

## **Are Those with Darker Personality Traits more Willing to Corrupt When They Feel Anxious?**

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### **Abstract**

This unprecedented research endeavors to investigate the relationship between dark personality traits (i.e., narcissism, Machiavellianism, and psychopathy) and corruption intention through the mediation of anxiety. Based on the resource conservation theory, it is hypothesized that those higher in dark personality traits are more inclined to corrupt when they feel anxious. Having collected data in the south of Iran from 273 employees of various organizations at two-time points in 2017 and 2018, five months apart, the authors conducted confirmatory factor analysis and used Structural Equation Modeling (SEM) to acquire the results. In Formative SEM, sub-constructs are considered separately since they may have diverse effects and causes, and hence, require to be considered as disparate variables (Srivastava et al. 2001) and this method is used in various studies in high-quality journals (e.g., Tang et al., 2018; Gentina et al., 2018; Gentina & Tang, 2018). In the formative SEM model, based on the data analysis, Dark Triad was formed through high narcissism and Machiavellianism and low psychopathy. The findings revealed that the Dark Triad bears a significant indirect positive relationship with corruption intention through anxiety. Anxiety acts as a full mediator between Dark Triad and corruption intention. All in all, this study extended previous research by providing evidence that anxiety can contribute to corruption intention for those with Dark Triad traits.

### **Keywords**

Narcissism, Machiavellianism, Psychopathy, Dark Triad, Anxiety, Corruption intention.

## **Introduction**

Corruption, as a potentially ubiquitous monster, especially in developing countries, imposes serious threats to the progress of individuals and nations. Corruption has various adverse consequences such as decreasing human development (Morais, Miguéis & Camanho, 2017), causing destructive entrepreneurship (Boudreaux, Nikolaev & Holcombe, 2018) continuing to be an underdeveloped country (Agbiboa, 2012), misallocating public resources, impediment in public trust in government and lowering moral standards (Sobhani & Bechara, 2011). According to the statistics released by the Transparency International (2018), Iran's rank is 138 among 180 countries, with a score of 28 out of 100. Consequently, it is deemed necessary to figure out what is opening this Pandora's Box.

Corruption at the organizational level can manifest itself through two disparate phenomena of an organization: corrupt individuals and a corrupt organization (Pinto et al., 2008). Accordingly, in the analysis, the focal unit is an organization; however, the level of analysis can be the individuals, groups, organizations, and the environment. Considering the individual level analysis, individual difference variables (i.e., personality in this study) can partially explain corruption (Agbo & Iwundu, 2016). There is a paucity of research exploring different personalities potentially pertinent to corruption. For example, searching the word "corruption" in PsycNET, the American Psychological Association (APA) database, known as the voluminous psychological oriented electronic database, resulted in only two citations. It implies inadequate empirical and theoretical coverage of corruption.

Since the inception of the Dark Triad of personality, standing on the pillars of narcissism, Machiavellianism, and psychopathy (Paulhus & Williams, 2002), a great deal of research has shown that these personality traits can be culprits of unethical and counterproductive work behaviors (e.g., Baloch et al., 2017; Baka, 2018). Machiavellianism describes an exploitative interpersonal style, a cynical view of human nature, and an "ends justify the means" attitude (Christie & Geis, 1970). Narcissistic individuals are characterized by feelings of entitlement, superiority, and self-enhancing behaviors (Raskin & Hall, 1979). Psychopathy is defined by shallow affect, impulsivity, risk-taking, and physical aggression (Jones & Neria, 2015; Jones & Paulhus, 2011; Malesza & Ostaszewski, 2016).

The contributions of this research are multifold. First, this research investigates the effects of dark personality traits on the intention to perpetrate corruption. In this study, the intention paradigm focuses on the tendency to corrupt in general. Moreover, despite an increase in evidence substantiating the effect of the Dark Triad traits on diverse deviant behaviors, the underlying mechanism, and processes behind this relationship have received scant attention. Thus, the second aim of this research is to study the psychological mechanism underlying the association between dark personality traits and corruption. Third, unlike previous research exploring the cognitive mechanism mediating the association between the Dark Triad personality and corruption (Zhao, Zhang & Xu, 2016), to the best knowledge of the authors, this study is the first to consider an emotional trait (i.e. anxiety) as the mediator in that relationship.

## **Theoretical background and hypotheses**

### **Dark Triad traits and corruption**

The seeds of personality grow in the “social landscapes to which humans have to adapt” (Buss, 1991, p. 471) so they acquire status, security guarantee in groups and boost up access to mates. To reach these goals, some individuals apply prosocial and some agentic and socially aversive methods (Jonason & Webster, 2010). Having an exaggerated view of themselves, along with delusions of grandeur, narcissists are inclined to self-promote and show attention-seeking behaviors. Machiavellians believe that others are gullible and show no remorse and concern for their violated rights; therefore, they show manipulative behaviors. Psychopaths disregard norms, which ultimately cause antisocial behaviors. Juxtaposing these three traits, Paulhus and Williams (2002) coined the term Dark Triad in accordance with the degree of social averseness and malevolence.

### **Narcissism and Corruption**

Narcissism encompasses two components of grandiosity and entitlement (Brown, Budzek, & Tamborski, 2009). Entitlement is mainly about the desire to be treated exceptionally by others while grandiosity is more interpersonal and has to do with a selfish sense of self-importance (Mead et al., 2018). Maladaptive behaviors such as aggression, cheating, and

counterproductive behaviors are associated with exploitative/entitlement component of narcissism (Grijalva et al., 2015). Therefore, exploitation and entitlement provide viable explanations for the corrupting influence of power (Mead et al., 2018). Narcissists are optimistically egotistic (Jones, 2013), self-centered and possess a sense of vanity, superiority, entitlement, and grandiosity (Buelow & Brunell, 2014). As a consequence, they focus on their instant profits at the price of others' benefit (Lakey et al., 2008). These behavioral consequences of narcissism seem to elevate the tendency of individuals to corrupt to gain illegal money.

### **Machiavellianism and Corruption**

The pivotal features of Machiavellianism are (1) manipulating others (2) disregard or lack of conventional morality and (3) cynicism about the world and human nature (Djeriouat & Tremoliere, 2014). Different researchers have explored the relationship between Machiavellianism and various variables in diverse populations. On the whole, these studies have underscored the correlations between Machiavellianism and different antisocial and deviant conducts including cheating, occupational problems and counterproductive and negative work behaviors (Jones & Paulhus, 2009; DeShong et al., 2017). Wu and Lebreton (2011) postulate that a Machiavelli is motivated to do whatever needed to reach goals, shows no remorse and engages in unethical and hostile behaviors zealously.

### **Psychopathy and Corruption**

According to Hare (1999), a psychopath is "... a self-centered, callous, and remorseless person profoundly lacking in empathy," (Hare, 1999, p.2); moreover, they are "social predators who charm, manipulate, and ruthlessly plow their way through life... completely lacking in conscience and in feelings for others". To sum up, they are inconsiderate about social moral codes via antisocial acts which pursue personal gains. Jacob and Portales (2014) concluded that financial corruption and larceny emanate from arrogance or pathological selfishness. Baker, Filbeck, and Ricciardi (2017) introduced financial psychopaths in a chapter and mentioned that "... a financial psychopath is a predator who ruins the lives of others through activities involving financial transactions; this person is emotionally detached, narcissistic, and shows no remorse, perhaps even taking pleasure

in the destruction of the lives of others.” (p.161) Based on all the points mentioned above, it is hypothesized that:

H1: Dark personality traits are positively related to corrupt intention.

