"I alone can fix it": is social courage a bright side of narcissism?

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Abstract

Purpose – Narcissism is characterized by grandiosity, and it is included in the Dark Triad with Machiavellianism and psychopathy. Narcissism relates to many detrimental outcomes, but a growing stream of research has investigated beneficial outcomes of the Dark Triad. The authors continue this stream of research by assessing the relation of narcissism with social courage behaviors, which are prosocial actions with personal social risks. The authors propose that this relation is mediated by self-deceptive enhancement and subjective invulnerability and also test these relations while including the other Dark Triad dimensions.

Design/methodology/approach – The authors perform two survey studies to investigate our research questions. The first utilizes a cross-sectional approach, whereas the second utilizes a time-separated approach.

Findings – The results of this study show that narcissism has an indirect effect on social courage via both mediators, and it also produced a significant direct effect. Machiavellianism and psychopathy did not produce any reliable effects on social courage – whether direct or indirect.

Practical implications – The authors support that a "dark" trait relates to a "bright" outcome, but also that a bright outcome relates to a dark trait. These findings link the narcissism and social courage to novel theoretical frameworks, such as those associated with ethical decision making and self-regulation, which opens many directions for future research on both constructs.

Originality/value – The current article addresses two recent calls for novel research: the study of courage as well as positive outcomes of negative traits. It also adds much-needed nuance to current research on narcissism and courage.

Keywords Courage, Social courage, Values, Virtues, Narcissism, Machiavellianism, Psychopathy, Dark Triad

Paper type Research paper

The Dark Triad is a joint conceptualization of three maladaptive personality traits seen relatively frequently in the general population, and it includes narcissism, Machiavellianism and psychopathy (Jakobwitz and Egan, 2006; Jones and Paulhus, 2014). The former of these, narcissism, is the primary focus of the current article. Narcissism is "a relatively stable individual difference consisting of grandiosity, self-love and inflated self-views" (Campbell *et al.*, 2011, p. 269) when studied at the subclinical level as done in the current article and most research involving the Dark Triad (Furnham *et al.*, 2013; Jones and Paulhus, 2014; Maples *et al.*, 2014). Narcissism detrimentally influences many personal and work outcomes, including well-being, counterproductive work behaviors (CWBs), organizational citizenship behaviors (OCBs) and core performance (Palmer *et al.*, 2017; Spain *et al.*, 2014; Zettler and Solga, 2013). While narcissism broadly relates to negative outcomes, some authors have investigated the "bright side" of the Dark Triad (Fatfouta, 2019; Smith *et al.*, 2018; Wu *et al.*, 2019). For instance, Machiavellians perform more OCBs than non-Machiavellians [1] in high involvement management climates (Webster and Smith, 2019), and narcissists are often adept leaders because they mobilize followers toward their vision (Maccoby, 2000). This has resulted in calls for studies on the "bright" outcomes of "dark" traits (Fatfouta, 2019; Smith *et al.*, 2018; Wu *et al.*, 2019). In the current article, we satisfy this call by investigating the relation of narcissism with social courage.

Social courage behaviors are intentional and deliberate actions performed primarily for prosocial reasons with substantial risk to the actor's social well-being (e.g. relations, public image) (Detert and Bruno, 2017; Howard, 2019; Howard and Cogswell, 2019; Howard *et al.*, 2017). In the context of work, social courage behaviors can include admitting to mistakes

despite appearing incompetent, expressing concerns despite appearing too negative, and reporting a deviant coworker despite risking friendships. Such behaviors have long been argued to be pivotal for organizational success, and they are often considered valuable OCBs or even core performance (Deutsch, 1961; Hannah *et al.*, 2011; Larsen and Giles, 1976). For this reason, many authors have called for further research on the antecedents of social courage behaviors to better understand employee and ultimately organizational success (Detert and Bruno, 2017; Howard and Cogswell, 2019; Howard *et al.*, 2017; Koerner, 2014; Schilpzand *et al.*, 2015). By studying the relation of narcissism and social courage, we simultaneously satisfy this second call.

Studying the relation of narcissism with social courage does more than satisfy calls for research, however. The current investigation also addresses uncertainties in the present literature by uncovering complexity in both narcissism and social courage. If a relation is supported, our studies can suggest that narcissism should be included as a key determinant of social courage in associated theoretical frameworks (e.g. Schilpzand *et al.*, 2015) and perhaps even integrated into broader models of ethical decision making (Heyler *et al.*, 2016; Lehnert *et al.*, 2016; Schwartz, 2016). Such a finding would indicate that both present models of social courage and ethical decision making are incomplete, and the known positive outcomes of narcissism are underestimated. Similarly, established personal antecedents of social courage are almost entirely limited to overtly beneficial individual differences (e.g. grit, prosocial motivation), and it is presently unclear whether any negative traits relate to this beneficial outcome (Howard and Cogswell, 2019; Howard *et al.*, 2017). Supporting that a dark trait may too predict social courage can provide a more nuanced understanding of social courage, and it can link the outcome to theoretical frameworks associated with the dark trait. More studies have been performed on narcissism than social courage, and such an integration would provide much-needed theoretical lenses to study the outcome (e.g. self-regulation theories; Collins and Stukas, 2008; Grijalva and Zhang, 2016).

To establish a relation between narcissism and social courage, we investigate two explanatory mechanisms. It is important to not only identify whether a relation exists between the two, but also why a relationship exists. We propose that the relation of narcissism and social courage behaviors is mediated by self-deceptive enhancement and subjective invulnerability. Self-deceptive enhancement refers to subconscious positive biases in one's own characteristics (Davies *et al.*, 1998; Paulhus, 1998), whereas subjective invulnerability refers to the belief that oneself is particularly resilient to risks and harm – whether physical, emotional or social (Hill *et al.*, 2012; Lapsley and Hill, 2010). Narcissists both overestimate their abilities and devalue the risks in their actions, which partially explains their heightened sense of importance and tendency to ignore risks (Campbell and Miller, 2011; Crysel *et al.*, 2013; Forsyth *et al.*, 2012). Because of these perceptual tendencies, we suggest that narcissists are more likely to perform social courage behaviors because they overestimate their probability of success (self-deceptive enhancement) and overlook associated social risks (subjective invulnerability). While these people may not be driven by prosocial motivation, the small value that they associate with risks may lead them to perform courageous behaviors. We also test whether narcissism relates to social courage beyond the other two traits of the Dark Triad, Machiavellianism and psychopathy, to further support our rationale, as this analysis can address alternative explanations for our results. Therefore, the current article provides a robust investigation into the relation of narcissism and social courage.

Background
Literature review
Narcissism. Narcissism is characterized by "grandiosity, self-love, and inflated self-views" (Campbell *et al.*, 2011, p. 269), which is reflected in narcissists' typical patterns of

self-perceptions and self-regulatory strategies (Campbell *et al.*, 2011; Campbell and Miller, 2011). Narcissists have overly positive perceptions toward themselves, such that they perceive themselves as being special, unique and above-average. This inflated self-view partially contributes to their sense of entitlement and strong desire for power and esteem, which narcissists often fulfill using deviant and destructive methods (e.g. lying; Furnham *et al.*, 2013; Grijalva *et al.*, 2015; Twenge and Campbell, 2003). Likewise, narcissists' self-regulatory strategies are often problematic. They seek attention, exaggerate their accomplishments and deceive others. In turn, narcissists often deceive themselves. That is, they often convince others, and in turn themselves, that they have accomplished their personal goals despite evidence of the contrary, which partially explains their inflated views of themselves (Paulhus, 1998; Paulhus *et al.*, 2003; Paulhus and Williams, 2002).

These regulatory strategies often result in detrimental outcomes. Narcissists are more likely to engage in aggressive behaviors toward others, either subtle (e.g. undermining) or explicit (e.g. bullying), especially if they feel that their self-worth is being threatened (Campbell *et al.*, 2011; Palmer *et al.*, 2017; Zettler and Solga, 2013). In the workplace, this often results in individual-focused CWBs (CWB-I), which are known to damage both the well-being of others and organizational performance (Spain *et al.*, 2014). Likewise, while narcissists are known to perform OCBs if they can serve self-serving purposes (e.g. impression management), they are overall less likely to perform OCBs (Bourdage *et al.*, 2009; Campbell *et al.*, 2011; Judge *et al.*, 2006). Even the core job performance of narcissists is unclear. Narcissists are more likely to provide elevated self-reports of performance, take credit from others, and publicize their accomplishments (Campbell and Miller, 2011; Furnham *et al.*, 2013). Depending on the measurement method, this may cause narcissists to appear to have elevated job performance; however, objective indicators of job performance suggest that no relation or even a negative relation exists between narcissism and job performance (Campbell *et al.*, 2011).

