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Moving Narcissus: Can Narcissists Be Empathic?

Erica G. Hepper¹, Claire M. Hart², and Constantine Sedikides²

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Abstract

Empathy plays a critical role in fostering and maintaining social relations. Narcissists lack empathy, and this may account for their interpersonal failures. But why do narcissists lack empathy? Are they incapable, or is change possible? Three studies addressed this question. Study 1 showed that the link between narcissism and low empathy generalizes to a specific target person presented in a vignette. The effect was driven by maladaptive narcissistic components (i.e., entitlement, exploitativeness, exhibitionism). Study 2 examined the effect of perspective-taking (vs. control) instructions on self-reported responses to a video. Study 3 examined the effect of the same manipulation on autonomic arousal (heart rate [HR]) during an audio-recording. Perspective-taking ameliorated negative links between maladaptive narcissism and both self-reported empathy and HR. That is, narcissists can be moved by another's suffering, if they take that person's perspective. The findings demonstrate that narcissists' low empathy does not reflect inability, implying potential for intervention.

Keywords

narcissism, empathy, perspective-taking, heart rate

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It is well documented that individuals high in subclinical narcissism prioritize agency over communion (Campbell & Foster, 2007; Morf, Horvath, & Torchetti, 2011). For these individuals (hereafter referred to as “narcissists” or “high-narcissists” for brevity), getting ahead is more important than getting along (Bradlee & Emmons, 1992). Consequently, narcissists' interpersonal successes are short-lived and quick to turn sour, while their behavior can impact negatively on others and on society (Barry, Kerig, Stellwagen, & Barry, 2011; Sedikides, Campbell, Reeder, Elliot, & Gregg, 2002). Arguably, at the heart of narcissists' interpersonal deficits is their relative absence of empathy for others (Hepper, Hart, Meek, Cisek, & Sedikides, 2014; Watson & Morris, 1991). Empathy—vicariously experiencing another's perspective or emotions—is a fundamental basis of social functioning, prosocial behavior, and interpersonal harmony (Miller & Eisenberg, 1988; Vreeke & van der Mark, 2003). It is even known as “social glue” (Chartrand & Bargh, 1999). However, without walking in others' shoes and feeling their emotions, narcissistic individuals have no reason to curtail their antisocial behavior or engage in prosocial acts. That is, narcissists are “socially glueless.” But are narcissists *capable* of being moved by others' suffering? That is, can they be empathic? The present article addresses this question and, in so doing, paves the way for future investigations and interventions to help increase prosocial behavior in narcissists.

Narcissism and Interpersonal Functioning

Subclinical (normal or everyday) narcissism entails inflated self-views and a range of efforts to enhance and protect the self, including attention-seeking, associating with high-status others, seeking distinctiveness, and taking credit for success but blaming others for failure (Carlson, Vazire, & Oltmanns, 2011; Hepper, Gramzow, & Sedikides, 2010; Horton & Sedikides, 2009; Morf et al., 2011). Although the conceptual overlap between subclinical narcissism and the clinical diagnosis of narcissistic personality disorder (NPD) remains unclear (Miller & Campbell, 2008), research demonstrates that subclinical narcissism—on which this article focuses—entails a wide range of interpersonal consequences over and above NPD. Individuals high in subclinical narcissism react aggressively to criticism or rejection, unduly deplete common resources, game-play in romantic relationships, and engage in exploitative behavior (Bushman & Baumeister, 1998; Campbell, Bush, Brunell, & Shelton,

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2005; Morf et al., 2011). They are also more likely to commit criminal acts and be incarcerated (Barry, Frick, Adler, & Grafeman, 2007; Hepper et al., 2014). Accordingly, although narcissists are socially attractive at first acquaintance (Back, Schmukle, & Egloff, 2010; Oltmanns, Friedman, Fiedler, & Turkheimer, 2004), the shine soon wears off. After repeated or emotive interactions, group members report disliking narcissists (Back et al., 2013; Paulhus, 1998), and long-term romantic partners report dissatisfaction with their game-playing ways (Campbell, Foster, & Finkel, 2002).

The literature reviewed above indicates that, although narcissism is linked to high intrapersonal functioning (e.g., high self-esteem and satisfaction with life; Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004; Zuckerman & O'Loughlin, 2009), it can have long-term interpersonal (Campbell & Campbell, 2009) and even societal (Rosenthal & Pittinsky, 2006) costs. Recent conceptualizations of sub-clinical narcissism and examinations of its factor structure highlight the importance of distinguishing relatively adaptive (i.e., authority, self-sufficiency) versus maladaptive (i.e., exploitativeness, entitlement, and sometimes exhibitionism) components (Ackerman et al., 2011; Barry et al., 2007). These terms refer to the components' relative social desirability; both adaptive and maladaptive components may serve intrapersonal functions for the narcissist, and neither reflects vulnerability, pathology, or disorder. It is primarily the maladaptive components that entail socially harmful consequences (Back et al., 2013; Barry et al., 2007; Hepper et al., 2014). Given evidence that narcissism levels are on the rise among young adults across cultures (Cai, Kwan, & Sedikides, 2012; Twenge, Konrath, Foster, Campbell, & Bushman, 2008), it is crucial to understand the social or societal impact of narcissism and investigate ways to curtail its association with decreased prosocial behavior and increased antisocial behavior.

The Role of Empathy

We argue that, above a general disinterest in communality, it is narcissists' relative absence of empathy in particular that underlies their antisocial behavior and interpersonal failures. Empathy is a core aspect of communion and concerns other-oriented cognitive and emotional responses (Abele & Wojciszke, 2007). Research has documented negative associations between narcissism and various dispositional empathy measures (Ehrenberg, Hunter, & Elterman, 1996; Ghorbani, Watson, Hamzavy, & Weathington, 2010; Gurtman, 1992; Hepper et al., 2014; Jonason, Lyons, Bethell, & Ross, 2013; Vonk, Zeigler-Hill, Mayhew, & Mercer, 2013; Wai & Tiliopoulos, 2012; Watson, Grisham, Trotter, & Biderman, 1984; Watson & Morris, 1991). Although extant definitions of empathy vary and overlap, contemporary scholars agree that it contains both cognitive and affective components (Vreeke & van der Mark, 2003). Cognitive empathy concerns understanding and considering others'