### **The Mediating Role of anxiety**

It was previously mentioned that people possessing dark personality traits are more likely to show corrupt behaviors. At this stage, the question is what makes those with the high levels of the Dark Triad traits ignore the law and have corrupt intention? In brief, in this section, first the relationships between dark personality traits and anxiety are explained and the related hypotheses are presented. Then, through theory and prior research, the connection between anxiety and corruption intention is justified and eventually, the mediation is justified through using the Conservation of Resources (COR) theory (Hobfoll, 1988; 1989) because anxiety can function as a factor depleting resources, and gaining money is likely to compensate for the loss.

### **Dark personality and anxiety**

#### **Narcissism and anxiety**

Narcissism is “a pervasive pattern of grandiosity (in fantasy and behavior), need for admiration, and lack of empathy, beginning by early adulthood and present in a variety of contexts” (p.645) (DSM-5, APA, 2011). There are two subtypes of narcissism: vulnerable and grandiose (Hyatt et al., 2018). While grandiose narcissism has the features of superiority, excitement, exhibition and explosiveness (Manley et al., 2018), the vulnerable type shows a weaker expression of narcissism featuring hostility (Miller et al., 2011), hypersensitivity and social withdrawal (Dickinson & Pincus, 2003) as well as explicit self-esteem (Miller et al., 2010).

Based on the theory of self-discrepancy (Higgins, 1987), the void between self-state representations (i.e., actual, ideal and should) can predict emotional syndromes (Higgins, Klein & Strauman, 1985; Higgins, 1987). The actual self is an individual’s self- concept; the ideal self is a cognitive picture of what the person desires or hopes to possess and should-self addresses the qualities an individual ought to or should possess. In addition to these selves, Ogilvie (1987) added the fourth type of self-called undesired self (some qualities one does not want to possess and is concerned about the likelihood of becoming (Carver, Laurence & Scheiar,

1999). Barnett and Womack (2015) substantiated that the actual-undesired discrepancy is the predictor of self-esteem in a positive direction and is primarily related to narcissism. It implies that narcissists are plagued by the gap between the actual self and undesired self, which causes them to have less self-esteem. There is a plethora of research revealing that self-esteem functions as an anxiety-buffering function (e.g., Greenberg et al., 1992; Bajaj, Robins & Pande, 2016).

### **Machiavellianism and anxiety**

The term Machiavellianism addresses an individual's tendency to exploit others as tools to maximize personal profits to reach goals (Paulhus & Williams, 2002; Bereczkei, 2015). Such people are behavioral opportunists who are usually obsessed with their profit with no care about the interest of their exchanging partners (Bereczkei & Czibor, 2014).

In terms of emotional intelligence, researchers have shown a negative relationship between this trait and Machiavellianism (Szijarto & Bereczkei, 2015), which can have roots in their lack of competency or declined motivation to analyze their and others' emotional states (Czibor et al., 2017). Because of lacking the ability to express emotions, Machiavellians are skillful manipulators (Szijarto & Bereczkei, 2015). Attributing lower emotional intelligence to Machiavellians (Schutte et al., 2007) means they cannot manage stressful situations effectively (Schutte et al., 2001); therefore, research has shown a moderate, positive correlation between Machiavellianism and anxiety (McHoskey et al., 1998).

From another perspective, in terms of emotions, Machiavellians are not emotionally attached and their affective coldness is pertinent to intense and negative emotions, emotional instability, and inability to tolerate distress (Deak et al., 2017). Studies have postulated that Machiavellianism is the antecedent of diverse psychopathological outcomes such as anxiety, depression, and impulsivity (Monaghan et al., 2016).

### **Psychopathy and Anxiety**

Psychopathy as a personality disorder reflects a lack of remorse, insufficient competency to make decisions and a high level of impulsivity (Hare, 2003). To elaborate, psychopathy is associated with high impulsivity and thrill-seeking along with low empathy (Paulhus and Williams, 2002). Some researchers believe that the relationship between

psychopathy and anxiety is negative (Cleckley, 1941; 1976; Karpman, 1948) since immunity from anxiety and worry receives decency and acceptability in disturbing situations by them. Lykken (1957) supplemented the notion by postulating that psychopaths are less fearful; however, show no difference in their trait anxiety level. More recent research has refined the previous theories of psychopath- anxiety connection and postulated that psychopaths experience anxiety based on their contexts (Lilienfeld and Perna, 2001; Frick et al., 1999).

The reason for their anxiety is their experienced risk taking and antisocial behavior (Moffitt, 2003). Therefore, those who are scored high on psychopathy are likely to be assessed as more anxious (Kubak & Salekin, 2009). A very recent study showed that interpersonal and affective symptoms of psychopathy are linked with the aberrant organization and foundation of multiple brain networks (Espinoza et al., 2018), which contribute to the variability in anxiety and depression (Williams, 2017). Accordingly, it is hypothesized that:

H2: Dark personality traits are positively associated with anxiety.

### **Anxiety and corrupt intention**

Researchers consider anxiety as an emotion which is aversive and unpleasant (Smith & Ellsworth, 1985), engendering some other emotions such as nervousness, stress, and dread (Gray, 1991). These negative feelings signal potential threats and trigger psychological, behavioral and physiological responses in order to negate the unpleasant effects of the aversive situation (Pacheco-Unguetti et al., 2010). According to affective events theory (Weiss & Cropanzano, 1996), emotional reactions of employees influence workplace attitudes and behaviors. It insinuates that emotions (i.e. anxiety in his research) can lead to specific behaviors (i.e. corrupt behavior). Anxiety has the power to mobilize different psychological and biological resources to avoid, defend or escape danger (Rachman, 2004).

In terms of evolutionary psychiatry, anxiety disorders are some proximate mechanisms utilized to survive through adaptation in order to be protected from seven sources of danger including agoraphobia, acrophobia, small animal phobias, general anxiety, panic attack, society phobia (anxiety), and obsessive-compulsive disorder (Flannelly, 2017). The

response patterns encompass cognitive and physiological which commonly manifest themselves in the forms of apprehension and nervousness, which trigger self-protection in humans (Kouchaki & Desai, 2015). This study has constrained its scope to the effects of experienced anxiety on unethical behavior (i.e., corrupt behavior in this study).

H3: Experienced anxiety impacts intention to corrupt positively.