At the same time, these self-regulatory strategies also relate to beneficial outcomes, which have received increased scholarly attention in recent years (Fatfouta, 2019; Smith *et al.*, 2018; Wu *et al.*, 2019). Subclinical narcissists, as studied in the current article, are known to have high self-esteem and overall positive well-being, which is believed to be due, in part, to their elevated sense of self (Collins and Stukas, 2008; Grijalva and Zhang, 2016; Sedikides *et al.*, 2002). Narcissists are also known to develop favorable first impressions and motivate others around their visions, which may partially explain why narcissists are frequently seen in leadership positions – both in organizations as well as politics (Campbell *et al.*, 2011; Maccoby, 2000). From these findings and many others, it should be recognized that narcissism is not entirely detrimental. Narcissism in small amounts is certainly beneficial for personal well-being, and it can also serve useful organizational functions in the correct circumstances.

Cumulative findings on the benefits of narcissism have resulted in the recognition that current perspectives on narcissism may be too narrow (Fatfouta, 2019; Smith *et al.*, 2018; Wu *et al.*, 2019). Because narcissism is traditionally viewed as a maladaptive trait, our understanding of the trait may be overly focused on its detrimental outcomes, causing researchers to overlook its beneficial aspects. These oversights may have also caused researchers to exclude narcissism from relevant theoretical models associated with beneficial outcomes, such as ethical decision-making models, resulting in a call for research on the bright side of narcissism (Fatfouta, 2019; Smith *et al.*, 2018; Wu *et al.*, 2019). In the current article, we extend modern research by studying the relation of narcissism and social courage, described below.

Social courage. The nature of courage has been debated for centuries (Jenyns, 1776; Rachman, 1990; Wagner, 1894), and only relatively recently have researchers agreed on a common definition for the construct. This definition was created by Rate *et al.* (2007), and it is a "(1) willful, intentional act, (2) executed after mindful deliberation, (3) involving objective

substantial risk to the actor, (4) primarily motivated to bring about a noble good or worthy end" (p. 95). Many authors have supported the validity of this definition (Hannah *et al.*, 2011; Harbour and Kisfalvi, 2014; Sekerka *et al.*, 2009). It is likely the most commonly-used definition of courage applied in modern research, and authors applying Rate's definition typically consider a "noble good or worthy end" to be synonymous with a prosocial outcome (Detert and Bruno, 2017; Howard *et al.*, 2017; Koerner, 2014; Schilpzand *et al.*, 2015; Simola, 2015). Therefore, many researchers agree that courage is an (1) intentional, (2) deliberate, (3) risky and (4) prosocial action.

It should be recognized, however, that courage can be conceptualized as both a trait and a behavior. Pury and Starkey (2010) consider this the difference between treating courage as an accolade and as a process. Accolade definitions typically describe courage using vague and varying terms, and they are rarely able to differentiate courageous individuals from non-courageous individuals despite their mainstream popularity. For instance, many awards for courage (e.g. Arthur Ashe Courage Award, John F. Kennedy Profile in Courage Award) are given to those that demonstrate "bravery", "valor", "integrity" and "morals", and other similar terms; however, these terms do little more to describe courage than the word "courage" itself. Due to these weaknesses, accolade definitions are infrequent in research. Alternatively, process definitions of courage typically focus on distinguishable characteristics of behaviors that can be more clearly categorized as courageous or non-courageous. For instance, Rate's definition is a process definition, and a behavior that does not satisfy each of its elements cannot be considered courageous. Process definitions can also identify those who possess the trait of courage; individuals that habitually perform courageous behaviors are considered courageous. While we do not study trait courage in the current article, the inherent link between behavioral and trait courage may allow the current results on behavioral courage to generalize to trait courage – a consideration discussed below. Due to these benefits of process definitions of courage, they are more commonly used in research, and we therefore apply Rate's process definition.

Courage is also multidimensional, and people perform certain courageous behaviors but retreat from others (Koerner, 2014; Rate *et al.*, 2007; Sekerka *et al.*, 2009). Researchers differ on the number and nature of proposed courage dimensions, but three repeatedly arise in scholarly discussions: physical, moral and social courage (Goud, 2005; Pury *et al.*, 2007; Woodard and Pury, 2007). In the current article, we focus on social courage because (1) as opposed to physical courage, it has been argued to be relevant to most any workplace; (2) as opposed to moral courage, its definition is more agreed upon and empirically supported; and (3) as opposed to moral courage, again, it has an associated measure with robust psychometric and validity support (Detert and Bruno, 2017; Howard, 2019; Howard and Cogswell, 2019; Howard *et al.*, 2017; Schilpzand *et al.*, 2015). These characteristics make social courage ideal for empirical research.

Social courage is an intentional, deliberate and prosocial action that risks the actor's social esteem, which may include their relations and public self-image (Detert and Bruno, 2017; Howard, 2019). Social courage is exhibited in several common workplace interactions. For instance, an employee demonstrates social courage when they correct a coworker, as they risk damaging their relation with that coworker to improve their organization; likewise, an employee shows social courage when they volunteer to give a presentation, as they risk appearing unknowledgeable in front of an audience for the benefit of their organization. Social courage is also exhibited in rarer workplace interactions. Whistleblowing the unethical actions of an organization is often considered a hallmark example of extreme social courage. Thus, social courage behaviors can be seen all throughout an organization's hierarchy.

Further, some social courage behaviors are included in the scope of core performance, whereas others are included in the scope of OCBs. Despite their associations, social courage

behaviors have differing antecedents and outcomes than core performance and OCBs (Howard and Cogswell, 2019; Howard *et al.*, 2017). It is inappropriate to assume that prior observations regarding OCBs and performance hold for social courage behaviors. Instead, it is necessary to independently study social courage as done in the current article, as such studies can improve organizational outcomes by identifying approaches to elicit courage in organizations.

Due to the relative nascency of research on the construct, few authors have studied the antecedents of social courage behaviors (Howard, 2021; Howard and Cogswell, 2019; Howard and Fox, 2020). Of those that have, the identified antecedents are largely focused on positive individual differences (e.g. grit, prosocial motivation). This trend mirrors research on narcissism. Research on narcissism often associates the construct with detrimental outcomes because it is believed to be a negative trait; research on social courage may also associate the outcome with positive traits because it is believed to be a beneficial outcome. The current article furthers modern research by associating social courage with a negative trait, demonstrating that the antecedents of the behavior may be broader than currently assumed. By doing so, we can also link social courage with frameworks previously used to understand narcissism. Therefore, we hypothesize how narcissism relates to social courage via two mediating mechanisms below.

Hypothesis development
As mentioned, narcissists have overly positive perceptions toward themselves, and they are known to deceive themselves to maintain their self-esteem. This deception causes narcissists to believe that they possess certain capabilities or achieved certain accomplishments despite evidence to the contrary (Paulhus, 1998; Paulhus *et al.*, 2003). Given these patterns, we assert that narcissism positively relates to self-deceptive enhancement and subjective invulnerability, which are the explanatory mechanisms for the relation between narcissism and social courage.

The relation of narcissism and self-deceptive enhancement is clear. Narcissists are conscious of some self-presentation perceptions and behaviors, but they also engage in subconscious self-presentation (Paulhus *et al.*, 2003; Paulhus and Williams, 2002; Raskin *et al.*, 1991; Watson and Morris, 1991). Narcissists systematically rate themselves as more physically attractive, intelligent and creative than indicated by objective measures or others' ratings of them (i.e. self-insight bias; Grijalva and Zhang, 2016), and they do so at a greater extent than those who score low in narcissism. Further, those who score low in narcissism are less likely to self-enhance if they believe that their ratings will then need to be defended; however, narcissists are unwavering at the prospect of defending their ratings, and they will continue to self-enhance despite knowing that their assessments will be contested (Collins and Stukas, 2008; Sedikides *et al.*, 2002). This suggests that narcissists genuinely believe that they possess these exaggerated characteristics, which is also supported by a multitude of other study designs investigating this effect (see Grijalva and Zhang, 2016 for descriptions of these other studies and their designs).

Narcissists' tendency to self-enhance is believed to be consciously and subconsciously driven by self-regulatory strategies to protect their self-esteem (Horvath and Morf, 2010; Raskin *et al.*, 1991; Wallace, 2011). That is, narcissists may succumb to feelings of inferiority if they are able to acknowledge that their characteristics are not as positive as they believe them to be, resulting in significant detriments to their self-esteem. This is believed to also explain their exaggerated defensive reactions to self-esteem threats; narcissists tend to react more severely to self-esteem threats than those who score low in narcissism because they may suffer more from these threats than others (Baumeister *et al.*, 2000; Bushman and Baumeister, 1998). Because the tendency to subconsciously enhance perceived personal characteristics is

a behavior that is closely tied to essential aspects of narcissism, namely elevated self-worth, we hypothesize that narcissism positively relates to self-deceptive enhancement.

H1. Narcissism positively relates to self-deceptive enhancement.