perspectives and feelings. Crucially, it involves not just theory of mind (i.e., the basic ability to infer others' mental states; Premack & Woodruff, 1978) but also the proclivity to adopt, appreciate, and take into account others' perspectives (Batson & Ahmad, 2009; Davis, 1983). Whereas recent evidence suggests that narcissists perform well on some theory of mind tests (Wai & Tiliopoulos, 2012; Vonk et al., 2013), they typically report low cognitive empathy (Ehrenberg et al., 1996; Gurtman, 1992; Hepper et al., 2014; Watson & Morris, 1991). Affective empathy concerns feeling other-oriented emotions. It involves both the vicarious experience of others' emotions or distress, and the reactive experience of sympathy (i.e., feeling touched or concerned; Davis, 1983; Vreeke & van der Mark, 2003). The measures used in past research typically assess both aspects (e.g., Davis, 1980), and narcissists consistently report low affective empathy (Ehrenberg et al., 1996; Gurtman, 1992; Hepper et al., 2014; Watson et al., 1984; Watson & Morris, 1991; Wai & Tiliopoulos, 2012; Vonk et al., 2013).

Theoretically, cognitive perspective-taking is considered a precursor or a prerequisite for experiencing affective empathy (Batson & Ahmad, 2009; Vreeke & van der Mark, 2003), and so it is unsurprising that narcissists appear to lack both facets of empathy. It is noteworthy that accompanying the generational rise in narcissism (Twenge & Campbell, 2009) is a decline in dispositional empathy among young adults (since 2000; Konrath, O'Brien, & Hsing, 2011). Although most studies have not drawn a distinction between components of narcissism when examining empathy, those that have done so generally implicate the maladaptive components (Gurtman, 1992; Hepper et al., 2014; Watson & Morris, 1991; Watson et al., 1984).

Narcissists' relative lack of empathy is likely to have consequences, because empathy plays a critical role in fostering interpersonal engagement, social bonding, and prosocial behavior. For example, individuals higher in dispositional empathy are better liked and more readily form or maintain social bonds (Chartrand & Bargh, 1999; Davis, 1983; Davis & Oathout, 1987). They also engage in more prosocial behavior such as helping, volunteering, and donating to charity (Miller & Eisenberg, 1988; Unger & Thumhuri, 1997) and in less antisocial behavior such as aggression and crime (Jolliffe & Farrington, 2004; Miller & Eisenberg, 1988). Empathy's prosocial consequences reflect its inherently personal experience—empathizing with others' emotions involves many of the same neural and cognitive processes as experiencing that emotion oneself (Lamm, Decety, & Singer, 2011). That is, empathy literally involves sharing another's pain. As a result, empathy is also reflected in autonomic arousal. In particular, empathic individuals respond to others' suffering by showing heart rate (HR) acceleration (Anastassiou-Hadjicharalambous & Warden, 2007, 2008; Zahn-Waxler, Cole, Welsh, & Cox, 1995). Moreover, such autonomic responses predict helping and other prosocial behaviors (Hein, Lamm, Brodbeck, & Singer, 2011;

Zahn-Waxler et al., 1995). Without experiencing others' emotions in this way, individuals are unmoved to behave prosocially—a deficit that also harms their social bonds.

The consequences of low empathy tally with the very interpersonal failures that befall narcissists. Stated otherwise, the relative absence of empathy may account for narcissists' propensity to engage in antisocial rather than prosocial behaviors (Bushman & Baumeister, 1998; Campbell et al., 2005) as well as their failure to be enduringly likable (Campbell et al., 2002; Paulhus, 1998). This idea is supported by the finding that narcissists' interpersonal falls from grace are accelerated by social interactions that involve emotive content (Back et al., 2013), in which empathic responding would be key for smoothing social relationships. Providing more direct support, Hepper et al. (2014) reported that a sequential pattern of low cognitive empathy and subsequently low affective empathy mediates the link between young men's narcissism and likelihood of incarceration. Narcissists' low empathy, then, may undermine their social behaviors and relationships.

Are Narcissists Capable of Empathy?

Why is empathy relatively absent in narcissists? Is it because they are incapable of being empathic or for some other reason (e.g., because they lack motivation)? A range of conditions associated with empathy-related deficits show dysfunction in neural systems responsible for empathy, implying incapability. These conditions include psychopathy, antisocial personality disorder, borderline personality disorder, autistic-spectrum disorders, alexithymia, and schizophrenia (Decety & Moriguchi, 2007; Shamay-Tsoory, Shur, Harari, & Levkovitz, 2007). Should narcissism be added to this list? Such a deficit would fit with the long-held assumption that narcissists' ego defenses are so entrenched that they rigidly deflect inconsistent or undesirable information and thereby resist change (Freud, 1931/1950; Kohut, 1971). It would also fit with Fan et al.'s (2011) finding that narcissism (assessed in a non-clinical sample with a quasi-clinical measure) relates to decreased anterior insula activation while viewing and responding to emotional faces. The anterior insula is a neural indicator of the capacity for empathy and may form a core deficit in autism (Uddin & Menon, 2009). Thus, narcissists may lack the capacity for empathy.

However, there is also reason to suppose that narcissists' relative absence of empathy has potential for change. Contemporary theoretical models emphasize the core role of motivation in underpinning narcissists' behavior (Sedikides & Gregg, 2001). For example, narcissists may sacrifice empathic responding in favor of agentic goals (Campbell & Foster, 2007) or self-enhancement goals (Morf et al., 2011). Thus, narcissists should be flexible to engage whatever processes help to serve their goals (Morf et al., 2011). If empathizing with another person is beneficial to narcissists' goals, they may be more likely to show empathy. There is also

evidence that narcissists' behavior is malleable in certain contexts. For example, Finkel, Campbell, Buffardi, Kumashiro, and Rusbult (2009) found that narcissists could become more committed relationship partners, if communal concerns were activated (e.g., via priming or via a partner's behavior). Also, Ashton-James and Levordashka (2013) reported that narcissists exhibit behavioral mimicry, if their interaction partner is presented as high (but not low) status. Thus, narcissists may be able to modulate their emotional responses to others, given the right conditions (e.g., if their motivation calls for it).