Based on the Conservation of Resource (COR) Theory (Hobfoll, 1988; 1998), stress and anxiety, as the responses to resource loss, can trigger an attempt to minimize losses and maximize gains and resources. As such, several behaviors can emerge based on the context (Holmgren, Tirone, Gerhart & Hobfoll, 2017). Accordingly, in accounting and financial departments, money and financial credit as a tertiary resource (Hobfoll and Lilly, 1993) can be potential to tempt employees to corrupt. On the one hand, those who possess dark personality traits are more bound to be anxious and on the other hand the rise of anxiety initiates the mechanism to prevent against resource loss; as a result, it is suggested that the tendency to gain money (even illegally), as a resource, can compensate for the loss. Therefore, as it is seen in the research model (Figure 1), it is hypothesized that:

H4: Anxiety acts as a mediator between dark personality and corruption intention.

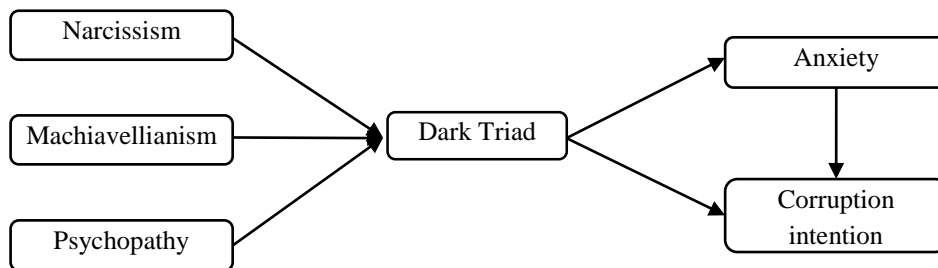


Figure 1. The proposed model of this study



## **Methods**

### **Research Setting and Data Collection**

Since this research tries to investigate the mechanism linking dark personality traits to corruption, the essence of participants' access to money and transactions seems plausible. Therefore, in this research, participants were selected from the accountants of governmental organizations in Iran. We randomly selected 30 governmental organizations in a populated city in the south of Iran using available information on websites and then distributed the questionnaires. It was ensured that the participants were professionally conscientious, interested and committed to answering honestly and reflecting reality as a result of the commitment of the researchers to the confidentiality of their responses. In order to cope with common method and single source biases, the measures of the independent and dependent variables were separated and related data were collected at two different time points. In order to guarantee confidentiality, the responses at two-time points of Times 1 and 2 were interconnected by some codes written on the first questionnaire. The instructions on the questionnaires asked them to memorize or write down the code to be saved for the second survey sometime later. They were made sure that these codes were just for the sake of linking the answers of the participants at Time 1 and Time 2.

At the beginning of winter 2017, a questionnaire comprising of dark personality dimensions and demographic variables was distributed and at the end of the spring, the second survey containing anxiety and corruption intention was administered to the same employees. In the winter, out of 600 distributed questionnaires, 469 complete ones were returned, showing the response rate of 78%. At the end of spring, the second survey was sent to the same employees electronically. Finally, 273 usable questionnaires were collected (response rate= 58%). A total of 92 participants were female. The employees had an average age of 38.53 years ( $SD= 7.65$ ) and their mean tenure was 17.87 years ( $SD= 10.16$ ). The organizations were involved in financial services (28%), education (25%), banking (35%) and other professional services (12%).

## Measures

The original survey questions were in English; therefore, they were translated to Persian by three bilingual scholars knowing Persian and English well. Using the back translation method (Brislin, 1970), the items were converted to English by one bilingual individual expert in both Persian and English languages to accentuate the accuracy of the translation.

### Dark Triad

In order to measure the Dirty Dozen (Johnson & Webster, 2010), a 12-item Dark Triad scale was adopted. Dark Triad Scale encompasses Machiavellianism, narcissism, and psychopathy. Sample items for each trait were “I tend to want others to admire me”; “I have used deceit and lied to get my way” and “I tend to be callous or insensitive”, respectively. Higher scores of narcissism, Machiavellianism, and psychopathy indicate they were more narcissistic, Machiavellian and psychopathic people. The scores were acquired through a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The total reliability of this scale was 0.82 and the Cronbach's  $\alpha$  for narcissism, Machiavellianism and psychopathy was 0.80, 0.82, and 0.82, respectively. Additionally, a confirmatory factor analysis revealed that there was a good fit for the measurement model ( $\chi^2/df = 2.40$ , TLI = 0.94, CFI = 0.97, RMSEA = 0.06).

### Anxiety

State-trait anxiety was assessed via the short scale of the Spielberger State-Trait Anxiety Inventory (STAI) (Marteau & Bekker, 1992). This scale comprised of six short statements on a 5-point Likert scale (1 = not all, 2 = somewhat, 3 = moderately, 4 = much and 5 = very much). Sample items of the STAI items were: “I feel worried,” “I am calm,” and “I am anxious.” Moreover, in comparison with the full form of the STAI, the short form six-item version provides a shorter and more valid scale (Marteau & Bekker, 1992). The Cronbach's  $\alpha$  for this scale was acceptable (Cronbach's  $\alpha = .85$ ).

### Corruption intention

Corruption intention was assessed by adopting the 18-item Corruption Propensity Scale (CPS) developed by Agbo, and Iwundu (2016) after making some changes to increase the comprehension of the questions and

their suitability to the context. Sample items of the scale were “If I have the opportunity of handling the money that belongs to this country, I will make sure I benefit from it,” and I don’t mind asking my client to thank me through bribing”. The scores were acquired through a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The reliability of this scale was high (Cronbach’s alpha = .91).

**Table 1. Descriptive statistics and correlations**

	Mean	SD	1	2	3	4	5	6	7	8
(1) Age	31.01	9.66	-							
(2) Gender	1.66	0.49	-.08	-						
(3) Education level	2.54	1.34	-.16**	.15**	-					
(4) Machiavellianism	2.57	0.62	-.11*	-.06	-.19**	-				
(5) Narcissism	2.96	0.59	-.04	.01	.02	.12*	-			
(6) Psychopathy	2.42	0.55	-.17**	-.05	.01	.16**	.09	-		
(7) Anxiety	2.77	0.85	-.05	-.05	-.09	.21**	.27**	.21**	-	
(8) Corruption intention	2.82	0.53	-.05	-.04	-.04	-.02	.17**	.36**	.18**	-

Note.  $N = 273$ . Gender coded as 1 for females and 2 for males. Education was coded on a 5-point scale (1 = Diploma, 2 = Associate diploma, 3 = Bachelor’s degree, 4 = Master’s degree and 5 = doctorate).

\*  $p < .05$ . \*\*  $p < .01$ .

## Results

Table 1 demonstrates the descriptive statistics, Cronbach’s alpha and correlations for the variables in this study. Research has shown that age, gender, and educational level are connected with corruption and unethical behavior (Kish-Gephart, Harrison, and Treviño, 2010; Köbis et al., 2015; Zhao et al., 2016); thus, these variables were controlled in our following analyses. To examine multicollinearity, variance inflation factors (VIFs) were calculated for each regression equation. The results revealed that no VIF exceeded 1.83, and all were well below the 4.00 or 10.00 thresholds (O’Brien 2007).