Due to their inflated sense of self, we also suggest that narcissists are less likely to perceive personal risk. Compared to people of equal ability, narcissists perceive themselves as having more favorable characteristics and being more capable (Campbell *et al.*, 2004; Crysel *et al.*, 2013; Furnham *et al.*, 2013; Grijalva *et al.*, 2015). Whereas a person of typical ability may stray from certain activities because they feel that they would be unsuccessful, narcissists of typical ability may strive toward these activities because they perceive their abilities as being extraordinary. In evaluating these activities, narcissists may estimate the associated risks to be less severe. Because narcissists systematically perceive themselves to be more capable, they may also believe that they could address any associated risks. In other words, while those who score lower in narcissism may perceive a risk to be insurmountable, a narcissist of equal ability may perceive the same risk to be quite addressable due to their inflated sense of self.

Many constructs could represent narcissists' systematic associations with personal capabilities and risk. In the current article, we use the construct of subjective invulnerability, which refers to beliefs that oneself is relatively impervious to risks and harm (Hill *et al.*, 2012; Lapsley and Hill, 2010). While subjective invulnerability may incorporate beliefs about physical risks and harm, it is also frequently studied via its association with social and emotional risks and harm. Indeed, researchers have shown that certain people believe that they are less affected by social and emotional risks and harm, which causes them to be more willing to perform certain behaviors (Duggan *et al.*, 2000; Hill *et al.*, 2012). In the current article, we propose that narcissism positively relates to subjective invulnerability. Because narcissists overestimate their capabilities, they may subsequently believe that they are more capable at handling any risks or harm – whether they mitigate their occurrence or defuse their effects.

H2. Narcissism positively relates to subjective invulnerability.

Via these two explanatory mechanisms, we propose that narcissism indirectly relates to social courage behaviors. Howard and Cogswell (2019) proposed that antecedents predict social courage behaviors due to their effect on perceived benefits and/or risks, and we suggest the same in the current article. Certain personality dimensions may cause individuals to particularly value the effects of social courage behaviors. For instance, prosocial motivation and goal orientations have been shown to predict social courage (Howard and Cogswell, 2019; Howard *et al.*, 2017), as they may cause employees to more often recognize the importance of social courage behaviors. Alternatively, certain personality dimensions may cause individuals to devalue the risks inherent in social courage. For instance, risk-taking tendencies and grit have been shown to predict social courage (Howard and Cogswell, 2019; Howard *et al.*, 2017), as they may cause employees to ignore the risks involved with social courage behaviors. We suggest that narcissism relates to social courage due to its association with risk and risk taking.

As argued above, narcissists possess an inflated sense of self and devalue risks associated with their actions. While narcissists may not be strongly driven by prosocial motivation, they may nevertheless perform more social courage behaviors because they (1) consider themselves more capable to address relevant risks and/or (2) devalue the risks altogether. In other words, narcissists may be more likely to perform social courage behaviors due to their elevated self-deceptive enhancement and subjective invulnerability. Threats that would turn away most people from performing such behaviors may have little influence on narcissists. For instance, a typical employee may not volunteer to give a presentation because they fear

appearing unknowledgeable, but a narcissist may be more willing to give this presentation because they overestimate their capabilities in doing so. If true, then the relation of narcissism with social courage could be a bright side of the dark trait. We propose the following:

H3. The relation between narcissism and social courage is mediated by (a) self-deceptive enhancement and (b) subjective invulnerability.

Proposal of testable queries. Many authors have argued that it is inappropriate to study Dark Triad dimensions in isolation, as doing so can result in misleading theoretical inferences (Furnham *et al.*, 2013; Hogan and Hogan, 2001; Nelson and Hogan, 2009; Paulhus, 2014). These authors assert that the Dark Triads are distinct, but they also observe that they are strongly intercorrelated. A researcher "may discover, perhaps too late, that some fascinating correlate is actually attributable to another variable in the tetrad family [2]" (Paulhus, 2014, p. 422) when studying a dimension in isolation, as the variance reflected in the correlate may be better attributed to a different Dark Triad dimension. These authors also note that researchers often produce construct creep (attribute inappropriate characteristics to construct) when studying Dark Triad dimensions in isolation, as these researchers may incorrectly ascribe characteristics of unstudied Dark Triad dimensions to explain the correlates of their studied dimension. Lastly, these authors also highlight that each Dark Triad dimension is associated with callousness, but it often emerges in different manners for each dimension (see Paulhus [2014] for examples). Each dimension may significantly relate a certain outcome due to this association with callousness when studied independently, but only one dimension may relate to this outcome when studied together because it explains the most variance in this outcome. Thus, it is necessary to study the Dark Triad dimensions together even when theoretical perspectives are focused on a single dimension.

For these reasons, we study the Dark Triad together although our focus is on narcissism, and we test the hypotheses above with the other Dark Triad dimensions. That is, we test the relations of Machiavellianism and psychopathy with self-deceptive enhancement, subjective invulnerability, and social courage in an exploratory manner. We do not make *a priori* predictions regarding these relations because Machiavellianism's and psychopathy's relations with deceptive enhancement, subjective invulnerability and social courage are presently unclear. Nevertheless, including these dimensions provides a more appropriate assessment of the entire Dark Triad, including our specific dimension of interest.

Testable Query 1. Does Machiavellianism and/or psychopathy significantly relate to self-deceptive enhancement, subjective invulnerability and/or social courage?

We also test the proposed mediation model with Machiavellianism and psychopathy substituted for narcissism (each tested separately) in an exploratory manner. If significant results are found, the manner in which these dimensions influence social courage can be understood.

Testable Query 2. Are the relations of Machiavellianism as well as psychopathy with social courage mediated by self-deceptive enhancement and subjective invulnerability?

Further, we assess whether these proposed relations of narcissism still hold when including Machiavellianism and psychopathy in analyses, which can provide further theoretical insights into our relations of interest. It could be argued that narcissists perform courage-like behaviors for self-serving reasons. For instance, a narcissist may risk their relation by confronting a disruptive coworker not for the betterment of others, but instead because they believe it would appear favorably to their boss. In such cases, these behaviors would not be courageous because they are not performed for the benefit of others (given modern definitions

of courage; Detert and Bruno, 2017; Howard *et al.*, 2017; Koerner, 2014; Rate *et al.*, 2007), and instead the observed relations would be due to differing theoretical mechanisms.

The current article addresses this alternative explanation for the relation of narcissism and social courage in two manners. First, our two mediators are not reflective of self-serving motivations. Supporting them as explanatory mechanisms indicates that narcissists, at least to some extent, perform social courage behaviors via alternative mechanisms. Second, self-serving motives are also associated with Machiavellianism and psychopathy, and they are even more so associated with Machiavellianism than the other Dark Triad dimensions (Furnham *et al.*, 2013; Jakobwitz and Egan, 2006; Jones and Paulhus, 2014; Paulhus and Williams, 2002). If narcissism relates to social courage due to self-serving reasons, then we would expect the other Dark Triad dimensions to significantly relate to social courage. We would also expect narcissism's relation with social courage to be noticeably smaller when accounting for the other Dark Triad dimensions, as the variance associated with self-serving motives would be split among the multiple dimensions. Therefore, assessing the relations of narcissism while accounting for the other Dark Triad dimensions can provide a robust test of our theoretical arguments and conceptual model, and it can address this alternative explanation.

Testable Query 3. Does narcissism still have a significant relation with self-deceptive enhancement, subjective invulnerability and social courage when accounting for Machiavellianism and psychopathy?

We likewise assess whether the indirect effects of narcissism are consistent when including Machiavellianism and psychopathy. We again assert that narcissism is the most relevant dark trait in explaining these relations, and assessing the joint influence of the Dark Triad can demonstrate the robustness of narcissism's effects.

Testable Query 4. Does narcissism still have a relation with social courage via the mediators of self-deceptive enhancement and subjective invulnerability when accounting for Machiavellianism and psychopathy?

In the current article, we present two studies to investigate these proposals. The first utilizes a cross-sectional design, and the second utilizes a time-separated design. By performing two studies with different methods, we can better assess the validity of our conclusions.

