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► **To cite this version:**

Jonathan Bronchain, Patrick Raynal, Henri Chabrol. Psychopathic traits and identity threat as predictors of everyday heroism. *Personality and Individual Differences*, 2020, 153, 10.1016/j.paid.2019.109637 . hal-03197094

**HAL Id: hal-03197094**

**<https://hal.science/hal-03197094v1>**

Submitted on 13 Apr 2021

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Psychopathic Traits and Identity Threat as Predictors of Everyday Heroism

Jonathan Bronchain, Patrick Raynal, & Henri Chabrol

Centre d'Etudes et de Recherches en Psychopathologie et Psychologie de la Santé, Université  
de Toulouse, France

Author Note

Correspondence concerning this article should be addressed to: Jonathan Bronchain,  
UFR de Psychologie, Université de Toulouse-Jean Jaurès, 5 allées Antonio Machado, 31058  
Toulouse cedex 9. E-mail address: [jonathan.bronchain@etu.univ-tlse2.fr](mailto:jonathan.bronchain@etu.univ-tlse2.fr). Tel: +33781533109.

### **Abstract**

Psychopathic traits and heroic behaviors seem to display atypical relationships. Some have argued that fearless temperament could underlie both psychopathic and heroic dispositions. However, the relative contribution of narcissism and identity threat has received little attention in explaining these behaviors. We hypothesized that individuals exhibiting psychopathic characteristics would be more prepared to perform heroic behaviors when they are motivated by extrinsic social rewards or punishment. Participants were 1050 college students who received measures of psychopathic traits (antagonism, disinhibition, narcissism, emotional stability), identity threat, and heroic behaviors. We presented correlation analysis and a structural equation model whereby the relations between these variables were analyzed. As expected, results demonstrated that identity threat, narcissism, and emotional stability predicted heroic behaviors. Identity threat mediated the link between narcissism and emotional stability dimensions and heroism. Our results provide a key to understand heroic behaviors in individuals exhibiting psychopathic traits.

*Keywords:* heroic behaviors; heroism; psychopathic traits; identity threat; narcissism; emotional stability; psychopathy

## Psychopathic Traits and Identity Threat as Predictors of Everyday Heroism

### 1. Introduction

Psychopathy is a personality configuration referring to antagonistic, callous and deceitful social relationships, combined with increased levels of disinhibition and egocentrism (Lynam et al., 2011). Clinically, these characteristics have been frequently studied in carceral populations and historically associated with many negative outcomes such as proactive and reactive aggression, substance use behaviors, or institutionalization (Brennan, Stuppy-Sullivan, Brazil, & Baskin-Sommers, 2017; Hecht, Berg, Lilienfeld, & Latzman, 2016; Hemphill, Hare, & Wong, 1998).

Data from the last decades suggest that psychopathic traits are also present in college students, and sometimes at high levels (Forth, Brown, Hart, & Hare, 1996). From a categorical perspective, it has been shown that psychopathy profiles found in community samples are well aligned with those identified in carceral populations, with the classical primary and secondary variants (e.g., Falkenbach, Stern, & Creevy, 2014). From a dimensional perspective, the central traits of psychopathy and their reciprocal interactions are still discussed. Despite a consensus regarding some features such as callousness, impulsivity, and egocentrism, others, essentially boldness-related traits (i.e., fearless dominance, emotional stability), remain debated as central components of the construct (Lilienfeld et al., 2012; Lynam & Miller, 2012). While disinhibition and affective/interpersonal dimensions have shown strong reciprocal associations, boldness-related traits have displayed weak to moderate associations with these two factors of psychopathy (Sleep, Weiss, Lynam, & Miller, 2019).

Thus, studies in community settings have underlined some atypical manifestations in individuals with high psychopathic traits. For instance, psychopathy has sometimes been related to individual success (Lilienfeld, Watts, & Smith, 2015), prosociality (White, 2014), and heroic behavior (e.g., Patton, Smith, & Lilienfeld, 2018). These counterintuitive

associations were firstly examined by Lykken (1995), for whom fearless temperament underlies both psychopathic and heroic dispositions.

Heroism could be operationalized as altruist behaviors that involve at least some degree of risk to the performer (Franco, Blau, & Zimbardo, 2011). According to Franco et al. (2011), heroic behaviors could be divided into three categories, namely civil, social, and military heroism, which may have different determinants. Another classification distinguishes big H (emergency and infrequent situations) from small h (everyday situations) heroism (Farley, 2011). Small h heroism may be link to personality factors, while big H heroism may be due to the interaction between personality factors and situational factors (i.e., "being in the right place in the right time"). In Lykken's perspective, successful individual development stems from a conjunction of temperamental characteristics and parental practices. Thus, heroism and psychopathy would share common roots of fearlessness but could be differentiated by child exposure to protective factors such as warm parenting. Understanding the role of these protective factors would be central to explain these divergent developmental trajectories.