Overview

We examined, for the first time, whether narcissists are capable of empathizing with another in distress. We aim to extend past research in three novel ways. *First*, instead of dispositional empathy measures, we present a specific target person via vignette, video, or audio-recording and assess reactions to that person. This procedure is standard in the empathy literature (Batson et al., 1991; Batson, Early, & Salvarani, 1997; Davis, Conklin, Smith, & Luce, 1996) but has yet to be implemented in the context of narcissism. Adopting such a method allows us to test whether past dispositional findings replicate in a more externally valid context and whether they generalize across target persons in different (e.g., more vs. less severe) empathic situations.

Second, we test whether narcissists are capable of showing empathy when they are instructed to take the perspective of the target person. Such a manipulation—which directly targets the cognitive facet of empathy—provides a crucial first step in establishing narcissists' capabilities, because it has been shown consistently to increase affective empathy and helping behavior (Batson et al., 1991; Davis et al., 1996). If this manipulation reduces or rectifies narcissists' empathy deficit, it will demonstrate that narcissists' low empathy does not reflect inability. This finding will lay the foundations for exciting future investigation (e.g., examining the role of motivation) and interventions (e.g., educational programs, public campaigns). However, if this established manipulation does not reduce narcissists' empathy deficit, the wisdom of investing in such interventions would be in doubt.

Third, we seek to replicate findings conceptually using both self-reported empathy and autonomic arousal (i.e., HR; Anastassiou-Hadjicharalambous & Warden, 2007, 2008; Zahn-Waxler et al., 1995). This is a crucial step forward. If manipulations such as perspective-taking instructions increase narcissists' empathy, we must ascertain whether such findings reflect genuine change as opposed to demand characteristics (e.g., "I have been asked to perspective-take, so I guess I should feel compassion for her") or self-enhancement bias (e.g., "I have been asked to perspective-take, and I am awesome, so I must be really good at being compassionate"). Thus, we tested whether narcissists can be

moved—not just emotionally but physiologically—by another’s suffering.¹

To address these issues comprehensively, we examined narcissism in two ways. First, we used the overall Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988) score to mirror past research and enable conclusions to be drawn about “narcissists” as a whole. Second, we used the adaptive and maladaptive narcissism subscales, identified by Barry et al.’s (2007) factor analysis, to provide more fine-grained information about which aspects of narcissism drive the links with empathy and any moderating effects of perspective-taking instructions.

Based on literature suggesting that motivation is at the heart of narcissism, and on evidence indicating that narcissists can be malleable in certain circumstances (Ashton-James & Levordashka, 2013; Finkel et al., 2009), we hypothesized that narcissists’ relative absence of empathy would be ameliorated by perspective-taking. That is, when forced to view a situation from the distressed target’s viewpoint, even narcissists will be moved to respond empathically in terms of self-reported empathy and increased HR. Given evidence that maladaptive components of narcissism (e.g., entitlement, exploitativeness) are most closely linked to low empathy (e.g., Hepper et al., 2014; Watson & Morris, 1991), we further hypothesized that the maladaptive narcissism subscale would drive the effects. That is, it would be individuals high in maladaptive narcissism who most lack empathy for a target person and who thus respond most markedly to perspective-taking instructions.

Study 1

Study 1 comprised a first test of the relation between narcissism and empathy in the context of a specific distressed target person (presented in a written vignette). To examine the boundary conditions of the narcissism–empathy link, we varied (a) the severity of the target person’s suffering and (b) the extent to which the target person could be viewed as in control of (and thereby responsible for) their situation. Past research has exclusively studied narcissists’ global dispositional empathy and, as such, the extent to which the relation generalizes to targets in different levels of distress or targets who could be blamed for their suffering remains unclear. Thus, we deemed it important to establish these boundary conditions before attempting to increase narcissists’ empathy. We hypothesized that narcissism would be negatively associated with self-reported empathy for the distressed target. We left the moderating roles of severity and control as open research questions.

Method

Participants. Online volunteers ($N = 282$, 81.6% female, age range = 16–61, $M = 22.36$, $SD = 6.64$) were recruited via research websites (e.g., www.socialpsychology.org) and

completed measures in their own time. Participants were residents in the United Kingdom (55.0%), United States (36.5%), Canada (1.4%), and 17 other countries including those in Europe (3.5%), Asia (2.1%), and Australasia (1.1%). The majority (86.2%) were students, with the remainder employed (11.0%), home-makers (1.1%), or unemployed (1.8%).

Materials and procedure. Participants first completed the 40-item NPI (Raskin & Terry, 1988) to assess subclinical narcissism. Each item requires participants to choose between a pair of statements, one indicating high narcissism (e.g., “I have a natural talent for influencing people”) and the other low narcissism (e.g., “I am not good at influencing people”). The number of narcissistic choices is summed (present $\alpha = .85$; $M = 11.99$, $SD = 6.68$, range = 0–36). Following Barry et al.’s (2007) scoring procedure, we computed mean scores for adaptive narcissism (i.e., authority and self-sufficiency items; $\alpha = .70$) and maladaptive narcissism (i.e., entitlement, exploitativeness, and exhibitionism items; $\alpha = .75$). Consistent with past research (Barry et al., 2007; Hepper et al., 2014), adaptive and maladaptive narcissism correlated positively, $r(280) = .54$, $p < .001$.

Participants then read a vignette ostensibly written by a person named Chris, who was determined by the computer program to be the same gender as the participant. Chris described a recent relationship breakup. Participants were randomly assigned to read one version of the vignette in a 2 (severity: mild vs. severe) \times 2 (control: high vs. low) between-subjects design. The vignette indicated either that Chris missed the partner (mild) or felt overwhelmed with depression (severe), and either that Chris had seen the breakup coming and ignored the issue (high-control) or that it was out-of-the-blue (low-control).

After reading the vignette, participants completed single manipulation check items to indicate how serious Chris’ situation was (1 = *not at all*, 6 = *extremely*) and how much control Chris had over the situation (1 = *none*, 6 = *a great deal*). As intended, participants perceived Chris’ situation more serious in the high-severity ($M = 4.25$, $SD = 1.03$) than the low-severity ($M = 2.97$, $SD = 1.22$) vignette, $t(277) = 9.52$, $p < .001$. Also as intended, participants perceived Chris to have had more control in the high-control ($M = 2.88$, $SD = 1.40$) than in the low-control ($M = 2.50$, $SD = 1.15$) vignette, $t(277) = 2.53$, $p = .01$.