Study 1 – Cross-sectional design
Study 1 Method
Study 1 participants. Study 1 included 139 participants (M_{age} = 31.82, SD_{age} = 10.55, 38% female, 82% Caucasian) recruited from two sources. Fifty-five of these participants were solicited face-to-face by research assistants at a mid-size university in the Southern United States, and they completed paper surveys. Eighty-four of these participants were solicited online via a discussion forum for the city in which the mid-size university is located, and they completed online surveys. We believed that these two approaches could together gather a diverse population, as the in-person sample was primarily students and the online sample was primarily adults. The online sample (M_{age} = 34.10) was significantly older than the in-person sample (M_{age} = 28.30) (t = −3.225, p < 0.01). Of the studied variables, the two samples only significantly differed regarding their reported narcissism, with the in-person sample ($M_{narc.}$ = 4.03) reporting greater narcissism than the online sample ($M_{narc.}$ = 3.37) (t = 4.55, p < 0.01). This difference was expected, however, as many studies have shown that narcissism positively correlates with age (Foster *et al.*, 2003; Wilson and Sibley, 2011), and our varied sampling approach helps assure that our results generalize to broader populations. When controlling for the

method of data collection in our analyses, all inferences were the same between the primary analyses and these supplemental analyses (Supplemental Material 1), indicating that differences in these two subsamples did not sway our observed results. Lastly, we included four attention checks, and we asked participants whether they were employed because the applied social courage measure is specific to workplace environments. We removed all participants that either failed an attention check or reported being unemployed. The reported sample size and all statistics, including those reported above, reflect the sample after removing these participants.

Study 1 procedure. In-person participants were asked whether they wished to participate and provided an information sheet. They were then asked to complete the survey in private and return their responses by mixing their survey into an envelope with other completed surveys. Online participants obtained access to the study via a link on a local forum. The survey began with an information sheet, and participants completed the survey online after agreeing to participate.

Study 1 measures. Dark Triad. The Dark Triad was measured via the 27-item short Dark Triad (SD3) scale (Jones and Paulhus, 2014). The scale includes nine-items for each dimension of the Dark Triad, and prior research has supported the scale's psychometric properties and validity (Jones and Paulhus, 2014; Maples *et al.*, 2014; Özsoy *et al.*, 2017). Example items are, "People see me as a natural leader" (Narcissism, $\alpha = 0.70$), "Most people can be manipulated" (Machiavellianism, $\alpha = 0.82$) and "I'll say anything to get what I want" (Psychopathy, $\alpha = 0.67$).

Self-deceptive enhancement. Self-deceptive enhancement was measured via 10 items from the Balanced Inventory of Desirable Responding (BIDR) (Paulhus, 1991). This measure originally included 40 items: 20 to measure self-deceptive enhancement and 20 to measure impression management. Half of the self-deceptive enhancement items are reverse coded; the correlations between the regular and reverse-coded items are small to moderate; and the two sets of items tend to load onto two separate factors (Kroner and Weekes, 1996; Leite and Beretvas, 2005; Stöber *et al.*, 2002). For this reason, we only used the 10 regular-coded items. Its Cronbach's alpha was 0.64, and an example item is, "I never regret my decisions".

Subjective invulnerability. Subjective invulnerability was measured via nine items of Duggan *et al.*' (2000) scale. The scale originally included 21 items: 12 to measure physical subjective invulnerability and nine to measure emotional subjective invulnerability. Because social courage is more relevant to emotional than physical subjective invulnerability, we only used the nine emotional subjective invulnerability items. Its Cronbach's alpha was 0.87, and an example item is, "What people say about me has no effect on me at all."

Behavioral social courage. Behavioral social courage was measured via the 11-item workplace social courage scale (WSCS) (Howard *et al.*, 2017). As done in prior studies (Howard, 2021; Howard and Cogswell, 2019; Howard and Fox, 2020), we modified the instructions to measure behavioral social courage. Originally, the instructions ask participants to answer independently of their workplace to measure trait social courage, but we asked participants to answer regarding their current workplace to measure behavioral social courage. Its Cronbach's alpha was 0.81, and an example item is, "Although my coworker may become offended, I would suggest to him/her better ways to do things".

Study 1 results
Study 1 hypothesis tests. Table 1 presents correlations and Cronbach's alphas. Narcissism was significantly correlated with self-deceptive enhancement ($r = 0.22$, $p < 0.01$), subjective

invulnerability ($r = 0.20$, $p = 0.02$), and social courage ($r = 0.25$, $p < 0.01$). These results support Hypotheses 1 and 2. Self-deceptive enhancement ($r = 0.37$, $p < 0.01$) and subjective invulnerability ($r = 0.29$, $p < 0.01$) were both significantly correlated with social courage, providing support to assess the proposed dual mediation effect. We tested whether self-deceptive enhancement and subjective invulnerability simultaneously mediate the relation of narcissism and social courage (Supplemental Material 2). All indirect effect tests, including those associated with our testable queries below, were estimated using bootstrapped estimates via the PROCESS macro (Hayes, 2017). Narcissism had a significant indirect effect on social courage via self-deceptive enhancement ($ab = 0.05$, $S.E. = 0.04$, $95\%C.I.[0.01, 0.16]$), but its indirect effect via subjective invulnerability only approached significance ($ab = 0.02$, $S.E. = 0.02$, $95\%C.I.[-0.01, 0.09]$). Its direct effect was significant ($\beta = 0.16$, $p = 0.04$). These findings fully support Hypothesis 3a and partially support Hypothesis 3b.

Study 1 testable query tests. Machiavellianism ($r = 0.25$, $p < 0.01$) and psychopathy ($r = 0.31$, $p < 0.01$) were only significantly correlated with subjective invulnerability. These results address Testable Query 1. We first tested the dual mediating effects (both self-deceptive enhancement and subjective invulnerably) for Machiavellianism and psychopathy independently (Supplemental Material 2). Machiavellianism had a significant indirect effect via subjective invulnerability ($ab = 0.04$, $S.E. = 0.03$, $95\%C.I.[0.01, 0.11]$) but not self-deceptive enhancement ($ab = 0.01$, $S.E. = 0.03$, $95\%C.I.[-0.03, 0.08]$). Its direct effect was significant ($\beta = -0.13$, $p = 0.04$). Psychopathy did not have any significant effects (all $p > 0.05$). These findings address Testable Query 2.

Table 2 provides primary regression results. In all analyses, VIF statistics were below the standard cutoff of 2.0 (Hair *et al.*, 2018). When tested together, only narcissism significantly related to self-deceptive enhancement ($\beta = 0.22$, $p = 0.04$); only psychopathy significantly related to subjective invulnerability ($\beta = 0.23$, $p = 0.04$); and only narcissism significantly related to social courage ($\beta = 0.33$, $p < 0.01$). These results address Testable Query 3.

	1	2	3	4	5	6
(1) Narcissism	0.70					
(2) Machiavellianism	0.34**	0.82				
(3) Psychopathy	0.36**	0.64**	0.67			
(4) Self-Deceptive Enhancement	0.22**	0.05	0.11	0.64		
(5) Subjective Invulnerability	0.20*	0.25**	0.31**	0.52**	0.87	
(6) Workplace Social Courage	0.25**	−0.11	−0.03	0.37**	0.29**	0.81

Note(s): Cronbach's alphas listed on the diagonal; †$p < 0.10$; *$p < 0.05$; **$p < 0.01$

Table 1.
Correlations and Cronbach's alphas of study 1

	Self-deceptive enhancement		Subjective invulnerability		Workplace social courage Step 1		Workplace social courage Step 2	
	β	p	β	p	β	p	β	p
Constant		<0.01**		<0.01*		<0.01**		<0.01**
(1) Narcissism	0.22	0.02*	0.09	0.31	0.33	<0.01**	0.26	<0.01**
(2) Machiavellianism	−0.08	0.46	0.08	0.49	−0.21	0.05†	−0.21	0.05*
(3) Psychopathy	0.08	0.46	0.23	0.04*	−0.01	0.92	−0.08	0.46
(4) Self-Deceptive Enhancement							0.22	0.02*
(5) Subjective Invulnerability							0.20	0.04*
R^2		0.05		0.11**		0.11**		0.23**

Note(s): †$p < 0.10$; *$p < 0.05$; **$p < 0.01$

Table 2.
Regression results of study 1

We retested all indirect effects while including all Dark Triad dimensions together (Supplemental Material 2). Narcissism still had a significant indirect effect via self-deceptive enhancement ($ab = 0.05$, $S.E. = 0.03$, $95\%C.I.$[0.002, 0.14]), and the indirect effect via subjective invulnerability approached significance ($ab = 0.02$, $S.E. = 0.02$, $95\%C.I.$[-0.01, 0.08]). Its direct effect was significant ($\beta = -0.24$, $p < 0.01$). These findings address Testable Query 4. Machiavellianism did not have any significant indirect effects (all $p > 0.05$), but its direct effect was significant ($\beta = -0.16$, $p = 0.04$). Psychopathy's indirect effect via subjective invulnerability became significant ($ab = 0.05$, $S.E. = 0.03$, $95\%C.I.$[0.002, 0.14]), but its direct effect and indirect effect via self-deceptive enhancement was not significant (all $p > 0.05$).

We reconducted all analyses while controlling for gender, age, employment type (part-time or full-time) and tenure (Supplemental Material 1). All inferences were consistent between the results provided in our primary text and these supplemental results, providing further support for the robustness of our findings.