In this line, several studies have been conducted to test Lykken's hypothesis. Smith, Lilienfeld, Coffey, and Dabbs (2013), found that psychopathic fearless dominance was positively associated with heroic altruism in college students, and positively associated with war heroism among 42 U.S. presidents rated on psychopathic traits. Similarly, fearless dominance and sensation seeking were positively associated with heroic behaviors and altruism in first responders, while self-centered impulsivity components were inversely correlated, or unrelated, to heroism (Patton et al., 2018).

However, although heroic and altruist behaviors would stem from fearlessness, they could also be driven by potential narcissistic rewards, or by the avoidance of negative social feedback in case of inaction. Indeed, it has been suggested that the antisocial personalities

were highly vulnerable to self-esteem and identity threats (Gilligan, 1996) and were more prepared to perform prosocial behaviors when they are motivated by extrinsic social rewards (White, 2014). Similarly, although researchers still discussed this point, some data suggest that psychopathy could be associated with heightened reward sensitivity (see Blair, 2015 for a review). Thus, the link between psychopathy and heroism may be explained by higher reward sensitivity, reduced consideration of potential costs (i.e., risk associated to heroic behavior) and be associated with greater reward-seeking behavior (Buckholtz et al., 2010). Despite these results, the relative contribution of identity threat and narcissism in predicting heroic behaviors has received little attention.

Therefore, the aim of this study was to examine the independent contribution of identity threat and narcissism among other psychopathic traits in predicting heroic behaviors. In a community sample of college students, we expected that narcissism, emotional stability (i.e., fearless dominance), and identity threat represent three independent predictors of everyday heroism and that antagonism and disinhibition were unrelated to heroic behaviors.

## **2. Methods**

### *2.1. Participants and Procedure*

The data were collected through an online survey that was distributed to students from different French universities. The link was shared on social networks in groups specifically dedicated to students. The median completion time was 34.61 min. Three control questions (e.g., "Please tick "strongly disagree" if you are careful in completing this questionnaire") were added to the survey as inattention checks. A total of 179 participants were excluded from the final analyses on the basis of these checks. The final sample consisted of 1050 young adults (433 males, 41%; 617 females, 59%). Participants ranged in age from 18 to 28 years old ( $M = 21.20 \pm 2.33$ ). The objectives of the study were presented to all participants at the beginning of the online questionnaire, specifying that this was a study on personality and

behaviors. The participants were assured of the anonymity of their answers. This study was approved by the research ethics committee of our institution.

## 2.2. *Measures*

Psychopathic traits were assessed using The Elemental Psychopathy Assessment-Short Form (EPA-SF; Lynam et al., 2013). It is a 72-item inventory, rated on a 5-point scale, that assesses 18 facets (with 4 items each) identified as descriptive of psychopathy (e.g., "Other people describe me as cold-hearted"). These 18 facets can be combined into a total score or used to score four factors: Interpersonal Antagonism (i.e., Callousness, Coldness, Distrustful, Manipulative, and Self-centered), Emotional Stability (i.e., Invulnerability, Self-contented, and Unconcerned), Disinhibition (i.e., Disobliged, Oppositional, Rashness, Thrill Seeking, and Urgency) and Narcissism (i.e., Anger, Arrogance, Dominance, and Self-assured).

Identity threat was measured using the Identity Threat Questionnaire (ITQ; Aquino & Douglas, 2003). The ITQ is a 9-item scale in which respondents have to report the number of times that a person displayed the target behavior towards them within the past 6 months (e.g., "Made insulting comments about your private life", "Questioned your abilities or judgments") using a 5-point Likert scale (from Never to 10 or more times). Participants were asked to report only behaviors that caused them to experience psychological or emotional discomfort (i.e., threatening to their self-concepts).

Heroic behaviors were assessed using the Action Frequency Inventory (AFI; Lilienfeld, 1998). The AFI is composed of 30 items for which participants have to report how many times in their lives they had engaged in a specific heroic behavior (e.g., breaking up a physical fight, pulling over to assist a stranded motorist).

