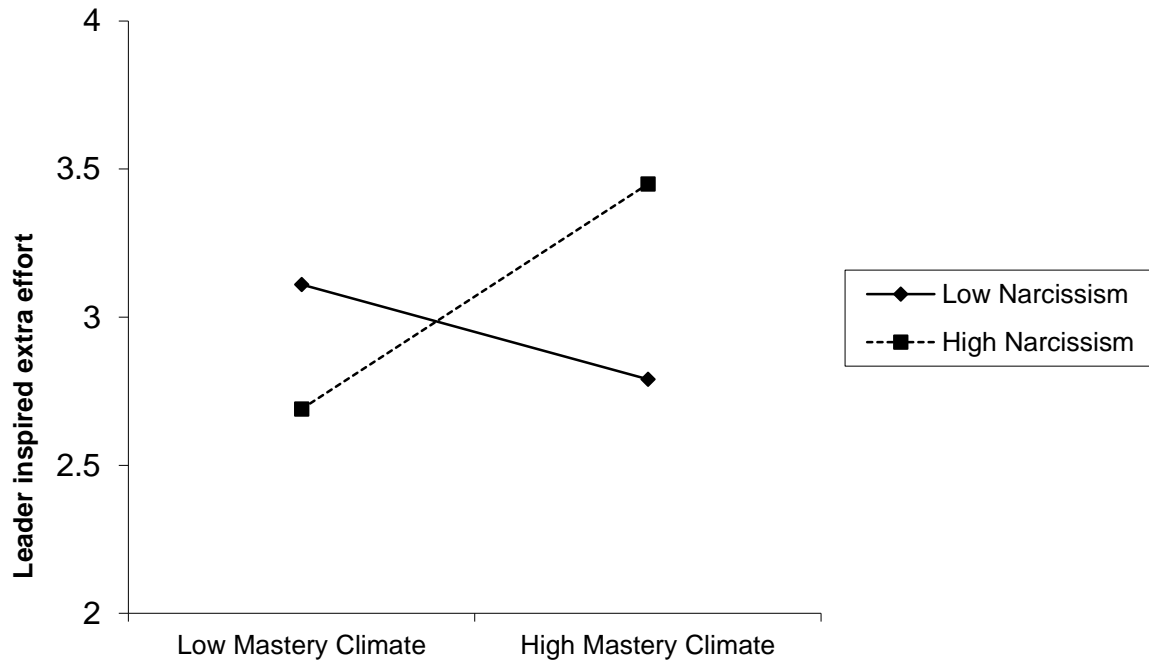
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** $p < .01$, *** $p < .001$



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1
 2 Figure 1. Interactions between performance climate and narcissism (top), and mastery climate and
 3 narcissism (bottom), on leader inspired extra effort. Regression slopes are derived from regression
 4 equations with hypothetical individuals who are one standard deviation below the mean (low) or
 5 one standard deviation above the mean (high).
 6