Study 1 discussion
Our results support that narcissism positively relates to self-deceptive enhancement, subjective invulnerability and social courage. It also has a significant indirect effect on social courage via self-deceptive enhancement, but the indirect effect via subjective invulnerability only approached statistical significance. Narcissism's direct effect was significant in all tests of mediation, and all results remained consistent when tested with other Dark Triad dimensions.

The results regarding Machiavellianism and psychopathy were less clear. When tested in isolation, Machiavellianism had a significant indirect effect via subjective invulnerability as well as a significant direct effect on social courage, and psychopathy did not have any significant effects. When tested together, Machiavellianism only had a significant direct effect, whereas psychopathy had a significant indirect effect via subjective invulnerability on social courage.

These results indicate that narcissism has a clear, positive effect on social courage, which is partially explained by self-deceptive enhancement and perhaps subjective invulnerability. This effect still holds when accounting for Machiavellianism and psychopathy, partially addressing the alternative explanation that narcissists perform courage-like behaviors for self-serving reasons. Alternatively, the other Dark Triad dimensions may have smaller, negative influences on social courage – either due to direct effects or indirect effects via subjective invulnerability. While these results for Machiavellianism and psychopathy are not as compelling as those regarding narcissism, they indicate that their relations merit further research. We assess each of the same relations in Study 2 using a more robust methodological design.

Study 2 – Time-separated design
Study 2 method
Study 2 participants. Study 2 included 393 participants ($M_{age} = 35.31$, $SD_{age} = 11.00$, 41% female, 76% American) recruited from Amazon's Mechanical Turk (MTurk). MTurk is an online service that connects those needing tasks completed online, such as taking a survey, with those willing to complete those tasks. Many prior authors have supported that results obtained via MTurk are valid and similar to results obtained with other sampling methods (Hauser and Schwarz, 2016; Paas *et al.*, 2018; Walters *et al.*, 2018). Further, we included five attention checks, and we also asked participants whether they were currently employed. We removed all participants that either failed an attention check or reported being unemployed. The reported sample size and all statistics, including those reported above, reflect the sample after removing these participants.

Study 2 procedure. Participants signed up for the study via MTurk, and they were presented information about the study. At this time (Time 1, $n = 393$), they completed the Dark Triad measure. One week later (Time 2, $n = 175$), they were sent an email and completed measures on self-deceptive enhancement and subjective invulnerability. One week after the Time 2 survey (Time 3, $n = 134$), they were sent an email and completed the behavioral social courage measure.

Study 2 measures. All measures for Study 2 were the same as those applied in Study 1.

Study 2 results

Study 2 hypothesis tests. Table 3 presents correlations and Cronbach's alphas. Narcissism was significantly correlated with self-deceptive enhancement ($r = 0.36$, $p < 0.01$), subjective invulnerability ($r = 0.33$, $p < 0.01$), and social courage ($r = 0.25$, $p < 0.01$). These results support Hypotheses 1 and 2. Self-deceptive enhancement ($r = 0.36$, $p < 0.01$) and subjective invulnerability ($r = 0.38$, $p < 0.01$) were both significantly correlated with social courage, providing support to assess the proposed dual mediation effect. We again tested the proposed dual mediating effect via bootstrapped estimates (Supplemental Material 3). Narcissism had a significant indirect effect on social courage via subjective invulnerability ($ab = 0.07$, $S.E. = 0.03$, $95\%C.I.[0.02, 0.15]$) as well as self-deceptive enhancement ($ab = 0.06$, $S.E. = 0.03$, $95\%C.I.[0.002, 0.13]$). Its direct effect was not significant ($\beta = 0.07$, $p = 0.31$). These findings support Hypothesis 3b and 3a.

Study 2 testable query tests. Machiavellianism and psychopathy were not significantly related to any mediators or outcomes (all $p > 0.05$). These results address Testable Query 1. When the dual mediating effects were tested for Machiavellianism and psychopathy independently, the two constructs did not produce any significant effects. All associated confidence intervals included zero, and their direct effects were no longer statistically significant when accounting for the mediators (all $p > 0.05$). These findings address Testable Query 2.

Table 4 provides the primary regression results. No VIF value exceeded the cutoff of 2.0. When tested together, only narcissism ($\beta = 0.44$, $p < 0.01$) significantly related to self-deceptive enhancement. Narcissism ($\beta = 0.40$, $p < 0.01$) and Machiavellianism ($\beta = -0.35$, $p < 0.01$) significantly related to subjective invulnerability. Narcissism ($\beta = 0.35$, $p < 0.01$) and Machiavellianism ($\beta = -0.22$, $p = 0.04$) were both significantly related to social courage. These results address Testable Query 3.

We retested the indirect effects while including all Dark Triad dimensions (Supplemental Material 3). Narcissism still had a significant indirect effect via subjective invulnerability ($ab = 0.07$, $S.E. = 0.04$, $95\%C.I.[0.02, 0.16]$). The effect via self-deceptive enhancement closely approached significance ($ab = 0.05$, $S.E. = 0.04$, $95\%C.I.[-0.01, 0.13]$), as did its direct effect ($\beta = 0.14$, $p = 0.06$). These findings address Testable Query 4. Machiavellianism's indirect effect via subjective invulnerability became significant ($ab = -0.05$, $S.E. = 0.03$, $95\%C.I.[-0.13, -0.01]$), but its direct effect and indirect effect via self-deceptive enhancement was not significant (all $p > 0.05$). None of the psychopathy's effects were significant (all $p > 0.05$).

	1	2	3	4	5	6
(1) Narcissism	0.80					
(2) Machiavellianism	0.45**	0.87				
(3) Psychopathy	0.50**	0.68**	0.85			
(4) Self-Deceptive Enhancement	0.36**	−0.02	−0.01	0.64		
(5) Subjective Invulnerability	0.33**	−0.10	0.12	0.57**	0.91	
(6) Workplace Social Courage	0.25**	−0.15	−0.09	0.36**	0.38**	0.83

Note(s): Cronbach's alphas listed on the diagonal; †$p < 0.10$; *$p < 0.05$; **$p < 0.01$

Table 3.
Correlations and Cronbach's alphas of study 2

	Self-deceptive enhancement		Subjective invulnerability		Workplace social courage Step 1		Workplace social courage Step 2	
	β	p	β	p	β	p	β	p
Constant		$<0.01^{**}$		$<0.01^{**}$		$<0.01^{**}$		<0.01
(1) Narcissism	0.44	$<0.01^{**}$	0.40	$<0.01^{**}$	0.35	$<0.01^{**}$	0.18	0.06†
(2) Machiavellianism	−0.12	0.18	−0.35	$<0.01^{**}$	−0.22	0.04^{*}	−0.14	0.19
(3) Psychopathy	−0.11	0.23	0.17	0.05†	−0.08	0.46	−0.09	0.37
(4) Self-Deceptive Enhancement							0.15	0.15
(5) Subjective Invulnerability							0.22	0.03^{*}
R^2		0.16^{**}		0.18^{**}		0.13^{**}		0.21^{**}

Note(s): †$p < 0.10$; $^{*}p < 0.05$; $^{**}p < 0.01$

We reconducted all analyses while controlling for gender, age, employment type (part-time or full-time) and tenure (Supplemental Material 1). All inferences were consistent between the results provided in our primary text and these supplemental results, again providing further support for the robustness of our findings.

Study 2 discussion
The results of study 2 largely replicated the results of study 1 using a time-separated design. Narcissism was significantly related to self-deceptive enhancement, subjective invulnerability and social courage. In study 2, however, it had a significant indirect effect on social courage via subjective invulnerability in all tests of mediation. The effect via self-deceptive enhancement was supported when narcissism was tested alone, but it only approached significance when assessed alongside the other Dark Triad dimensions. Its direct effect was significant in this analysis. These results again partially address the alternative explanation that narcissism relates to courage-like behaviors due to self-serving motives, given the significance of narcissism's effects with accounting for the other Dark Triad dimensions.

Further, the direct and indirect effects of Machiavellianism and psychopathy on social courage were not consistently significant, whether tested together or in isolation. These results again indicate that narcissism has a positive effect on social courage, which is partially explained by self-deceptive enhancement and subjective invulnerability, and these effects largely hold when including all Dark Triad dimensions. Machiavellianism and psychopathy do not have clearly supported effects on social courage. These results do provide considerations regarding future research on all Dark Triad dimensions and social courage.

General discussion
Many authors have called for research into the upsides of dark personality traits (Fatfouta, 2019; Smith *et al.*, 2018; Wu *et al.*, 2019), as discovering these counterintuitive upsides could further our understanding of traits, relevant workplace behaviors and even organizational performance. Also, research has largely associated social courage with overtly positive antecedents (Detert and Bruno, 2017; Howard, 2019; Howard *et al.*, 2017). For instance, Howard and Cogswell (2019) supported that grit and proactive personality predict social courage behaviors, and these personality aspects are typically considered positive traits. At the same time, prior authors have shown that positive outcomes (e.g. performance, OCBs) can be predicted by negative antecedents, and the dearth of knowledge regarding this phenomenon

and social courage suggests that much is still unknown about this type of behavior. As we detail below, addressing this uncertainty uncovers many important theoretical implications.