Finally, participants completed a 12-item measure of empathy for Chris (1 = *not at all*, 8 = *extremely*). We adapted items from Davis’ (1983) dispositional Interpersonal Reactivity Index (IRI), selecting items that could readily be reworded to refer to Chris. The measure entailed four items adapted from each of the perspective-taking (e.g., “To understand better how Chris is feeling, I am able to put myself in Chris’ shoes”), empathic concern (e.g., “I have tender, concerned feelings for Chris”), and personal distress subscales (e.g., “When reading Chris’ story, I feel apprehensive and

ill-at-ease”). Although these aspects of empathy are often treated as three subscales when assessed at the dispositional level, empathy for a specific target person may be unidimensional or yield a different structure (cf. Batson et al., 1991, 1997). Accordingly, we conducted a principal components analysis to establish the most appropriate structure for the purpose of analyses. The scree plot evinced one main component which explained more than 30% of the variance in the data, and all but one item loaded significantly ($>.33$) onto this component. This is also consistent with Cliffordson’s (2001) evidence that the IRI reflects a higher order empathy factor.² Thus, we calculated an aggregate of 11 items with the exception of the non-loading item (“When I read about Chris suffering, I am able to remain calm”). The resulting index was reliable ($\alpha = .81$) and normally distributed ($M = 4.64$, $SD = 1.01$).

Results and Discussion

We examined the association between narcissism and empathy for Chris using multiple regressions. In Step 1, we entered narcissism and variables representing control (1, -1) and severity (1, -1). In Step 2, we entered the interactions between each variable. Preliminary analyses showed that sex did not significantly alter or moderate any of the findings below, so we excluded this variable from the reported analyses.

Using the overall NPI score, narcissism predicted lower empathy for Chris, $\beta = -.17$, $p = .003$, 95% confidence interval (CI) = $[-0.05, -0.01]$, $R^2 = .03$. Empathy was significantly higher in the severe (vs. mild) condition, $\beta = .16$, $p = .005$, 95% CI = $[0.05, 0.29]$, $R^2 = .03$, but was unaffected by control level, $\beta = -.01$, $p = .88$, 95% CI = $[-0.13, 0.11]$. There were no two-way interactions, $\beta_s < |.07|$, $p_s > .30$, but a Narcissism \times Control \times Severity interaction, $\beta = .12$, $p = .047$, 95% CI = $[0.00, 0.04]$, $R^2 = .01$. Simple slopes (calculated using PROCESS; Hayes, 2013) revealed that control moderated the narcissism–empathy link in the low-severity, $\beta = -.18$, $p = .03$, 95% CI = $[-0.05, -0.003]$, but not in high-severity, $\beta = .06$, $p = .51$, 95% CI = $[-0.02, 0.04]$, condition. Narcissism was negatively associated with empathy in the low-severity, high-control condition ($\beta = -.31$, $p = .002$) but not in the low-severity, low-control condition ($\beta = .05$, $p = .70$). Given that empathy was generally lowest in this condition, this result may reflect a floor effect.

We next conducted an equivalent analysis entering adaptive and maladaptive narcissism instead of the total score. This regression showed that the association between narcissism and empathy was driven by maladaptive, $\beta = -.14$, $p = .037$, 95% CI = $[-1.59, -0.05]$, $R^2 = .02$, not adaptive ($\beta = -.08$, $p = .22$, 95% CI = $[-1.13, 0.26]$), narcissistic components. This time, these associations were unmoderated by severity or control, $\beta_s < |.10|$, $p_s > .17$, suggesting that empathy’s link with maladaptive narcissism is more robust than that with the overall NPI. Thus, as expected, maladaptive

narcissists lack empathy for a specific target character, and this occurs regardless of the severity of the situation or the extent to which the person could be held accountable for it.

Summary. The results demonstrate that narcissists lack empathy for a specific distressed person. These findings extend past evidence of narcissists lacking dispositional empathy (e.g., Hepper et al., 2014; Watson et al., 1984). The results also pinpoint the role of narcissism as driven by its maladaptive components (i.e., entitlement, exploitativeness, exhibitionism). Moreover, narcissists lack empathy virtually irrespective of whether the person’s situation is relatively mild or severe, and whether the person was somewhat in control (and thus partly culpable) or not. The link between maladaptive narcissism and low empathy is thus robust to the context surrounding the target person’s distress.

Study 2

Study 1 illustrated that narcissism entails lack of empathy for a specific person in distress regardless of this person’s predicament. This finding paves the way for investigation of whether this lack of empathy is underlain by inability or whether there is potential for change. In Study 2, we ask: Can narcissists be empathic? To begin addressing this crucial question, we adopted a well-established and face-valid manipulation of perspective-taking (Batson et al., 1991; Davis et al., 1996; Smith, Keating, & Stotland, 1989). Cognitive perspective-taking is viewed as an antecedent or a prerequisite for experiencing affective empathy (Batson & Ahmad, 2009; Vreeke & van der Mark, 2003). Thus, if an individual takes the perspective of a distressed target person, this should increase empathic responding. Indeed, perspective-taking instructions (compared with instructions to be objective) increase physiological and self-reported indices of empathy and helping behavior (Batson et al., 1991, 1997; Stotland, 1969). They do so by augmenting the overlap between self- and other-representations at a cognitive and neural level, prompting individuals to process and respond to other-related information as if it referred to the self (Ames, Jenkins, Banaji, & Mitchell, 2008; Galinsky & Moskowitz, 2000). Thus, perspective-taking instructions may work partly by priming a communal orientation (cf. Finkel et al., 2009), but this technique’s specific focus on the precursor to affective empathy makes it an ideal tool for the first test of narcissists’ ability to respond empathically.

We adapted the manipulation by using a natural-responding control condition (i.e., with no specific instruction), whereas most past studies have used an objective-instruction control condition (i.e., instructing participants to remain as objective as possible and not to get caught up in imagining the person’s feelings; Batson et al., 1991; Davis et al., 1996). This stringent control condition allowed us to emulate better the context in which participants would typically encounter a distressed person. It also allowed us to test whether the Study

1 result (i.e., the negative association between maladaptive narcissism and empathy) would replicate conceptually in the Study 2 control condition.