### **Common Method Variance (CMV)**

The data were acquired at two-time points; hence, CMV is less likely to occur (Podsakoff et al. 2003; Spector 2006). Based on variance, if the share of variance for one single factor exceeds 50 percent, in this situation, CMV should be considered as a threat. Employing Harman's single-factor test, the unrotated factor solution including all to-be-considered variables (Dark Triad, anxiety and corruption intention) was tested by exploratory factor analysis (EFA). The output of the analysis showed 12 factors with eigenvalues more than one (i.e., 12.75, 11.37, 7.70, 5.96, 4.67, 3.78, 3.51, 3.18, 2.95, 2.88, 2.80, 2.74, respectively, total = 64.30). After confining the number of factors to one, the total percentage of variance for that one factor was 18.534, which is far less than 50%. Hence, CMV does not impact the results.

### **Measurement model**

The measurement model was comprised of 3 latent factors (Dark Triad, anxiety and corruption intention) and 27 observed variables. In order to test data fitness to the measurement model, five criteria were selected. These indices were the ratio showing the division of Chi-square by degree of freedom ( $\chi^2/df < 3.0$ ), Tucker-Lewis Index (TLI  $> .9$ ), incremental fit index (IFI  $> .9$ ), comparative fit index (CFI  $> .9$ ), and root mean square error of approximation (RMSEA  $< 0.08$ ) (Hooper et al. 2008; Schreiber et al. 2006). In this research, initial testing of the measurement model showed satisfactory data fitness: ( $\chi^2/df = 1.65$ ; TLI = 0.9; IFI = 0.92; CFI = 0.92; RMSEA = 0.04), which indicates all latent factors are well connected with their corresponding indicators. Furthermore, it is shown that the connections between latent variables have been significant and reasonably conceptualized through literature.

### **Structural model**

To begin, the direct path coefficient on the path from the independent variable (Dark Triad) to the dependent variable (corruption intention,  $\beta = .28$ ,  $p < .001$ ) remained significant even after the omission of the mediator (anxiety). Second, in order to specify the best model, two alternative models were investigated. A partially mediated model (Model1) with a mediator and a direct path from Dark Triad to corruption intention did not show a good fit to the data (see Table 2). Moreover, the standardized path

coefficient from Dark Triad to corruption intention was non-significant ( $\beta = .07, p < .001$ ). Next, a fully-mediated model (Model 2) was considered by restricting the path between Dark Triad and corruption intention to zero, showing a satisfactory data fitness (Table 2). In this analysis, there was a significant difference between the Chi-squares of these two models ( $\Delta \chi^2 (1, N = 273) = 95.86, p < .001$ ). Since all indices improved significantly and the omission of the path contributed to the model the second model (the full mediation model) was chosen as the best model (Figure 2).

Table 2. Fit indices between two competing models

	$\chi^2$	Df	CFI	IFI	TLI	RMSEA
Model 1	254.48	68	0.89	0.89	0.85	0.09
Model 2	181.29	69	0.93	0.93	0.90	0.06

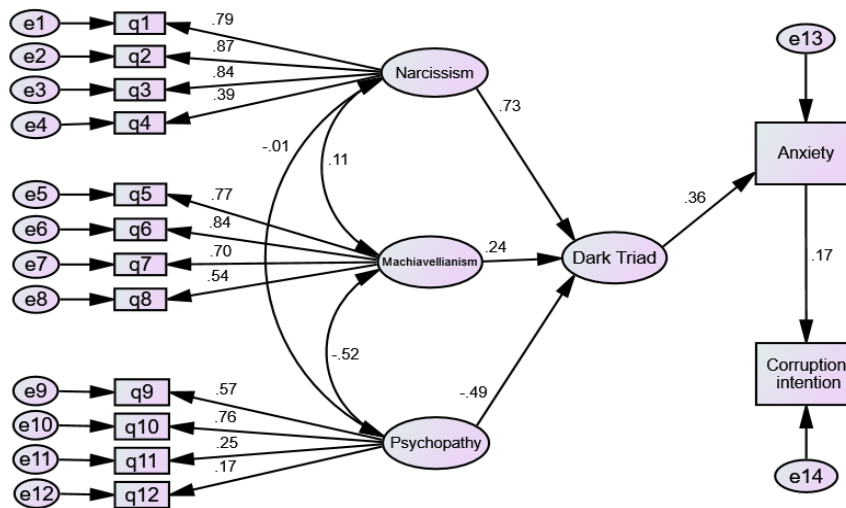


Figure 2. Results for the current research’s theoretical model linking Dark triad (Narcissism, Machiavellianism, and psychopathy) to corruption intention through anxiety

The significance of the mediating effect of anxiety was tested through utilizing Bootstrap estimation procedure. Two thousand bootstrapping samples were generated from the main data set (N = 273) through random sampling. Table 3 shows the indirect effects and their associated 95% confidence intervals. As demonstrated in Table3, Dark Triad exerted a significant indirect effect on corruption intention through anxiety.

Table 3. Standardized indirect effects and 95% confidence interval

Model pathways	Estimated	Confidence interval 95%	
		Lower	Upper
Narcissism→ Dark Triad→ Anxiety→ Corruption intention	.015*	0.015	0.092
Machiavellianism→ Dark Triad→ Anxiety→ Corruption intention	.031*	-0.077	-0.008
Psychopathy → Dark Triad→ Anxiety→ Corruption intention	.047*	0.002	0.048

\* 95% confidence interval does not overlap with zero

## Hypotheses testing

### Hypothesis 1

Dark Triad was hypothesized to have a positive and significant relationship with corruption intention. Participant's intention to corrupt was considered as the outcome and their anxiety fully-mediated the relationship between the participants' dark personality traits and corruption intention. Figure 2 suggests Dark Triad is not directly related to corruption intention; nevertheless, this latent variable (high narcissism and Machiavellianism and low psychopathy) contributes significantly and positively to anxiety (.36,  $p < .001$ ), which, in turn, was significantly associated with corruption intention (.17,  $p < .001$ ), supporting H1. The overall indirect impact from Dark Triad to corruption intention was small but significant ( $.061 = .36 \times .17$ ).

### Hypothesis 2

Dark Triad was hypothesized to have a positive relationship with anxiety. According to Figure 2, since paths on both sides of the Dark Triad were significant, higher levels of dark personality traits (higher narcissism and higher Machiavellianism and low psychopathy) are associated with higher anxiety (.36,  $p < .001$ ), supporting Hypothesis 2.

### Hypothesis 3

Anxiety was hypothesized to have a positive relationship with corruption intention. According to Figure 2, the path coefficient between anxiety and corruption intention is positive and significant; consequently, higher anxiety contributes to higher corruption intention (.17,  $p < .001$ ), supporting Hypothesis 3.

**Hypothesis 4**

It is hypothesized that anxiety mediates the effect of Dark Triad on corruption intention. Figure 2 shows that Dark Triad was positively related to anxiety ( $r = .36, p < .001$ ), and anxiety was also positively related to corruption intention ( $.17, p < .001$ ). In order to enhance the accuracy of the estimates of direct effect standard errors, a bootstrap method (Shrout and Bolger, 2002) was applied. The results demonstrated that there was a positive indirect relationship between Dark Triad and corruption intention via anxiety (full- mediation, indirect effect = 0.061; CI [.04, .042]). Hence, Hypothesis 4 was well supported.