The goal of the current study was therefore to demonstrate that a negative personality trait, narcissism, may too predict social courage behaviors. Study 1 fully supported that narcissism relates to social courage via self-deceptive enhancement and partially supported its relation via subjective invulnerability. Study 2 fully supported that narcissism influences social courage via subjective invulnerability and partially supported its effect via self-deceptive enhancement. These findings jointly support that the effect of narcissism on social courage is partially explained by these two mediators, and the direct effect of narcissism was still significant in both study 1 and 2. Also, these effects of narcissism remained consistent when accounting for the other Dark Triad dimensions. Because these other dimensions are also associated with self-serving motives, Machiavellianism even more so than narcissism (Furnham *et al.*, 2013; Jakobwitz and Egan, 2006; Jones and Paulhus, 2014; Paulhus and Williams, 2002), this result suggests that narcissists do not perform social courage behaviors for self-serving reasons, and further reinforces for our supported conceptual model linking narcissism and social courage behaviors via subjective invulnerable and self-deceptive enhancement.

The effects of Machiavellianism and psychopathy on social courage were not consistently supported, whether assessing direct or indirect effects, and therefore narcissism was the only Dark Triad dimension supported to influence social courage. Several theoretical implications should be considered in light of these findings.

Theoretical implications

Our research contributes to both the dark personality and courage literature by providing further evidence of the bright side of narcissism. The observed relation between narcissism and social courage suggests that narcissists can still choose to behave in a manner that benefits the greater good. Narcissists do not entirely engage in self-serving behaviors, and they can engage in behaviors that primarily benefit others. While they may not engage in these behaviors because they particularly value the benefits to others, they nevertheless engage in these behaviors seemingly because they value the benefits to others more than the diminished risks that they see in these behaviors. This is not evident regarding the other Dark Triad dimensions, Machiavellianism and psychopathy, regarding the outcome of social courage. Likewise, while the positive effects of narcissism may not outweigh its significant negative effects, these results do provide further evidence that narcissism relates to more than negative outcomes alone.

The observed relation of narcissism to social courage can also link narcissism to models of ethical decision making. Specifically, the Dark Triads are notably absent from many models of ethical decision making (Heyler *et al.*, 2016; Lehnert *et al.*, 2016; Schwartz, 2016), and other traits, such as moral character disposition or integrity capacity, are instead included in these models. This absence may be because ethics researchers assume that these other traits are more relevant to ethical decision making than the Dark Triad, and the current results supported that this may be true for Machiavellianism and psychopathy. The current results also supported, however, that neglecting the role of narcissism causes these models to be incomplete, and narcissism may play a pivotal role in ethical decision making. For this reason, future theoretical developments should reconsider the role – or present lack thereof – of narcissism in ethical decision-making models.

Similarly, dark traits had yet to be identified as possible antecedents to social courage behaviors. Linking narcissism to social courage behaviors open new theoretical lens to study these behaviors. Specifically, a host of personality theories has been applied to understand narcissism and the Dark Triad, such as reinforcement sensitivity theory (Jonason and Jackson, 2016). We suggest that such theory may also be able to explain the broader

antecedents of social courage. For instance, social courage behaviors may be more associated with the behavioral activation system rather than the behavioral inhibition system, and antecedents primarily emerging from the behavioral activation system may be stronger predictors of social courage.

Practical implications
The current article joins prior research that has discovered positive impacts of the Dark Triad (Fatfouta, 2019; Smith *et al.*, 2018; Wu *et al.*, 2019). The results of these studies may jointly explain why those with dark personality traits are selected to high power positions, but also why some dark individuals succeed in those positions. Individuals in high power positions need strong views in their ability to take risks and gauge the concluding effects (e.g. strategic decisions), which is benefitted by heightened positive self-perceptions. We propose that narcissists are more willing to make such decisions, as evidenced by the observed relations of social courage, but they may also be able to convince others that they are capable in such decisions. Furthermore, social courage behaviors include substantial social risks, and thereby such behaviors may be avoided by most employees. Social courage behaviors may improve follower's perception of leaders, as they would perceive the leader as willing to address threats that would be avoided by most people. Those willing to perform social courage behaviors, such as narcissists, may be perceived as better leaders for this reason, and they may be more quickly promoted up the corporate ladder.

With advancements in technology, organizations must learn to adapt and compete. Typically, narcissists have higher risk-taking tendencies and possess greater entrepreneurial intentions, which, along with social courage, are needed for innovation and competition (Smith *et al.*, 2018; Hmieleski and Lerner, 2016). From a strategic management perspective, organizations developing key individuals for their innovation and competitive edge should consider the role of self-deceptive enhancement and subjective invulnerability. These individuals may benefit from heightened self-perceptions – at least until they can engage in mastery experiences – in developing their innovation and competition abilities (Bandura, 2006, 2010), because they may subsequently be more willing to take risks in being innovative and competitive. Therefore, while most of the current article's implications are centered on the role of stable traits, our results may also speak towards dynamics of employee training and development.

Future directions
We foresee five primary future directions derived from the current study. First, researchers should insert narcissism into extant models of ethical decision making and test resultant effects. Narcissism may predict important mediators and outcomes of ethical decision making, and it may do so more strongly than typical traits included within these models (e.g. moral character disposition and integrity capacity). Thus, the study of narcissism could develop a more accurate and refined study of ethical decision making.

Second, researchers should integrate personality theory with the study of social courage and likewise test resultant effects. Theories used to understand narcissism may be fruitful, but we also call for future research to look toward prior findings on social courage to prompt these studies. For instance, Howard *et al.* (2017) demonstrated that certain Big Five dimensions have significant relations with trait social courage, but subsequent research has yet to theoretically justify or test mechanisms that explain such relations. Relevant personality theory to the Big Five, such as reinforcement sensitivity theory (Jonason and Jackson, 2016), may too detail the nuances of social courage – both as a trait and as a behavior.

Third, future research should study the motives of narcissists in performing social courage behaviors. We asserted that narcissists see less risk in their actions, and they

perform courage behaviors because the benefits to others outweigh the perceived risks. This assertion suggests that narcissists may still perform behaviors due to prosocial motivations, and they are not entirely self-serving in their actions. We made this assertion because it aligns with subclinical narcissism, which is much more prevalent in the general population than narcissistic personality disorder (Furnham *et al.*, 2013; Jakobwitz and Egan, 2006; Jones and Paulhus, 2014; Paulhus and Williams, 2002). That is, those with extreme levels of narcissism (i.e. narcissistic personality disorder) may be largely unable to perform behaviors for prosocial reasons, and instead they may almost solely perform self-serving behaviors to keep their ego inflated. Those with narcissistic personality disorder may therefore not perform courageous behaviors. Alternatively, those with less extreme levels of narcissism may still perform behaviors for prosocial reasons because they do not need to constantly inflate their ego. Studying the motives of narcissists could address these present uncertainties and further uncover the exact situations in which certain individuals may or may not perform social courage behaviors. While our results when accounting for the other Dark Triad dimensions supported our perspective, identifying the role of motives could provide even further support for our arguments. Likewise, studying those diagnosed with narcissistic personality disorder could uncover differing patterns of results than those observed in the current studies using samples taken from a general population.

As an aside, it should be noted that the definition of courage mandates that the behavior must be performed for noble or prosocial reasons. If those with narcissistic personality disorder perform an otherwise courageous behavior for self-serving reasons, it would only be a risky behavior (rather than a courageous behavior) according to modern courage definitions (Koerner, 2014; Rate *et al.*, 2007; Rate, 2010). Nevertheless, the relation of narcissism and these types of risky behaviors can still be a fruitful research endeavor. Howard and Crayne (2019) supported that persistence despite difficulties and persistence despite fear relate to many positive personal and organizational outcomes, and behaviors representative of these constructs have long been considered as "courage" without a noble or prosocial requirement (Goud, 2005; Pury *et al.*, 2007; Woodard and Pury, 2007). Thus, studying the relation of narcissism to positive but not necessarily prosocial outcomes may too provide important implications to research and practice.

Fourth, research has supported a relation between social courage and well-being (Detert and Bruno, 2017; Koerner, 2014; Howard *et al.*, 2017), but little is known regarding why this relation exists. Prosocial behaviors typically cause the actor to feel fulfilled and satisfied (Simola, 2015), which is a likely justification for the relation of social courage and well-being. Narcissism, however, is often related to worse well-being (Furnham *et al.*, 2013; Jones and Paulhus, 2014), suggesting that narcissism and social courage may be at odds regarding well-being. We call for future researchers to study the relation between social courage and well-being as well as various moderators of this relation, such as narcissism.

