

DOI: 10.5455/msm.2021.33.100-104

Received: Feb 25 2021; Accepted: May 16, 2021

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ORIGINAL PAPER

Mater Sociomed. 2021 Jun; 33(2): 100-104

# The Dark Triad of Personality: Is Psychopathy a Good Predictor of Workplace Stress?

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## ABSTRACT

**Background:** Psychopathy as an antisocial characteristic of an individual is characterized by a lack of empathy, guilt, inability to control impulsive behavior, irresponsibility, irritability and aggressive behavior. Because of the traits that underlie this factor, we hypothesized that psychopaths would experience more stress in the work environment. Stress, in this article, is operationalized within Karasek's model of stress which consider that contextual variables (excessive demands on work, lack of social support, and lack of control at work) are responsible for experiencing stress at the workplace. This kind of work context, according to our assumption, can affect psychopaths to have a weaker response to stressful situations. **Objective:** To determine the predictive power of psychopathy as a factor in the dark triad in order to explain the workplace stress. **Methods:** We conducted the study in one company on a sample of 235 respondents. Data were collected using the Sociodemographic Characteristics Questionnaire, the Dark Triad Questionnaire (SD27) and the Copenhagen Questionnaire for measuring cognitive, behavioral and somatic stress. **Results:** The mean age of the respondents was 39.04±10.27 years. Using standard regression analysis, we found that the dark triad model is the only significant one in explaining cognitive stress, and a significant predictor is psychopathy. **Conclusion:** In majority of previous studies, psychopathy has not been associated with stress, and the findings are important for future research that should shed light on the complex relationship between psychopathy and stress.

**Keywords:** dark triad, stress, workplace, antisocial characteristics, psychopathy.

## 1. BACKGROUND

Empirical studies, until today, has shown that workplace stress is contributed by a number of factors, from excessive demands at work, lack of social support, lack of control at work to unclear work roles, and variables related to leadership styles (1). In addition to work environment characteristics and contextual variables, workplace stress is significantly emphasized by individual characteristics. Personality psychologists show a special interest in studying individual differences in the experience of stress (2). It is common knowledge that neuroticism from the dispositional domain is the strongest predictor of stress and specifically stress at the workplace. By developing new personality models that seek to explain the basic structure of personality by factors that are not included in other models, and relate to distorted perceptions, a model of the dark triad has been developed (3). The model of the dark triad contains three personality traits: Machiavellianism, narcissism and psychopathy. Each of the features of the dark triad should be investigated separately regardless of the degree of overlap (3). Psychopathy is rightly considered the darkest trait (3). Psychiatrist Harvey Cleckly was among the first authors to list the descriptors of psychopathy. In addition to antisocial behaviors, psychopaths are characterized by superficial charm, lack of anxiety, dishonesty, unreliability, self-centeredness, failure to maintain quality human relationships, grandiosity, and fickleness (4). People with a pronounced psychopathic tendency can also show aggressive behavior even towards people they love. Since they prefer to venture into the unknown without thinking about the potential dangers, we can classify them as people with an impulsive search for sensations. Pickering et al. report that

psychopaths tend to ridicule other people, often manifest antisocial tendencies, and engage in violent behaviors and criminal activities at the risk of their own lives and the lives of others (5). Due to its strong biological basis, psychopathy develops through childhood and adolescence and is resistant to most treatments (6). Machiavellianism differs from the other two traits of the dark triad of personality in that it is not based on any traditionally diagnosed disorder (3). Machiavellians are: prone to interpersonal manipulation, flattery and deception, have underdeveloped empathic abilities (7): they have a cynical view of the world (8), treat others as means to their own benefit and do not trust others (8). Kajonius & Björkman argue that because of the significant difference between Machiavellianism and psychopathy, Machiavellianism should negatively correlate with perceived stress (2). An association between Machiavellianism and high workplace stress has also been established (10). Narcissism is a dimension of personality that, at the semi-adaptability, contains traits: exhibitionism, grandiosity, self-centeredness, and exploitation of others (9). There are several classifications of narcissism, and the most common distinction is the one between grandiose and vulnerable narcissism (11). Grandiose narcissism is characterized by high self-esteem with the goal of self-examination; while vulnerable narcissism is manifested by low self-esteem and anxiety (12). Vulnerable narcissists compensate for the feeling of inferiority by portraying themselves as „super“ persons. The way narcissists perceive stress obviously depends on the type of narcissism. The results of the study of the relationship between the characteristics of the dark triad of stress at work have not been crystallized (13). Some authors have not found a significant relationship between psychopathy and stress at work (10,14,15). Richardson & Boag speculate that the lack of a link between psychopathy and stress may be an indication of the insensitivity training characteristic for psychopaths, especially since the authors found that psychopaths use only suppression from mature defense mechanisms to protect themselves from experiencing negative feelings (10). However, relatively new studies have shown that psychopathy is associated with high rates of stress at work and emotional exhaustion and negative affective experiences (13,16).

## 2. OBJECTIVE

The aim of this article is to examine the role of the characteristics of the dark triad with stress at work, with special reference to the darkest feature of the triad—psychopathy.