**Discussion**

Based on the data collected at two points of time in 2017 and 2018 with the interval of five months, this study tried to investigate the impact of dark personality traits (narcissism, Machiavellianism and psychopathy) on the corruption intention of accountants. Anxiety was chosen as the mediator between Dark Triad and corruption intention. This research has the following implications for theory and practice.

**Theoretical contributions**

First, despite the crucial role of personality traits, the negative outcomes of them for the organizations are not sufficiently explored. More importantly, the mechanisms linking different personality traits to counterproductive behaviors such as corruption are still unknown. Aligned with the theory of planned behavior (Ajzen, 1991), the dark personality traits were the antecedents of anxiety, which in turn, positively impacted one's corruption intention.

Before proceeding to the theoretical implications, some features of Iranian culture pertaining to anxiety are explained. The most distinguishing aspects of Iranian culture are its family and in-group orientation (Javidan & Dastmalchian, 2003). The implication is that family members and close friends have strong expectations from each other. From one point of view, it can be a detriment to economic progress, which can increase an individual's financial anxiety (Shapiro & Burchell, 2012). The second potential outcome of a strong family orientation is the restricted number of trusted people, leading to attachment insecurity. Attachment insecurity is proved to be significantly related to higher anxiety and depression (Muris

et al., 2001; Lee et al., 2006). Besides, currently, the imposed sanctions by the U.S government have caused an upsurge in the cost of living due to the almost trebled value of the dollar in Iran; therefore, it is plausible to think of this economic situation as the generator of anxiety.

According to the GLOBE study (House et al., 2004), uncertainty avoidance in Iran is rather low. This cultural feature can reduce satisfaction and social health as the contributors to more anxiety (Cheng & McCarthy, 2018) since lack of rules commitment to their usefulness and appropriateness of them can both open the venues for corruption. Iran is a male dominant society (Arjmand, 2016); therefore, most employees, especially in financial sectors, are male. This means the level of anxiety is lower because men experience lower levels of anxiety. The analysis of data for males and females demonstrated that for females, the relationship between Dark Triad and anxiety as well and anxiety and corruption was higher. In terms of human performance, Iranians tend to be performance-oriented with short time horizons. High emphasis on performance coupled with short time planning can contribute to the anxiety of Iranians. Therefore, the role of anxiety in different behaviors seems to be of great importance.

As the first theoretical implication, the results demonstrated that anxiety fully mediated the relationship between Dark Triad and corruption intention. This result is in line with the previous findings showing the positive relationship between dark personality traits and unethical behaviors (e.g., Egan et al., 2015; Roeser et al., 2016) and counterproductive behavior (e.g., Deshong et al., 2015; Cohen, 2016). One of the spinoffs of this study was the strange role of psychopathy in the formation of Dark Triad. The negative relationship between psychopathy and dark personality and the positive ones between narcissism, Machiavellianism and Dark Triad show that those who are more narcissistic and more Machiavellian have more anxiety while psychopaths are less worried and anxious. In other words, more narcissistic, more Machiavellian and less psychopathic individuals have higher anxiety. For male participants, high levels of narcissism and Machiavellianism but a low level of psychopathy formed Dark Triad. However, for females, high levels of all three sub-constructs represented Dark Triad. This result confirms the results of previous research indicating psychopathic traits can be



distributed or manifested differently for different genders (Hare, 2003; Coid et al., 2009; Salekin et al., 2001). While males believed that lower psychopathy and remorselessness can cause higher Machiavellianism and lead to more anxiety, females believed that higher psychopathy initiates more anxiety. Based on Sevecke et al. (2009), regarding anxious-depressive behavior, psychopathy is negatively associated with affective traits (e.g., lack of empathy) for males but this is not true for females. In other words, females are bound to think that those who are psychopathic have empathy and remorse, but they act in contrast with their emotional possessions and that is likely to increase anxiety. Research has addressed the differences between the traits of male and female psychopaths. Psychopathic women share many traits with their male counterpart (e.g., manipulative, deceitful, domineering, self-centered, remorseless, unempathetic, detached, uncommitted, self-justifying, insincere, and irresponsible), but other traits may be more relevant to psychopathy in women (e.g., emotional instability) (Kreis & Cooke, 2012). The need for achievement in people of diverse social status and success along with extroversion and emotional instability can lead to higher levels of anxiety (Paspalanov, 1984). Moreover, anxious attachment and emotional instability can increase health anxiety (Sherry et al., 2014).

As the second contribution, this study revealed that anxiety is a full mediator between dark personality traits and corruption intention. This result accentuates the previous findings (Kouchaki & Desai, 2015; Zhao et al., 2016). It demonstrates that anxiety has important emotional functions as a “demon” inside people to commit corruption.

### ***Practical implications***

This study and its findings can be illuminating for organizational managers and policymakers. Based on Transparency International statistics (Transparency International, 2018), in the last decade, the Corruption Perception Index in Iran has increased from 18 in 2007 to 30 in 2017. This entails drastic and meticulous attention of the authorities to curb anxiety among those making monetary and financial decisions to decrease the intention to corrupt. As mentioned earlier, corruption has dire consequences. The amalgamation of international sanctions, social anxiety, financial anxiety, vicarious unemployment and demotion, high rates of inflation and economic failure can surely inject anxiety in the veins of Iranian employees

who are vulnerable due to their insufficient salaries. Anxiety has the potential to shatter the fabric of humanity and ethics when the actors of life possess dark personality traits. Taking lessons from big successful companies such as Google and Johnson & Johnson can give us some clues to augment mental peace through playful furniture, flextime jobs, and physical exercises, using yoga mats, meditation, and deep breathing. Dark personality can be bred in contexts inundated with the threat, anxiety, and lack of empathy, within which individuals lose their identity and think of themselves as inefficient and useless. Hence, boosting self-esteem and respect can buffer against anxiety.

### **Limitations and future research**

This study has several inherent limitations. Using correlational designs have no power to infer causality from the relationship between dark personality traits, anxiety, and corruption intention. Therefore, experimental research can help in this regard. Second, having used data at two different time points can negate the negative impact of common method bias; however, it can still influence the validity of the findings. Third, the relationships between the Dark Triad traits and corruption intention are determined through the mediator of anxiety. There are other mediators and moderators which can depict the mechanism. Therefore, future research can use emotional intelligence and moral disengagement as alternative mediators and power distance and task interdependence as potential moderators. Fourth, anxiety as an emotion is assessed through some questions which can be impacted by impulses and does not consider the factors generating it. It is deemed necessary to consider different determinants of anxiety such as financial, attachment, social and future anxieties to get a more detailed picture of how these and other types of anxiety can mediate Dark Triad traits and corruption intention relationship.

### **Conclusion**

This study aimed at investigating the relationship between Dark Triad constituted by narcissism, Machiavellianism and psychopathy, and corruption intention through the mediating role of anxiety. The results showed that anxiety fully mediates the relationship between Dark Triad and corruption intention. In the analyzed model, Dark Triad was formed through the juxtaposition of high

narcissism, Machiavellianism and low psychopathy. On the whole, this study showed that anxiety plays an important role in the relationship between a personality type and their potential behavior to conduct unethical work behavior.