## 2.3. *Statistical Analysis*

To estimate the model, a structural equation model (SEM) was conducted with AMOS 24 using maximum likelihood parameter estimation procedure, whereby the relations among

EPA-SF dimensions, ITQ, and AFI were analyzed. The rationale behind the model is such that the EPA-SF dimensions were used as predictors of ITQ and AFI, respectively. Given the  $\chi^2$  statistic sensitivity to sample size, we did not use it as a unique indicator of model fit. We additionally used three absolute and two incremental fit indices: The Goodness-of-Fit Index (GFI), the Adjusted Goodness-of-Fit Index (AGFI), the Root Mean Square Error of Approximation (RMSEA), the Tucker-Lewis Index (TLI), and the Comparative Fit Index (CFI). Models are considered to have a very good fit when the  $\chi^2$  statistic is non-significant, the GFI, AGFI, TFI, and CFI are greater than .95 and the RMSEA is below .06.

### 3. Results

We first examined zero-order correlations between EPA-SF dimensions, ITQ, and AFI (Table 1). Results showed the expected relationships. Narcissism, emotional stability, and identity threat displayed small positive correlations with heroic behaviors. All variables were positively associated with identity threat, with the exception of emotional stability, which was negatively associated.

We next conducted a SEM in which ITQ was regressed using the four EPA-SF dimensions, and AFI was regressed using narcissism and emotional stability dimensions of the EPA-SF (Fig. 1). The model fit was good:  $\chi^2 = 6.109(2)$ ,  $p = .047$ , CFI = 0.993, TLI = 0.944, RMSEA = 0.044, SRMR = 0.016. The parameter estimates were in line with correlation analysis but also elucidated more clearly how the psychopathy dimensions diverged in their relations with identity threat and heroic behaviors. The effects were relatively modest but showed that antagonism, disinhibition and narcissism domains positively predicted ITQ scores while emotional stability negatively predicted ITQ scores. Moreover, identity threat narcissism, and emotional stability dimensions both predicted AFI scores.



We finally performed exploratory analysis in order to test the mediating role of identity threat on the relationship between narcissism and emotional stability dimensions and heroic behaviors. In line with Shrout and Bolger (2002), the bias-corrected confidence intervals (95% confidence level) were calculated through a bootstrapping procedure on 1000 samples. Indirect effects via identity threat were statistically significant for both narcissism and emotional stability. Standardized direct, indirect, and total effects are reported in Table 2.

#### **4. Discussion**

The main objective of this study was to examine the relative contribution of identity threat, narcissism, and emotional stability in predicting heroic behaviors. As expected, and in line with previous studies, emotional stability (i.e., fearless dominance) was positively associated with heroism (e.g., Patton et al., 2018). Our study is also the first to report that narcissism and emotional stability remain independent predictors of heroic behaviors when other psychopathic traits and identity threat are controlled. These results are consistent with Lykken's hypothesis that a fearless temperament would underlie both psychopathic traits and heroic behaviors. However, they also emphasize the contribution of narcissistic dispositions in predicting heroic behaviors. Indeed, high psychopathic traits individual could be motivated by social rewards or manipulative tendencies when they behave in a heroic way. In this perspective, heroic behavior would be a means to obtain a reward or to dominate the potential rescued victim. These results, needing to be replicated, are in line with data (Blair, 2015; Buckholtz et al., 2010) underlining greater sensitivity to rewards in psychopathy (potentially related to narcissism) and reduced consideration of the associated cost (potentially related to fearlessness/emotional stability).

In the same way, identity threat has shown to predict heroic behaviors and to mediate the link between emotional stability and narcissism dimensions and heroism. Interestingly, this result support that heroic behaviors could also be driven by the avoidance of social

punishment or threat to social status, in accordance with Gilligan (1996) who posited this vulnerability in antisocial profiles. Individuals with high psychopathic traits, characterized by a profound detachment from others, should be nevertheless sensitive to punishment from out-group members (i.e., strangers) (Hackel, Zaki, & Van Bavel, 2017).

Several limitations of this study should be considered. First, the way we operationalized heroic behaviors could be debated. We solely evaluated civil heroism and excluded military and social heroism representing two other dimensions which could be determined by other factors (Franco et al., 2011). Second, important confounding factors such as sensation seeking and empathy (e.g., Bateson, Ahmad, Lishner, & Tsang, 2016) have not been included in our model, and could have improved it. Third, the observed effects in correlational and SEM analysis were significant but relatively modest. They allowed a better understanding of the atypical link between psychopathic traits, identity threat, and heroic behaviors, but need to be replicated before drawing more accurate conclusions. Finally, the use of online completion of self-report questionnaires could be arguable, although reports available suggest that Internet-based data collections commonly produce reliable and generalizable results (Best, Krueger, Hubbard, & Smith, 2001; Gosling, Vazire, Srivastava, & John, 2004). Despite these limitations, our study provides new and important information regarding the involvement of narcissism and identity threat in psychopathic heroism. Results support that emotional stability could have a role in heroism, but that we also need to focus on the meaning of these behaviors. In this context, narcissism and identity threat could be the key to understanding heroic behaviors in individuals exhibiting psychopathic characteristics. Future research should continue to investigate how social desirability, fear of exclusion and extrinsic social rewards influence the behavioral manifestations of psychopathy.