If narcissists' low empathy reflects *inability*, simple instructions to take a target person's perspective should not influence their empathy toward that person and their empathy should be low regardless of instruction set. However, if they are *capable* of showing empathy, perspective-taking (vs. natural-responding) instructions should ameliorate high-narcissists' lack of empathy (i.e., a Narcissism \times Condition interaction). This is a critical first step into establishing whether narcissists are capable of empathic responding.

Method

Participants. Participants were 95 female undergraduates (age range = 18-29; $M = 19.74$, $SD = 1.76$) who took part for course credit or £5 (approximately \$8 U.S.) compensation. The empathic stimulus (see below) focused on a female target character who was a victim of domestic abuse from a male perpetrator. As such, and to standardize potential gender differences, we recruited exclusively women.

Materials and procedure. Participants completed the NPI ($\alpha = .84$, $M = 11.39$, $SD = 6.43$, range = 0-24) as part of a mass online pretest at the start of the academic year. We computed adaptive narcissism ($\alpha = .64$) and maladaptive narcissism ($\alpha = .72$) scores, as in Study 1 (Barry et al., 2007).

Between 1 and 6 months later, participants came to the laboratory and watched a 10-min documentary video describing a woman's (Susan's) experiences of domestic violence. The video was originally broadcast on a national U.S. news network, and we accessed it via a public video-streaming website. It contained several emotive images and concepts but did not show violent behavior on screen, and included excerpts of a retrospective interview with Susan in which she remained calm. Before the video began, participants were randomly assigned to receive one of two instructions on the computer screen (a between-subjects manipulation). Those assigned to the perspective-taking condition were instructed to "imagine how Susan feels. Try to take her perspective in the video, imagining how she is feeling about what is happening..." (Davis et al., 1996, p. 715). Those assigned to the control condition were instructed to "imagine you are at home watching television . . . during a typical evening."

After watching the video, participants rated their empathy for Susan with 12 items (1 = *not at all*, 100 = *extremely*). We used the same measure as in Study 1, but omitted the four perspective-taking items, because perspective-taking was explicitly manipulated and would thus be vulnerable to demand characteristics. We substituted these with four newly written items that covered more comprehensively the low end of the empathic concern dimension (e.g., "To some extent, Susan must have let this happen to her"). These items correlated positively with the remainder of the empathy scale

(item-total correlations ranged from .13 to .35). In this sample, the item that we removed from Study 1 analyses demonstrated a good item-total correlation ($r = .32$), and we therefore included it in the aggregate score ($\alpha = .62$). The empathy scale again evinced a normal distribution ($M = 68.87$, $SD = 9.67$).

Results and Discussion

We conducted multiple regressions to test our hypotheses, entering narcissism and condition (1, -1) in Step 1 and their interaction in Step 2. Using the NPI total score, there was no main effect of narcissism, $\beta = .02$, $p = .83$, 95% CI = [-1.79, 2.23], or condition, $\beta = .10$, $p = .36$, 95% CI = [-1.08, 2.93], but a significant NPI \times Condition interaction, $\beta = .22$, $p = .03$, 95% CI = [0.16, 4.11], $R^2 = .05$. Simple slopes (Hayes, 2013) showed that the effect of condition was significant for high-narcissists, $\beta = .32$, $p = .03$, 95% CI = [0.03, 0.61], but not for low-narcissists, $\beta = -.13$, $p = .39$, 95% CI = [-0.41, 0.16]. The simple effect of narcissism did not reach significance in either condition, but was negative in the control condition (directionally replicating Study 1), $\beta = -.18$, $p = .18$, 95% CI = [-0.47, 0.09], and positive in the perspective-taking condition, $\beta = .25$, $p = .09$, 95% CI = [-0.04, 0.55]. Thus, whereas low-narcissists were unaffected by the manipulation—implying that they were already taking Susan's perspective—high-narcissists reported significantly higher empathy for Susan when they had (vs. had not) been instructed to take her perspective.

Next, we conducted equivalent analysis with adaptive and maladaptive narcissism. Condition significantly moderated the effect of maladaptive narcissism, $\beta = .31$, $p = .02$, 95% CI = [0.56, 5.64], $R^2 = .06$, but not adaptive narcissism, $\beta = -.03$, $p = .84$, 95% CI = [-1.36, 3.57]. As illustrated in Figure 1 (panel a), simple slopes analyses again showed a significant effect of condition for high-narcissists, $\beta = .41$, $p = .02$, 95% CI = [0.07, 0.75], but not for low-narcissists, $\beta = -.23$, $p = .16$, 95% CI = [-0.56, 0.10]. Moreover, these more fine-grained analyses revealed that the association between maladaptive narcissism and empathy for Susan was significant and negative in the control condition, $\beta = -.35$, $p = .048$, 95% CI = [-0.71, -0.01], but non-significant in the perspective-taking condition, $\beta = .29$, $p = .15$, 95% CI = [-0.10, 0.68]. That is, participants higher in maladaptive narcissism reported significantly lower empathy for Susan in natural conditions, but this shortfall was eliminated by perspective-taking instructions.

The distribution of the empathy scale and the predicted means (Figure 1, panel a) demonstrate that this finding is not due to ceiling effects. There would have been scope for low-narcissists to show an equivalent increase in empathy, had the manipulation been equally influential for them. Thus, the obtained pattern indicates that low-narcissists were likely already engaging in the level of perspective-taking directed by the manipulation. Note that past research (Batson et al.,