### **Appendix: scales in this study**

- **Dark Triad**

#### **Narcissism**

1. I tend to want others to admire me.
2. I tend to want others to pay attention to me.
3. I tend to seek prestige or status.
4. I tend to expect special favors from others.

#### **Machiavellianism**

1. I tend to manipulate others to get my way.
2. I have used deceit or lied to get my way.
3. I have used flattery to get my way.
4. I tend to exploit others towards my own end.

#### **Psychopathy**

1. I tend to lack remorse.
2. I tend to be unconcerned with the morality of my actions.
3. I tend to be callous or insensitive.
4. I tend to be cynical.

- **Corruption propensity scale**

1. If I have the opportunity of handling any money that belongs to this country, I will make sure I benefit from it.
2. If I am in a position of awarding a contract for the public, I will make sure I benefit from it.
3. I don't mind amending my age in order to remain in an office.
4. There is nothing wrong with receiving money, donation, or gift from someone who wants me to use my office to help him/her.
5. If it takes making offers to attain higher positions wherever I work, I will do it.
6. I will utilize the advantage of my office to obtain some benefits for myself, family, and friends.
7. If I have the opportunity, I will allow my relations, friends, and acquaintances to benefit from contracts from where I work.

8. I am likely to receive or demand offers in order to allow friends, acquaintances, or whoever is interested win a contract.
9. There is nothing wrong in increasing the prices of articles, goods, or services to enable one to have some money after purchases in my place of work.
10. I don't mind making statements that only I know is not true to ensure that I benefit from things going on in my office.
11. If I will get my cut, I will assist my boss do whatever he/she wants.
12. As long as I will be well compensated, I will release officially classified information to whoever needs it.
13. It is impossible to be successful where I work if I don't find a way of redirecting funds to myself.
14. I am ready to give preference to my friends, family members, and acquaintances, irrespective of what the rule says, after all, they are the reason why I work.
15. Once I have the opportunity, I will claim allowances, as much as I can, whether correct or not, since that's one way to get my cut of the national cake.
16. I don't mind favoring a client for a bribe.
17. People make noise about corruption as if it is entirely wrong.
18. Corruption is an excuse to say that one is a criminal.

- **Anxiety scale**

1. I feel calm.
2. I am tense.
3. I feel upset.
4. I am relaxed.
5. I feel content.
6. I am worried.

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**References**

- Agbibo, D. E. (2012). Between corruption and development: The political economy of state robbery in Nigeria. *Journal of Business Ethics, 108*(3), 325-345.
- Agbo, A. A., & Iwundu, E. I. (2016). Corruption as a propensity: Personality and motivational determinants among Nigerians. *The Journal of Psychology, 150*(4), 502-526.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes, 50*(2), 179-211.
- Arjmand, R. (2016). *Public urban space, gender and segregation: Women-only urban parks in Iran*. London & New York: Routledge.
- Bajaj, B., Robins, R. W., & Pande, N. (2016). Mediating role of self-esteem on the relationship between mindfulness, anxiety, and depression. *Personality and Individual Differences, 96*, 127-131.
- Baka, L. (2018). When do “the dark personalities” becomes less counterproductive? The moderating role of job control and social support. *International Journal of Occupational Safety and Ergonomics, 24*(4), 557-569.
- Baker, H. K., Filbeck, G., & Ricciardi, V. (Eds.). (2017). *Financial Behavior: Players, services, products, and markets*. Oxford University Press, NY.
- Barnett, M. D., & Womack, P. M. (2015). Fearing, not loving, the reflection: Narcissism, self-esteem, and self-discrepancy theory. *Personality and Individual Differences, 74*, 280-284.
- Bereczkei, T. (2015). The manipulative skill: Cognitive devices and their neural correlates underlying Machiavellian’s decision making. *Brain and Cognition, 99*, 24-31.
- Bereczkei, T., & Czibor, A. (2014). Personality and situational factors differently influence high Mach and low Mach persons’ decisions in a social dilemma game. *Personality and Individual Differences, 64*, 168-173.
- Boudreaux, C. J., Nikolaev, B. N., & Holcombe, R. G. (2018). Corruption and destructive entrepreneurship. *Small Business Economics, 51*(1), 181-202.

- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology, 1*, 185–216. <http://dx.doi.org/10.1177/135910457000100301>
- Brown, R. P., Budzek, K., & Tamborski, M. (2009). On the meaning and measure of narcissism. *Personality and Social Psychology Bulletin, 35*(7), 951-964.
- Buelow, M. T., & Brunell, A. B. (2014). Facets of grandiose narcissism predict involvement in health-risk behaviors. *Personality and Individual Differences, 69*, 193-198.
- Buss, D. M. (1991). Evolutionary personality psychology. *Annual review of psychology, 42*(1), 459-491.
- Carver, C. S., Lawrence, J. W., & Scheier, M. F. (1999). Self-discrepancies and affect: Incorporating the role of feared selves. *Personality and Social Psychology Bulletin, 25*(7), 783-792.
- Cheng, B. H., & McCarthy, J. M. (2018). Understanding the dark and bright sides of anxiety: A theory of workplace anxiety. *Journal of Applied Psychology, 103*(5), 537-560.
- Christie, R. & Geis, F. (1970). *Studies in Machiavellianism*. New York: Academic Press.
- Cohen, A. (2016). Are they among us? A conceptual framework of the relationship between the Dark Triad personality and counterproductive work behaviors (CWBs). *Human Resource Management Review, 26*(1), 69-85.
- Coid, J., Yang, M., Ullrich, S., Roberts, A., Moran, P., Bebbington, P., ... & Singleton, N. (2009). Psychopathy among prisoners in England and Wales. *International journal of law and psychiatry, 32*(3), 134-141.
- Czibor, A., Szabo, Z. P., Jones, D. N., Zsido, A. N., Paal, T., Szijjarto, L., ... & Bereczkei, T. (2017). Male and female face of Machiavellianism: Opportunism or anxiety? *Personality and Individual Differences, 117*, 221-229.
- Deak, A., Bodrogi, B., Biro, B., Perlaki, G., Orsi, G., & Bereczkei, T. (2017). Machiavellian emotion regulation in a cognitive reappraisal task: An fMRI study. *Cognitive, Affective, & Behavioral Neuroscience, 17*(3), 528-541.
- DeShong, H. L., Grant, D. M., & Mullins-Sweatt, S. N. (2015). Comparing models of counterproductive workplace behaviors: The Five-Factor