Fifth, authors have proposed many dimensions of courage beyond social courage. Physical courage is perhaps the most frequently included in these proposals (Goud, 2005; Pury *et al.*, 2007; Woodard and Pury, 2007), highlighting the potential importance of the construct to certain contexts, and Howard and Reiley (2020) recently created the physical courage at work scale (PCWS) to begin empirical investigations into the construct. Prior research on social courage can be used as a basis to initiate research on physical courage, and much of the same theoretical rationale can be applied for the newly operationalized construct. For instance, future research can test whether narcissism predicts physical courage via the mechanisms tested in the current article. If the results are consistent across the various types of courage, then the current results may speak toward the nature of courage in general; however, if the results are not consistent across the types, then narcissism may instead relate to social courage due to its associated interpersonal aspects. Thus, testing these relations with physical courage could allow a better understanding of all types of courage.

Limitations
Some concern could be expressed regarding our choice of samples. Sample 1 utilized a convenience sampling strategy, whereas study 2 utilized MTurk to obtain a sample. Some authors have argued that results obtained via these sampling approaches may be misleading or inaccurate. At the same time, other authors have supported that results obtained via these sampling approaches are accurate and valid (Hauser and Schwarz, 2016; Paas *et al.*, 2018; Walters *et al.*, 2018). For the current studies, we wanted to obtain samples that represent a broad range of participants, and, despite possible limitations, we believe that the current samples were able to appropriately investigate our research questions. Nevertheless, the current results should be replicated using varied sampling approaches, including those noted above.

Our results were not entirely replicated across studies 1 and 2. The mediating effect of self-deceptive enhancement was fully supported in study 1, whereas it was only partially supported in study 2. The mediating effect of subjective invulnerability was fully supported in study 2, whereas it was only partially supported in study 1. Likewise, the effects of Machiavellianism and psychopathy were largely not significant, but some significant effects did arise across the two studies. We conceptually synthesized these results to develop a clear and accurate narrative for the relations between the Dark Triad and social courage, but these effects should be replicated in future studies. Machiavellianism or psychopathy, for instance, may have notable relations with social courage that were not consistently observed in the current article.

Conclusion
The primary goal of the current article was to assess the relation of narcissism with social courage to illustrate a bright side of a dark trait and a negative antecedent of a positive outcome. Our results supported that narcissism indeed influences social courage via self-deceptive enhancement and subjective invulnerability. The cognitive biases of narcissists that typically result in detrimental outcomes were shown to produce a positive outcome in the current studies. These findings also link both narcissism and social courage to new theoretical domains, and therefore the current article provides many new avenues for research.

Notes
1. It is recognized that personality traits exist on continuous spectrums. We use dichotomous terminology (e.g. Machiavellians vs. nonMachiavellians) for the sake of clarify and conciseness.

2. The Dark Tetrad is a conceptualization of maladaptive personality that includes the Dark Triad with the additional dimension of everyday sadism. We study the Dark Triad in the current article due to its more widespread support and association with relevant theoretical frameworks, but future research should reinvestigate the current results with the Dark Tetrad.

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Supplemental Material 1

	1	2	3	4	5	6	7	8	9	10	11
(1) Narcissism	0.70										
(2) Machiavellianism	0.34**	0.82									
(3) Psychopathy	0.36**	0.64**	0.67								
(4) Self-Deceptive Enhancement	0.22**	0.05	0.11	0.64							
(5) Subjective Invulnerability	0.20*	0.25**	0.31**	0.52**	0.87						
(6) Workplace Social Courage	0.25**	-0.11	-0.03	0.37**	0.29**	0.81					
(7) Gender	-0.03	-0.22**	-0.22**	0.08	-0.14	0.00	–				
(8) Age	-0.24**	-0.22**	-0.18*	-0.01	0.06	0.11	-0.00	–			
(9) Employment Status	-0.16	-0.07	-0.05	-0.17*	0.03	0.03	-0.04	0.27**	–		
(10) Tenure	-0.13	-0.14	-0.14	-0.05	0.09	0.05	-0.18*	0.66**	0.20*	–	
(11) Collection Method	-0.36**	-0.08	-0.04	-0.07	-0.00	-0.06	-0.09	0.27**	0.34**	0.10	–

Note(s): Gender coded as 0 = Male, 1 = Female. Employment Status coded as 0 = Part Time, 1 = Full Time. Collection Method coded as 0 = In Person, 1 = Online; * $p < 0.05$; *** $p < 0.01$

Table A1.
Correlations and
Cronbach's Alphas of
Study 1

	Self-deceptive enhancement		Subjective invulnerability		Workplace social courage Step 1		Workplace social courage Step 2	
	β	p	β	p	β	p	β	p
Constant		<0.01**		0.04*		<0.01**		<0.01**
(1) Narcissism	0.22	0.06*	0.10	0.32	0.35**	<0.01**	0.27	<0.01**
(2) Machiavellianism	-0.10	0.43	0.11	0.37	-0.24*	0.04*	-0.24	0.03*
(3) Psychopathy	0.10	0.37	0.20	0.08	-0.01	0.91	-0.08	0.46
(4) Gender	0.07	0.44	-0.06	0.52	-0.05	0.56	-0.06	0.50
(5) Age	0.11	0.39*	0.11	0.37	0.18	0.14	0.13	0.24
(6) Employment Status	-0.19	0.05*	0.01	0.89	0.02	0.86	0.06	0.50
(7) Tenure	-0.04	0.72	0.07	0.57	-0.07	0.55	-0.07	0.50
(8) Collection Method	0.08	0.46	-0.00	0.97	0.00	0.97	-0.02	0.86
(9) Self-Deceptive Enhancement							0.24	0.02*
(10) Subjective Invulnerability							0.20	0.05*
R^2	0.09		0.12*		0.14*		0.27**	

Note(s): * $p < 0.05$; ** $p < 0.01$

Table A2.
Regression results of Study 1

Indirect effect of narcissism without controlling for other dark triad dimensions
Note: All analyses conducted with bias-corrected bootstrap confidence intervals

Direct effect	β	S.E.	t	p	95%C.I.
Narcissism	0.16	0.08	1.85	0.07	−0.01, 0.33

Indirect effects	AB Effect		S.E.		95%C.I.
Total	0.08		0.05		0.01, 0.19
Invulnerability	0.02		0.03		−0.01, 0.10
Enhancement	0.06		0.04		0.00, 0.18

Indirect effect of Machiavellianism without controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Mach	−0.14	0.07	−2.10	0.04	−0.28, −0.01

Indirect effects	AB Effect		S.E.		95%C.I.
Total	0.05		0.05		−0.04, 0.15
Invulnerability	0.04		0.03		0.00, 0.11
Enhancement	0.01		0.03		−0.04, 0.09

Indirect effect of psychopathy without controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Psycho	−0.13	0.09	−1.49	0.14	−0.30, 0.04

Indirect effects	AB Effect		S.E.		95%C.I.
Total	0.08		0.06		−0.02, 0.22
Invulnerability	0.05		0.04		−0.01, 0.14
Enhancement	0.04		0.04		−0.03, 0.14

Indirect effect of narcissism while controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Narcissism	0.26	0.09	2.91	<0.01	0.08, 0.43

Indirect effects	AB Effect		S.E.		95%C.I.
Total	0.07		0.05		−0.00, 0.18
Invulnerability	0.02		0.02		−0.01, 0.10
Enhancement	0.05		0.04		0.00, 0.16

Indirect effect of Machiavellianism while controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Mach	−0.18	0.08	−2.17	0.03	−0.34, −0.02

Indirect effects	AB Effect	S.E.	95%C.I.
Total	−0.00	0.04	−0.09, 0.08
Invulnerability	0.02	0.02	−0.01, 0.08
Enhancement	−0.02	0.03	−0.10, 0.03

Indirect effect of psychopathy while controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Psycho	−0.08	0.10	−0.74	0.46	−0.28, 0.13

Indirect effects	AB Effect	S.E.	95%C.I.
Total	0.06	0.06	−0.03, 0.19
Invulnerability	0.04	0.03	−0.00, 0.13
Enhancement	0.02	0.04	−0.03, 0.13

	1	2	3	4	5	6			
(1) Narcissism	0.80								
(2) Machiavellianism	0.45**	0.87							
(3) Psychopathy	0.50**	0.68**	0.85						
(4) Self-Deceptive Enhancement	0.36**	-0.02	-0.01	0.64					
(5) Subjective Invulnerability	0.33**	-0.10	0.12	0.57**	0.91				
(6) Workplace Social Courage	0.25**	-0.15	-0.09	0.36**	0.38**	0.83			
(7) Gender	-0.12*	-0.08	-0.26**	-0.01	-0.38**	-0.30**	–		
(8) Age	-0.31**	-0.40**	-0.46**	-0.01	0.08	0.16	0.09	–	
(9) Employment Status	0.05	0.9	0.13*	0.10	0.06	0.14	-0.08	-0.17**	–
(10) Tenure	-0.21**	-0.22**	-0.22**	-0.07	0.02	0.10	-0.06	0.49**	-0.00	–