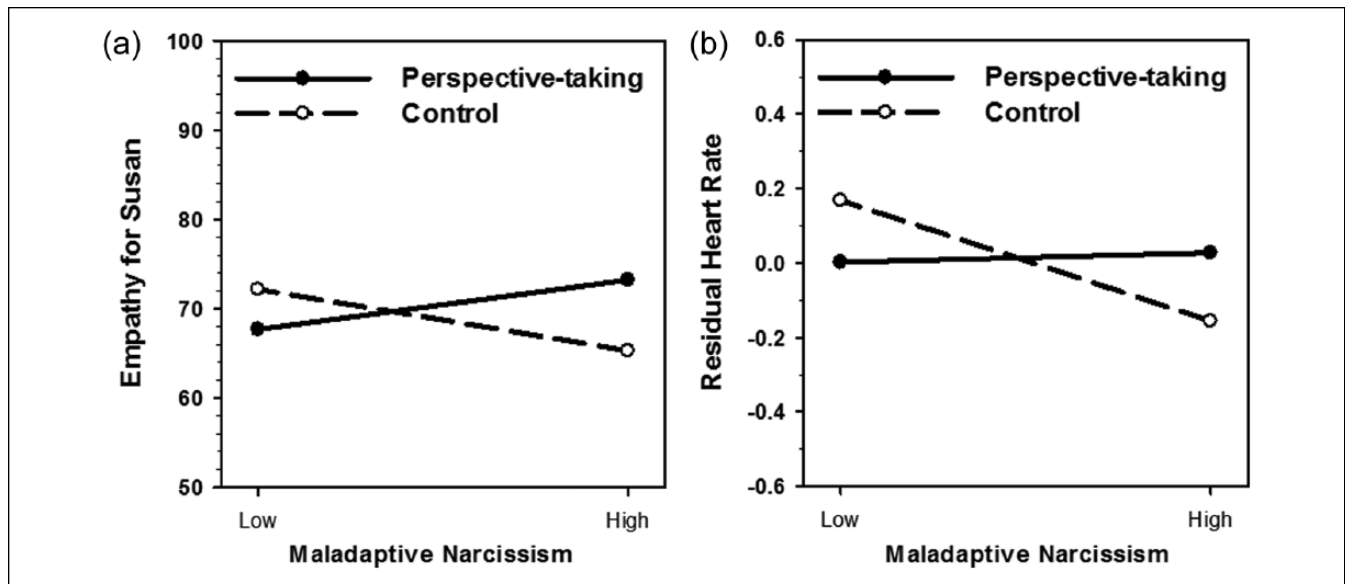


Figure 1. Perspective-taking (vs. control) instructions moderating the association between maladaptive narcissism and (a) self-reported empathy for the target character in Study 2 and (b) residual heart rate (controlling for baseline) in Study 3.

Note. Predicted means are for one SD above and below the mean of maladaptive narcissism, and control for adaptive narcissism and the Adaptive Narcissism \times Condition interaction.

1991; Davis et al., 1996) has used an objective-instruction (not a natural-responding) control condition, which would have reduced empathy below its natural baseline. Here, we intentionally sampled this natural baseline and thus would not necessarily expect to elevate the empathy of participants who are naturally empathic.

Summary. These findings provide initial evidence that individuals high in narcissism, though inclined to lack empathy, are capable of reporting higher empathy for a target person, if instructed to take that person's perspective while exposed to their distressing experiences. Although the hypothesized interaction was significant for the overall NPI, it is noteworthy that (in this smaller sample compared with Study 1) the negative association between narcissism and empathy in the control condition was significant only for maladaptive narcissistic components. This results pattern corroborates the notion that it is narcissists' entitlement, exploitativeness, and self-centered exhibitionism that underlie some of their interpersonal problems. The findings are promising in suggesting that the detrimental link between maladaptive narcissism and empathy can be ameliorated by perspective-taking instructions.

Study 3

The results of Study 2 demonstrated that narcissists are capable of manifesting higher empathy when they have been instructed to view a situation from the target person's perspective. But is this finding reflective of true change or just a change in reporting habits? In Study 3, we addressed this

question by measuring not self-reported empathy but autonomic arousal. Increases in HR reliably indicate empathic response to others' emotions or suffering (Anastassiou-Hadjicharalambous & Warden, 2007, 2008; Zahn-Waxler et al., 1995). If high-narcissists evince lower HR than low-narcissists when exposed to an empathic stimulus, but this pattern is moderated by perspective-taking instructions (in a parallel pattern to Study 2), then we can be reasonably confident that a genuine change in processing and responding to the other person has occurred.

Method

Participants. Participants were 88 undergraduates (68.2% female; age range = 18-33, $M = 20.86$, $SD = 3.28$) who took part for course credit or £5 (approximately \$8 U.S.) compensation.

Materials and procedure. Participants completed the NPI ($\alpha = .80$, $M = 11.96$, $SD = 5.81$, range = 2-30) either as part of a mass online pretest ($n = 37$) or at the very end of the lab session, if they had not completed the pretest ($n = 51$). Narcissism scores did not differ significantly depending on when the scale was completed. We calculated adaptive narcissism ($\alpha = .65$) and maladaptive narcissism ($\alpha = .64$) scores, as in Studies 1 and 2 (Barry et al., 2007).

We invited participants to the laboratory and introduced them to the equipment for recording HR. We then placed two electrocardiograph (ECG) electrodes on participants' right shoulder and left ankle. We recorded autonomic signals with a Biopac MP150 system including an amplifier for ECG

collection. Participants sat at a computer, which timed and provided all instructions. Before beginning the main part of the study, participants rested for 5 min while baseline HR was recorded.

Next, participants listened to a 5-min audio blog recording ostensibly narrated by a student named Jenny who described her recent relationship breakup. The audio was recorded for the purpose of this study by a drama student. Jenny's situation was presented as somewhat serious (i.e., Jenny's life had been significantly disrupted, she felt lost, and crying could be heard near the end). Before the audio began, participants were randomly assigned to receive one of two instructions on the computer screen comprising the same perspective-taking or natural-responding conditions as in Study 2. We assessed HR throughout the 5-min interval. Afterward, participants completed the NPI, if they had not completed the mass pretest, and were detached from the physiological equipment.

Results and Discussion

Data preparation and analysis strategy. We cleaned the ECG data by removing artifacts, and calculated average HR across (a) the 5-min baseline and (b) the 5-min empathic audio-recording. Due to equipment failure or corrupted data files, we were unable to obtain usable HR data for 11 participants; thus, we conducted analyses with $N = 77$.

None of the narcissism indices correlated with baseline HR, $r_s < .10$, $p_s > .37$. To test the hypotheses, we conducted multiple regressions predicting HR during the empathic audio-recording. In Step 1, we controlled for baseline arousal; in Step 2, we added condition (1, -1) and narcissism; and in Step 3 we added Narcissism \times Condition interactions. Supplementary analyses showed that participant sex did not alter or moderate any of the reported findings, so we will not discuss this variable further.