- Model and the Dark Triad. *Personality and Individual Differences*, 74, 55-60.
- DeShong, H. L., Helle, A. C., Lengel, G. J., Meyer, N., & Mullins-Sweatt, S. N. (2017). Facets of the Dark Triad: Utilizing the five-factor model to describe Machiavellianism. *Personality and Individual Differences*, 105, 218-223.
- Dickinson, K. A., & Pincus, A. L. (2003). Interpersonal analysis of grandiose and vulnerable narcissism. *Journal of Personality Disorders*, 17(3), 188-207.
- Djeriouat, H., & Trémolière, B. (2014). The Dark Triad of personality and utilitarian moral judgment: The mediating role of Honesty/Humility and Harm/Care. *Personality and Individual Differences*, 67, 11-16.
- Egan, V., Hughes, N., & Palmer, E. J. (2015). Moral disengagement, the Dark Triad, and unethical consumer attitudes. *Personality and Individual Differences*, 76, 123-128.
- Espinoza, F. A., Vergara, V. M., Reyes, D., Anderson, N. E., Harenski, C. L., Decety, J., ... & Koenigs, M. (2018). Aberrant functional network connectivity in psychopathy from a large (N= 985) forensic sample. *Human brain mapping*, 39(6), 2624-2634.
- Flannelly, K. J. (2017). *Religious Beliefs, Evolutionary Psychiatry, and Mental Health in America*. New York: Springer.
- Frick, P. J., Lilienfeld, S. O., Ellis, M., Loney, B., & Silverthorn, P. (1999). The association between anxiety and psychopathy dimensions in children. *Journal of Abnormal Child Psychology*, 27(5), 383-392.
- Gentina, E., & Tang, T. L. P. (2018). Does adolescent popularity mediate relationships between both theory of mind and love of money and consumer ethics? *Applied Psychology*, 67(4), 723-767.
- Gentina, E., Tang, T. L. P., & Gu, Q. (2018). Do parents and peers influence adolescents' monetary intelligence and consumer ethics? French and Chinese adolescents and behavioral economics. *Journal of Business Ethics*, 151(1), 115-140.
- Gray JA. (1991). Neural systems, emotion, and personality. In J. Madden IV (Ed.), *Neurobiology of Learning, Emotion, and Affect* (pp. 273-306). New York: Raven
- Greenberg, J., Solomon, S., Pyszczynski, T., Rosenblatt, A., Burling, J., Lyon, D., ... & Pinel, E. (1992). Why do people need self-esteem?

- Converging evidence that self-esteem serves an anxiety-buffering function. *Journal of Personality and Social Psychology*, 63(6), 913-922.
- Grijalva, E., Newman, D. A., Tay, L., Donnellan, M. B., Harms, P. D., Robins, R. W., & Yan, T. (2015). Gender differences in narcissism: A meta-analytic review. *Psychological Bulletin*, 141(2), 261-310.
- Hare, R. D. (1999). *Without conscience: The disturbing world of the psychopaths among us*. Guilford Press.
- Hare, R. D. (2003). *The psychopathy checklist-Revised*. Toronto, ON,.
- Higgins, E. T. (1987). Self-discrepancy: a theory relating self and affect. *Psychological Review*, 94(3), 319-340.
- Higgins, E. T., Klein, R., & Strauman, T. (1985). Self-concept discrepancy theory: A psychological model for distinguishing among different aspects of depression and anxiety. *Social Cognition*, 3(1), 51-76.
- Hobfoll, S. E. (1988). *The ecology of stress*. New York: Hemisphere.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513-524.
- Holmgreen, L., Tirone, V., Gerhart, J., & Hobfoll, S. E. (2017). Conservation of resources theory. In Cooper, C. & Quick, J. C. (Eds.), *The handbook of stress and health: A guide to research and practice* (pp. 443-457). New Delhi, India : John Wiley & Sons Ltd.
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (Eds.). (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. London, UK: Sage publications.
- Hyatt, C. S., Sleep, C. E., Lynam, D. R., Widiger, T. A., Campbell, W. K., & Miller, J. D. (2018). Ratings of affective and interpersonal tendencies differ for grandiose and vulnerable narcissism: A replication and extension of Gore and Widiger (2016). *Journal of Personality*, 86(3), 422-434.
- Javidan, M., & Dastmalchian, A. (2003). Culture and leadership in Iran: The land of individual achievers, strong family ties, and powerful elite. *Academy of Management Perspectives*, 17(4), 127-142.
- Jonason, P. K., & Webster, G. D. (2010). The dirty dozen: A concise measure of the Dark Triad. *Psychological Assessment*, 22(2), 420-432.
- Jones, D. N. (2013). What's mine is mine and what's yours is mine: The Dark Triad and gambling with your neighbor's money. *Journal of Research in Personality*, 47(5), 563-571.



- Jones, D. N., & Neria, A. L. (2015). The Dark Triad and dispositional aggression. *Personality and Individual Differences, 86*, 360-364.
- Jones, D. N., & Paulhus, D. L. (2009). Machiavellianism. In M. R. Leary & R. H. Hoyle (Eds.), *Handbook of individual differences in social behavior* (pp. 93-108). New York, NY, US: Guilford Press.
- Jones, D. N., & Paulhus, D. L. (2011). The role of impulsivity in the Dark Triad of personality. *Personality and Individual Differences, 51*(5), 679-682.
- Jones, D. N., & Paulhus, D. L. (2014). Introducing the short Dark Triad (SD3) a brief measure of dark personality traits. *Assessment, 21*(1), 28-41.
- Karpman, B. (1948). The myth of the psychopathic personality. *American Journal of Psychiatry, 104*(9), 523-534.
- Kish-Gephart, J. J., Harrison, D. A., & Treviño, L. K. (2010). Bad apples, bad cases, and bad barrels: Meta-analytic evidence about sources of unethical decisions at work. *Journal of Applied Psychology, 95*(1), 1-31.
- Köbis N.C., Van Prooijen, J.-W., Righetti, F., & Van Lange, P., A., M. (2015). “Who doesn’t?”—The impact of descriptive norms on corruption. *PLoS ONE 10*(6): e0131830. <https://doi.org/10.1371/journal.pone.0131830>.
- Kouchaki, M., & Desai, S. D. (2015). Anxious, threatened, and also unethical: How anxiety makes individuals feel threatened and commit unethical acts. *Journal of Applied Psychology, 100*(2), 360-375.
- Kreis, M. K., & Cooke, D. J. (2012). The manifestation of psychopathic traits in women: An exploration using case examples. *International journal of forensic mental health, 11*(4), 267-279.
- Kubak, F. A., & Salekin, R. T. (2009). Psychopathy and anxiety in children and adolescents: New insights on developmental pathways to offending. *Journal of Psychopathology and Behavioral Assessment, 31*(4), 271-284.
- Lakey, C. E., Kernis, M. H., Heppner, W. L., & Lance, C. E. (2008). Individual differences in authenticity and mindfulness as predictors of verbal defensiveness. *Journal of Research in Personality, 42*(1), 230-238.