### **Declaration of interest**

The authors report no conflicts of interest.

**Role of the funding source**

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

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**Table 1**

Correlations, means and standard deviations for all exogenous and endogenous variables.

	1	2	3	4	5	<i>M (SD)</i>
1. Narcissism	-					42.07 (8.16)
2. Emotional stability	.23*	-				33.45 (9.31)
3. Antagonism	.24*	.16*	-			45.50 (10.31)
4. Disinhibition	.22*	-.13*	.35*	-		58.75 (11.68)
5. Identity threat	.14*	-.18*	.23*	.26*	-	16.08 (5.77)
6. Heroic behaviors	.15*	.09*	.01	.04	.13*	9.97 (13.87)

Note. \* $p < .01$ .

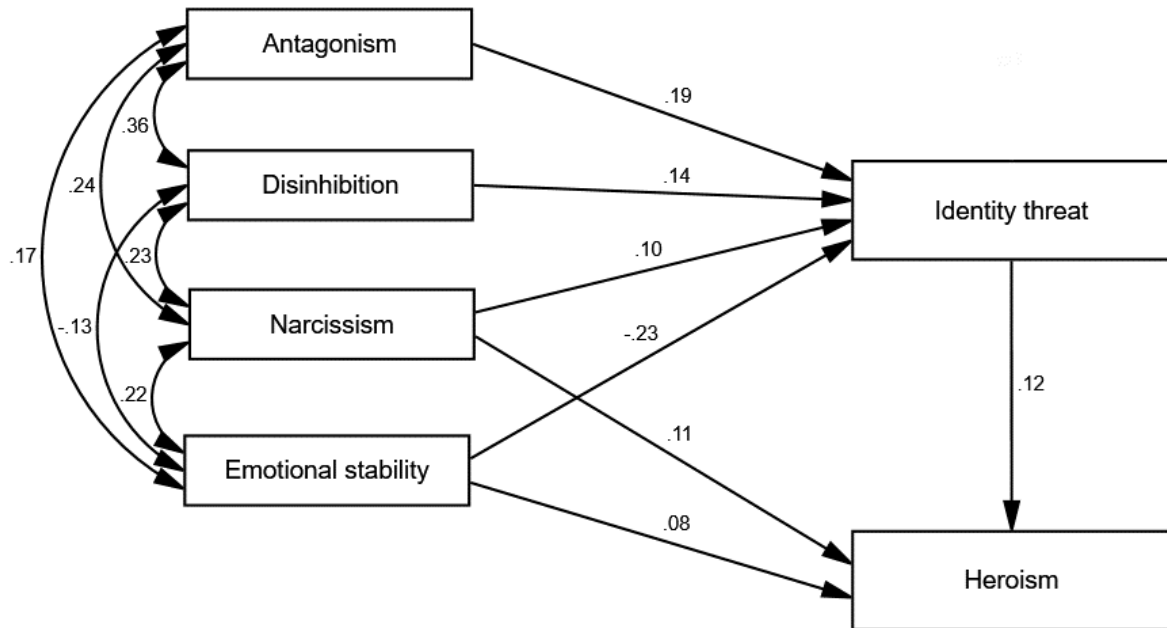


**Table 2**

Test of the mediating role of identity threat: Direct, indirect and total effects, and associated bootstrapping bias-corrected 95% confidence intervals (CI).

Predictor	Outcome: Heroic behaviors		
	Direct effect [CI]	Indirect effect [CI]	Total effect [CI]
Narcissism	.11 [.04, .17]*	.01 [.004, .03]*	.12 [.06, .18]*
Emotional stability	.08 [.02, .13]*	-.03 [-.05, -.01]*	.05 [-.01, .10]*

Note. All the reported estimates are standardized. \* $p < .01$



**Fig.1.** SEM depicting relations between psychopathy dimensions (i.e., antagonism, disinhibition, narcissism, and emotional stability), identity threat and heroism.