Note(s): Gender coded as 0 = Male, 1 = Female. Employment Status coded as 0 = Part Time, 1 = Full Time. Collection Method coded as 0 = In Person, 1 = Online; $^{*}p < 0.05$; $^{**}p < 0.01$

	Self-deceptive enhancement		Subjective invulnerability		Workplace social courage Step 1		Workplace social courage Step 2	
	β	p	β	p	β	p	β	p
Constant		<0.01**		<0.01**		<0.01**		<0.01**
(1) Narcissism	0.43	<0.01**	0.41	<0.01**	0.33	<0.01**	0.21	0.03*
(2) Machiavellianism	−0.11	0.27	−0.24	<0.01**	−0.12	0.26	−0.08	0.41
(3) Psychopathy	−0.12	0.22	−0.00	0.99	−0.22	0.04*	−0.19	0.08
(4) Gender	−0.02	0.85	−0.35	<0.01**	−0.31	<0.01**	−0.27	<0.01**
(5) Age	0.02	0.78	0.05	0.54	0.10	0.26	0.09	0.28
(6) Employment Status	0.10	0.19	0.02	0.79	0.11	0.17	0.09	0.24
(7) Tenure	−0.07	0.40	−0.03	0.66	0.03	0.76	0.04	0.62
(4) Self-Deceptive Enhancement							0.18	0.08
(5) Subjective Invulnerability							0.09	0.40
R^2		0.17**		0.29**		0.26**		0.30**

Note(s): Gender coded as 0 = Male, 1 = Female. Employment Status coded as 0 = Part Time, 1 = Full Time. Collection Method coded as 0 = In Person, 1 = Online; *p < 0.05; **p < 0.01

Indirect effect of narcissism without controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Narcissism	0.08	0.07	1.25	0.21	−0.05, 0.22

Indirect effects	AB Effect	S.E.	95%C.I.
Total	0.10	0.04	0.04, 0.17
Invulnerability	0.03	0.03	−0.03, 0.11
Enhancement	0.06	0.03	0.01, 0.14

Indirect effect of Machiavellianism without controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Mach	−0.09	0.06	−1.50	0.14	−0.21, 0.03

Indirect effects	AB Effect	S.E.	95%C.I.
Total	−0.01	0.03	−0.07, 0.04
Invulnerability	−0.01	0.01	−0.06, 0.01
Enhancement	−0.00	0.02	−0.05, 0.04

Indirect effect of psychopathy without controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Psycho	−0.15	0.07	−2.07	0.04	−0.29, −0.01

Indirect effects	AB Effect	S.E.	95%C.I.
Total	−0.01	0.03	−0.08, 0.05
Invulnerability	0.00	0.01	−0.03, 0.03
Enhancement	−0.01	0.03	−0.08, 0.03

Indirect effect of narcissism while controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Narcissism	0.16	0.07	2.28	0.02	0.02, 0.30

Indirect effects	AB Effect	S.E.	95%C.I.
Total	0.09	0.04	0.02, 0.18
Invulnerability	0.03	0.04	−0.04, 0.11
Enhancement	0.06	0.04	−0.00, 0.14

Indirect effect of Machiavellianism while controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Mach	−0.06	0.07	−0.83	0.41	−0.21, 0.09

Indirect effects	AB Effect	S.E.	95%C.I.
Total	−0.02	0.03	−0.09, 0.02
Invulnerability	−0.01	0.02	−0.07, 0.01
Enhancement	−0.01	0.02	−0.06, 0.01

Indirect effect of psychopathy while controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Psycho	−0.16	0.09	−1.80	0.07	−0.34, 0.02

Indirect effects	AB Effect	S.E.	95%C.I.
Total	−0.02	0.03	−0.10, 0.03
Invulnerability	−0.00	0.01	−0.03, 0.03
Enhancement	−0.02	0.03	−0.11, 0.01

Supplemental Material 2
Study 1 test of indirect effects

Indirect effect of narcissism without controlling for other dark triad dimensions

Note: All analyses conducted with bias-corrected bootstrap confidence intervals.

Direct effect	β	S.E.	t	p	95%C.I.
Narcissism	0.16	0.08	2.09	0.04	0.01, 0.31

Indirect effects	AB Effect	S.E.	95%C.I.
Total	0.08	0.04	0.01, 0.17
Invulnerability	0.05	0.04	0.01, 0.16
Enhancement	0.02	0.02	−0.01, 0.09

Indirect effect of Machiavellianism without controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Mach	−0.13	0.06	−2.06	0.04	−0.26, −0.01

Indirect effects	AB Effect	S.E.	95%C.I.
Total	0.05	0.04	−0.03, 0.14
Invulnerability	0.01	0.03	−0.03, 0.08
Enhancement	0.04	0.03	0.00, 0.11

Indirect effect of psychopathy without controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Psycho	−0.12	0.08	−1.40	0.16	−0.28, 0.05

Indirect effects	AB Effect	S.E.	95%C.I.
Total	0.09	0.05	−0.00, 0.21
Invulnerability	0.03	0.03	−0.02, 0.13
Enhancement	0.05	0.04	−0.00, 0.14

Indirect effect of narcissism while controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Narcissism	0.24	0.08	3.07	<0.01	0.09, 0.40

Indirect effects	AB Effect	S.E.	95%C.I.
Total	0.06	0.04	−0.00, 0.15
Invulnerability	0.04	0.03	0.00, 0.14
Enhancement	0.02	0.02	−0.01, 0.08

Indirect effect of Machiavellianism while controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Mach	−0.16	0.08	−2.02	0.04	−0.32, −0.00

Indirect effects	AB Effect	S.E.	95%C.I.
Total	−0.00	0.04	−0.09, 0.07
Invulnerability	−0.01	0.03	−0.09, 0.03
Enhancement	0.01	0.02	−0.02, 0.07

Indirect effect of psychopathy while controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Psycho	−0.08	0.10	−0.75	0.46	−0.28, 0.13

Indirect effects	AB Effect	S.E.	95%C.I.
Total	0.06	0.05	−0.03, 0.18
Invulnerability	0.02	0.03	−0.03, 0.11
Enhancement	0.05	0.03	0.00, 0.14

Supplemental Material 3
Study 2 test of indirect effects

Indirect effect of narcissism without controlling for other dark triad dimensions
Note: All analyses conducted with bias-corrected bootstrap confidence intervals.

Direct effect	β	S.E.	t	p	95%C.I.
Narcissism	0.07	0.07	1.03	0.31	−0.07, 0.20

Indirect effects	AB Effect	S.E.	95%C.I.
Total	0.13	0.04	0.06, 0.21
Invulnerability	0.05	0.03	0.00, 0.13
Enhancement	0.07	0.03	0.02, 0.15

Indirect effect of Machiavellianism without controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Mach	−0.10	0.06	−1.60	0.11	−0.21, 0.02

Indirect effects	AB Effect	S.E.	95%C.I.
Total	−0.02	0.03	−0.08, 0.04
Invulnerability	−0.00	0.02	−0.04, 0.02
Enhancement	−0.01	0.02	−0.06, 0.02

Indirect effect of psychopathy without controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Psycho	−0.10	0.07	−1.45	0.15	−0.24, 0.04

Indirect effects	AB Effect	S.E.	95%C.I.
Total	0.02	0.04	−0.05, 0.10
Invulnerability	−0.01	0.02	−0.06, 0.03
Enhancement	0.03	0.02	−0.01, 0.09

Indirect effect of narcissism while controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Narcissism	0.14	0.07	1.92	0.06	−0.00, 0.29

Indirect effects	AB Effect	S.E.	95%C.I.
Total	0.13	0.04	0.06, 0.22
Invulnerability	0.05	0.03	−0.01, 0.13
Enhancement	0.07	0.04	0.02, 0.16

Indirect effect of Machiavellianism while controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Mach	−0.10	0.08	−1.33	0.19	−0.25, 0.05

Indirect effects	AB Effect	S.E.	95%C.I.
Total	−0.06	0.03	−0.15, −0.01
Invulnerability	−0.01	0.01	−0.06, 0.01
Enhancement	−0.05	0.03	−0.13, −0.01

Indirect effect of psychopathy while controlling for other dark triad dimensions

Direct effect	β	S.E.	t	p	95%C.I.
Psycho	−0.08	0.09	−0.89	0.37	−0.26, 0.10

Indirect effects	AB Effect	S.E.	95%C.I.
Total	0.01	0.04	−0.06, 0.09
Invulnerability	−0.02	0.02	−0.09, 0.01
Enhancement	0.03	0.02	−0.00, 0.10

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