- Lee, A., & Hankin, B. L. (2009). Insecure attachment, dysfunctional attitudes, and low self-esteem predicting prospective symptoms of depression and anxiety during adolescence. *Journal of clinical child & Adolescent Psychology, 38*(2), 219-231.
- Lilienfeld, S. O., & Perna, S. (2001). Anxiety sensitivity: Relations to psychopathy, DSM-IV personality disorder features, and personality traits. *Journal of Anxiety Disorders, 15*(5), 367-393.
- Lykken, D. T. (1957). A study of anxiety in the sociopathic personality. *The Journal of Abnormal and Social Psychology, 55*(1), 6-10. <http://dx.doi.org/10.1037/h0047232>
- Malesza, M., & Ostaszewski, P. (2016). The utility of the Dark Triad model in the prediction of the self-reported and behavioral risk-taking behaviors among adolescents. *Personality and Individual Differences, 90*, 7-11.
- Manley, H., Roberts, R., Beattie, S., & Woodman, T. (2018). I'll get there because I'm great, or am I? Narcissistic vulnerability moderates the narcissistic grandiosity–goal persistence relationship. *Personality and Individual Differences, 120*, 65-74.
- Marteau, T. M., & Bekker, H. (1992). The development of a six-item short-form of the state scale of the Spielberger State-Trait Anxiety Inventory (STAI). *British Journal of Clinical Psychology, 31*(3), 301-306.
- McHoskey, J. W., Worzel, W., & Szyarto, C. (1998). Machiavellianism and psychopathy. *Journal of Personality and Social Psychology, 74*(1), 192-210.
- Mead, N. L., Baumeister, R. F., Stuppy, A., & Vohs, K. D. (2018). Power increases the socially toxic component of narcissism among individuals with high baseline testosterone. *Journal of Experimental Psychology: General, 147*(4), 591-596.
- Miller, D. J., & Robertson, D. P. (2010). Using a games console in the primary classroom: Effects of 'Brain Training' programme on computation and self-esteem. *British Journal of Educational Technology, 41*(2), 242-255.
- Miller, J. D., Hoffman, B. J., Gaughan, E. T., Gentile, B., Maples, J., & Keith Campbell, W. (2011). Grandiose and vulnerable narcissism: A nomological network analysis. *Journal of Personality, 79*(5), 1013-1042.

- Moffitt, T. E. (2003). Life-course-persistent and adolescence-limited antisocial behavior: A 10-year research review and a research agenda. In B. B. Lahey, T. E. Moffitt, & A. Caspi (Eds.), *Causes of conduct disorder and juvenile delinquency* (pp. 49-75). New York, NY, US: Guilford Press.
- Monaghan, C., Bizumic, B., & Sellbom, M. (2016). The role of Machiavellian views and tactics in psychopathology. *Personality and Individual Differences, 94*, 72-81.
- Morais, P., Miguéis, V. L., & Camanho, A. (2017, May). Exploring the Relationship between Corruption and Health Care Services, Education Services and Standard of Living. In *International Conference on Exploring Services Science* (pp. 87-100). Springer, Cham.
- Muris, P., Meesters, C., Van Melick, M., & Zwambag, L. (2001). Self-reported attachment style, attachment quality, and symptoms of anxiety and depression in young adolescents. *Personality and Individual Differences, 30*(5), 809-818.
- O'Brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. *Quality & quantity, 41*(5), 673-690.
- Ogilvie, D. M. (1987). The undesired self: A neglected variable in personality research. *Journal of Personality and Social Psychology, 52*(2), 379-385.
- Pacheco-Unguetti, A. P., Acosta, A., Callejas, A., & Lupiáñez, J. (2010). Attention and anxiety: Different attentional functioning under state and trait anxiety. *Psychological Science, 21*(2), 298-304.
- Paspalanov, I. (1984). The relation of nAch to extraversion, emotional instability and level of anxiety in people of different social status and success. *Personality and individual differences, 5*(4), 383-388.
- Paulhus, D. L., & Williams, K. M. (2002). The Dark Triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality, 36*(6), 556-563.
- Pinto, J., Leana, C. R., & Pil, F. K. (2008). Corrupt organizations or organizations of corrupt individuals? Two types of organization-level corruption. *Academy of Management Review, 33*(3), 685-709.
- Rachman, S. (2004). Fear of contamination. *Behaviour research and therapy, 42*(11), 1227-1255.

- Raskin, R. N., & Hall, C. S. (1979). A narcissistic personality inventory. *Psychological Reports*, 45(2), 590. <http://dx.doi.org/10.2466/pr0.1979.45.2.590>.
- Roeser, K., McGregor, V. E., Stegmaier, S., Mathew, J., Kübler, A., & Meule, A. (2016). The Dark Triad of personality and unethical behavior at different times of day. *Personality and Individual Differences*, 88, 73-77.
- Salekin, R. T., Trobst, K. K., & Krioukova, M. (2001). Construct validity of psychopathy in a community sample: A nomological net approach. *Journal of personality disorders*, 15(5), 425-441.
- Schutte, N. S., Malouff, J. M., Bobik, C., Coston, T. D., Greeson, C., Jedlicka, C., ... & Wendorf, G. (2001). Emotional intelligence and interpersonal relations. *The Journal of Social Psychology*, 141(4), 523-536.
- Schutte, N. S., Malouff, J. M., Thorsteinsson, E. B., Bhullar, N., & Rooke, S. E. (2007). A meta-analytic investigation of the relationship between emotional intelligence and health. *Personality and Individual Differences*, 42(6), 921-933.
- Sevecke, K., Lehmkuhl, G., & Krischer, M. K. (2009). Examining relations between psychopathology and psychopathy dimensions among adolescent female and male offenders. *European child & adolescent psychiatry*, 18(2), 85-95.
- Shapiro, G. K., & Burchell, B. J. (2012). Measuring financial anxiety. *Journal of Neuroscience, Psychology, and Economics*, 5(2), 92.
- Sherry, D. L., Sherry, S. B., Vincent, N. A., Stewart, S. H., Hadjistavropoulos, H. D., Doucette, S., & Hartling, N. (2014). Anxious attachment and emotional instability interact to predict health anxiety: An extension of the interpersonal model of health anxiety. *Personality and Individual Differences*, 56, 89-94.
- Smith, C. A., & Ellsworth, P. C. (1985). Patterns of cognitive appraisal in emotion. *Journal of Personality and Social Psychology*, 48(4), 813-838.
- Sobhani, M., & Bechara, A. (2011). A somatic marker perspective of immoral and corrupt behavior. *Social Neuroscience*, 6(5-6), 640-652.
- Tang, T. L. P., Sutarso, T., Ansari, M. A., et al. (2018). Monetary intelligence and behavioral economics across 32 cultures: Good apples

- enjoy good quality of life in good barrels. *Journal of Business Ethics*, 148 (4), 893-917.
- Transparency International. Corruption perceptions index 2016. (2018). @ <https://www.transparency.org> (accessed 190218)
- Weiss, H. M., & Cropanzano, R. (1996). Affective Events Theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior: An annual series of analytical essays and critical reviews*, Vol. 18, pp. 1-74. US: Elsevier Science/JAI Press.
- Williams, L. M. (2017). Defining biotypes for depression and anxiety based on large- scale circuit dysfunction: a theoretical review of the evidence and future directions for clinical translation. *Depression and Anxiety*, 34(1), 9-24.
- Wu, J., & Lebreton, J. M. (2011). Reconsidering the dispositional basis of counterproductive work behavior: The role of aberrant personality. *Personnel Psychology*, 64(3), 593-626.
- Zhao, H., Zhang, H., & Xu, Y. (2016). Does the Dark Triad of personality predict corrupt intention? The mediating role of belief in good luck. *Frontiers in Psychology*, 7, 608. doi: 10.3389/fp.