Hypothesis tests. Baseline HR explained 94% of the variance in HR during the audio-recording. Using the NPI total score, results revealed a significant main effect of narcissism, $\beta = -.07$, $p = .01$, 95% CI = [-0.22, -0.03], $R^2 = .08$, but no effect of condition, $\beta = .01$, $p = .86$, 95% CI = [-0.54, 0.65], and no interaction, $\beta = .02$, $p = .47$, 95% CI = [-0.07, 0.15]. That is, as well as self-reporting lower empathy (Studies 1 and 2), high-narcissists show less of an autonomic response when exposed to a distressed target person regardless of instruction set.

We next examined adaptive and maladaptive narcissism as simultaneous predictors. Conceptually replicating Studies 1 and 2, HR was significantly predicted by maladaptive narcissism, $\beta = -.07$, $p = .047$, 95% CI = [-9.14, -0.06], $R^2 = .05$, but not adaptive narcissism, $\beta = -.01$, $p = .82$, 95% CI = [-3.86, 3.07]. Moreover, conceptually replicating Study 2, condition moderated the association between maladaptive narcissism and HR, $\beta = .09$, $p = .01$, 95% CI = [1.49, 10.60], $R^2 = .09$ (Figure 1, panel b). The interaction was not

significant for adaptive narcissism, $\beta = -.05$, $p = .13$, 95% CI = [-5.96, 0.77]. Simple slopes (Hayes, 2013) revealed a significant effect of condition for high-maladaptive narcissists, $\beta = .09$, $p = .03$, 95% CI = [0.01, 0.18], but a marginal effect for low maladaptive narcissists, $\beta = -.08$, $p = .050$, 95% CI = [-0.17, 0.0001]. The association between maladaptive narcissism and HR was significant and negative in the control condition, $\beta = -.17$, $p = .002$, 95% CI = [-0.27, -0.07], but non-significant in the perspective-taking condition, $\beta = .01$, $p = .77$, 95% CI = [-0.08, 0.10]. In all, participants higher in maladaptive narcissism showed significantly lower HR when responding to Jenny's story naturally, but this shortfall was eliminated by perspective-taking instructions.

Summary. The findings indicate that the low empathy that narcissists (especially those high in the maladaptive components) report on questionnaire measures is not reflective of self-reporting bias, but it is underlain by low autonomic arousal. In conditions of natural responding, high (vs. low) narcissists evinced significantly lower HR while exposed to a target character's distress. This suggests that narcissists are less emotionally affected by the empathic stimulus: Their lack of empathy is more than skin-deep. However, crucially, taking the character's perspective wiped out the decline in HR evinced by those high in maladaptive narcissism. Perspective-taking led high-maladaptive narcissists to respond to another's distress with the same level of autonomic arousal as low maladaptive narcissists.

General Discussion

Lack of empathy may be a key factor underlying the socially harmful behavior and interpersonal failures of individuals high in narcissism. In the present research, we sought to re-examine the link between narcissism and empathy by considering components of narcissism, reactions to a specific target person's suffering, and autonomic arousal. In addition, we sought to test, for the first time, whether narcissists are capable of empathizing when instructed to take the target's perspective. In so doing, we aspired to establish the basic tenet that narcissists can be empathic. This is a crucial assumption that would underpin efforts to intervene in narcissists' antisocial behavior and relationship outcomes.

In accordance with the literature, all three studies showed that narcissists (especially those high in the maladaptive components) are low in empathy, even toward a specific target. This finding extends prior evidence concerning dispositional empathy (e.g., Hepper et al., 2014; Watson et al., 1984; Watson & Morris, 1991). Studies 2 and 3, however, suggested that narcissists are capable of empathic responding if forced to take another's perspective (cf. Batson et al., 1991; Davis et al., 1996). Thus, the reason for their low empathy is not inability. Crucially, both the negative narcissism-empathy association and the moderating role of perspective-taking instructions were replicated in the case of both self-reported

empathy and autonomic arousal (i.e., HR). Past research has established autonomic responses as objective signs of empathy (Anastassiou-Hadjicharalambous & Warden, 2007, 2008; Zahn-Waxler et al., 1995). Therefore, the current findings do not simply reflect biases such as demand characteristics or self-enhancement. Instead, they imply that narcissists' low empathy is automatic (instead of consciously suppressed or under-reported), and also that perspective-taking induces genuine change in the way that narcissists process a distressed person's experience. The present studies replicated the same fundamental effect in three independent samples on different dependent measures. Although the sample sizes in Studies 2 and 3 were relatively modest, this replication indicates that sufficient power was achieved in each study and provides confidence that the effects would be replicated in future.

Implications

The findings have implications for understanding narcissists' documented interpersonal failures. We have demonstrated that, when high-narcissists encounter another person who is suffering, they do not experience the increased HR response that low-narcissists do. This finding implies that narcissists do not automatically process others' experiences using the neural-cognitive networks involved in processing self-related information (Lamm et al., 2011). Such a suggestion is consistent with high-narcissists' lack of anterior insula activation when exposed to emotional faces (Fan et al., 2011). Because narcissists are not physiologically "moved" by another's distress and do not consciously experience empathy, they will not be motivated to communicate sympathetically to the other person, offer to help, or inhibit antisocial behavior (Hein et al., 2011; Zahn-Waxler et al., 1995). This notion tallies with the finding that low empathy mediates the link between narcissism and being in prison (Hepper et al., 2014). In all, past and present findings imply that low empathy may also underlie narcissists' propensity to exploit common resources (Campbell et al., 2005), game-play with romantic partners (Campbell et al., 2002), and cheat (Brown, Budzek, & Tamborski, 2009). Moreover, low empathy is visible to interaction partners in the form of reduced rapport and interpersonal mimicry, leading to lower liking (Chartrand & Bargh, 1999). Accordingly, narcissists' low empathy may account for the deterioration in their likability over time (Back et al., 2013; Paulhus, 1998) and the dissatisfaction of their long-term romantic partners (Campbell et al., 2002). We are currently extending the present research to real social interactions and ongoing relationships.

The results also have implications for developing intervention strategies. We showed that, when instructed to take the perspective of a suffering target person, the deficit in empathy and HR associated with (maladaptive) narcissism is eliminated. As such, given the right conditions, narcissists can be moved to empathize with another person to the same

extent as low-narcissists. This notion builds on other evidence that narcissists' interpersonal behavior can be malleable—for example, in interactions where they could gain something from building rapport (Ashton-James & Levordashka, 2013) or when communal concerns are activated (Finkel et al., 2009). Arguably, an increase in empathy might have underpinned both these prior findings. If so, targeting empathy in education, training, or public campaigns might be an efficient way to get to the heart of narcissists' deficits. It bears mention that perspective-taking (vs. natural-responding) instructions descriptively, if not significantly, *decreased* empathy and HR for low-narcissists in our studies, implying that making explicit a process that is typically natural and automatic may have interfered with its efficacy. Past empathy research has used an objective-responding control condition (Batson et al., 1991, 1997; Davis et al., 1996), and so it is impossible to compare this finding with extant findings. Yet, any perspective-taking intervention might need to be targeted only at high-narcissists. Development of such interventions is likely to help improve narcissists' interpersonal relations and societal contributions.

The reported research is the first step along such an ambitious path. The present findings demonstrate that narcissists' low empathy does not reflect inability, but they cannot tease apart whether their low empathy reflects a relative skill deficit (e.g., they cannot empathize unless they exert effort), lack of motivation (e.g., low communal concern), or motivation to avoid empathizing (e.g., it allows them to exploit the other person, self-enhance, or show off). The last possibility is consistent with the finding that maladaptive narcissistic components (i.e., entitlement, exploitativeness, exhibitionism) drove the obtained effects. Future research should examine the mechanisms that underlie effects of explicit perspective-taking instructions. For example, if perspective-taking works by activating communal concerns, a more subtle approach would be to prime communality (cf. Finkel et al., 2009). If perspective-taking works by providing an alternative means to self-enhance (e.g., by succeeding on the task at hand), a more long-lasting approach would be to make perspective-taking intrinsically appealing to narcissists. Given narcissists' agentic and self-enhancement motivations (Campbell & Foster, 2007; Morf et al., 2011), framing perspective-taking as a desirable skill may allow narcissists to find it rewarding. This should then activate the relevant neural processes (Lamm et al., 2011) and trigger affective empathy (Vreeke & van der Mark, 2003).

An additional question concerns whether narcissists can perspective-take *accurately*. That is, even when perspective-taking, do they correctly interpret what the target is thinking or feeling and hence respond appropriately? Individuals differ on theory of mind ability, which undergirds understanding of others' thoughts and feelings (Premack & Woodruff, 1978). Evidence diverges on whether narcissists show deficits in theory of mind (Vonk et al., 2013) or not (Wai & Tiliopoulos, 2012). Narcissists also overestimate their ability

on social judgment and interpersonal sensitivity tasks (Ames & Kammrath, 2004). Further research is needed to examine whether narcissists are accurate in decoding others' emotions in empathy-relevant interactions and whether this empathic accuracy can be improved via perspective-taking or other techniques.

Limitations

The present studies are not without limitations. Although we tested the effect of target severity and control on narcissists' empathy, we focused on suffering that concerned close relationships (i.e., breakup or domestic violence). Future investigations could examine different contexts (e.g., physical pain, failure, poverty). Similarly, all of our target persons were strangers; another boundary condition to narcissists' empathy deficit might be acquaintance or intimacy level. Given that narcissists self-enhance even when comparing themselves with a partner (Campbell, Reeder, Sedikides, & Elliott, 2000) and game-play in romantic relationships (Campbell et al., 2002), it is likely that the findings would extend to ongoing relationships. It would also be beneficial to establish the influence of narcissism over and above the other Dark Triad traits: psychopathy and Machiavellianism (Paulhus & Williams, 2002). We would expect narcissism uniquely to exhibit the obtained patterns (i.e., reduced empathy that is ameliorated by perspective-taking), given the theoretical role of motivation in narcissism and not the other traits (Sedikides & Gregg, 2001) and given that narcissism relates to low dispositional empathy above and beyond psychopathy and Machiavellianism (Jonason et al., 2013). Finally, it would be valuable to compare the patterns obtained for normal narcissism with pathological or vulnerable narcissism (cf. Hepper et al., 2014; Sylvers et al., 2008; Vonk et al., 2013).

We did not distinguish between different facets of empathy. Of particular relevance, using the present measures it was impossible to compare vicarious distress for the other person (i.e., Davis's [1980] empathic concern) with egocentric distress for the self (i.e., Davis' personal distress). The self-reported empathy measure showed a unifactorial structure, indicating that participants' responses did not differentiate between these constructs. This structure replicates Batson et al.'s (1997) finding that personal distress, when presented with a target person, does reflect empathic concern, but in the future it would be useful to tease apart these facets of empathy. Similarly, physiological arousal could plausibly indicate distress either for self or other. It would be informative to compare narcissists' reactions to an empathic target with their reactions to other aversive or emotional stimuli (e.g., noise blast; Kelsey, Ornduff, McCann, & Reiff, 2001). The comparability of findings for HR and self-reported empathy increases confidence that the two assess related processes. However, it is plausible that narcissists' augmented empathy when perspective-taking resulted from an increased salience of the idea of one's own suffering or from anxiety about how

to deal with the situation. That is, given their self-centeredness, narcissists may be inclined to imagine *themselves* in the distressing situation rather than imagining the *other person's* suffering—which yield different emotional reactions (Batson et al., 1997). Future empirical efforts would need to untangle this issue, given that egoistical distress may inhibit prosocial behavior (Batson et al., 1997).

Coda

Although it appears that narcissists' low empathy is relatively automatic and reflected at a physiological level, there is potential for change. Research should focus further on the narcissism–empathy relation, given recent evidence of rising narcissism levels and falling empathy levels (Konrath et al., 2011; Twenge et al., 2008). We hope that the present findings represent a first step toward better understanding of how narcissists can be moved by others, thereby improving their social behavior and relationships.

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Notes

1. Sylvers, Brubaker, Alden, Brennan, and Lilienfeld (2008) examined the link between narcissistic personality disorder (NPD) and physiological responses to emotional images. NPD diagnosis related to decreased respiratory sinus arrhythmia (an index of parasympathetic nervous system activation associated with empathy) while watching happy images of others. However, those findings refer to the clinical diagnosis of NPD—a rare disorder (~3%; Johnson et al., 2000)—whereas the present research focuses on subclinical narcissism, which is prevalent in the general population. Moreover, no research on narcissism and empathy has used empathy-evoking stimuli such as stories.
2. Although we also explored the possibility of a two-factor solution, the items did not load onto the two factors in any theoretically meaningful way.

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