## 3. MATERIAL AND METHODS

### 3.1. Sample and procedure

The data were collected on an adequate sample of employees of one pharmaceutical company. Of the total number of respondents (N=235), a higher percentage are women (66%) compared to men. The sample is heterogeneous according to all sociodemographic characteristics. Data were collected in compliance with all ethical principles required by the study. Participation was voluntary and written consent was requested and written for participation in the research. Data collection was difficult due to the epidemic situation caused by COVID-19. That is, we had to approach

dual data collection. The data were mostly collected in such a way that the instruments for each respondent were packed in envelopes, and in the organization in which the survey was conducted, a box was set up in which the respondents place the material after completing the questionnaire. During the research period, due to the worsening of epidemic situation in Sarajevo Canton, a number of respondents filled in the test material electronically and sent it to the address created by the researcher upon completion. For objective reasons, the data collection process was uneven.

### 3.2. Methods

#### General data questionnaire

The questionnaire was constructed for the purposes of the study and includes questions related to the socio-demographic characteristics of the respondents.

#### Scale for measuring the dark triad

The scale for measuring the characteristics of the Dark Triad (SD3, by Jones & Paulhus, 2014) consists of 27 claims that measure Machiavellianism, narcissism, and psychopathy. Each subscale contains nine particles, and the task of the respondents is to round the value of the statement that best describes it on a five degrees scale from 1 (I do not agree at all) to 5 (I completely agree). The total result is obtained by a linear combination of rounded values for each subscale. Particles numbered 11, 15, 17, 20 and 25 are scored in reverse. The internal reliability coefficient reported by the authors ranges from  $\alpha=0.80$  for Machiavellianism,  $\alpha=0.71$  for narcissism, and  $\alpha=0.73$  for psychopathy. The internal reliability coefficients determined in our research are  $\alpha=0.674$  for Machiavellianism; for narcissism  $\alpha=0.70$  and psychoticism  $\alpha=0.85$ .

#### *The Third Version of the Copenhagen Psychosocial Questionnaire (COPSOQ)*

The Copenhagen Questionnaire for Measuring Workers' Stress and Welfare (COPSOQ)—Version III (2003) is a questionnaire developed in three versions (longer, medium and short). The questionnaire is used to assess not only psychosocial factors at work, stress and well-being of workers, but also to assess some personality factors. The theoretical background of the instrument is based on the work of Kompier (2003). The authors of the original scale are Kristensen, Hannerz, Høgh & Borg, (2005). Christensen and co-workers recommend that researchers use the questionnaire with three subscales regardless of the work environment, while keeping the particles marked as „CORE“ in the questionnaire.

The particles are conceptually conceived to include the main theories of functioning at the workplace. Thus, COPSOQ includes important psychosocial dimensions of the workplace, such as general health, burnout at work, impact at work, trust in management, and emotional demands of the workplace. (COPSOQ)—Version III is a multidimensional questionnaire that includes outcome variables job satisfaction and stress (according to Husremović, 2011). In our study, we used a revised stress scale containing 19 questions. The task of the respondents is to circle the value that best describes them on a scale of five degrees, with the value 1—means never, while the value 5—means very often or always. The scale contains three subscales for measuring behavioral, cognitive, and somatic stress. The values

obtained represent the total intensity of stress from workers. A higher score indicates higher stress (17). Internal consistency was checked for three subscales. High coefficients of internal reliability were found, for subscale behavioral stress  $\alpha=0.88$ , for subscale somatic stress  $\alpha=0.88$  and for subscale cognitive stress  $\alpha=0.89$ .

#### 4. RESULTS

The mean age of the respondents was  $M=39.04$  ( $SD=10.27$ ). Table 1 shows the descriptive statistical values: mean values, standard deviations, skewness and kurtosis, and standard errors for skewness and kurtosis. The values of skewness show that some variables are slightly negatively asymmetric, while some of the variables are distributed positively asymmetrically, but within acceptable limits, and we did not transform the obtained results. In order to answer the research problem, we conducted three standard regression analyzes in order to determine the independent contribution of traits from the dark triad in explaining three types of stress: cognitive, somatic and behavioral stress.

From Table 2 we can see that the statistical model is significant; The F value is 4.10 ( $p<0.01$ ). The Dark Triad model explains ten percent of the variance in cognitive stress. The

	B	St. p	$\beta$	t	p
Machiavellianism	.157	.119	.140	1.321	.190
Narcissism	-.040	.181	-.023	-.219	.827
Psychopathy	.391	.117	.349	3.354	.001

  

R =	0.363
R <sup>2</sup> =	.132
cR <sup>2</sup> =	.100
F (3,80) =	4.107**

Table 2. Standards of the Dark Triad regression model in the prediction of cognitive stress

	B	St. p	$\beta$	t	p
Machiavellianism	.148	.119	.136	1.238	.219
Narcissism	.055	.182	.033	.304	.762
Psychopathy	.249	.118	.228	2.115	.038

  

R =	0.261
R <sup>2</sup> =	.068
cR <sup>2</sup> =	.034
F (3,80) =	1.980

Table 3. Standards of the Dark Triad regression model in the prediction of somatic stress

	N	M	SD	Skew	Standard error S	Kurtosis	Standard error K
Machiavellianism	232	3.48	0.67	-.37	.160	1.61	.318
Narcissism	230	2.98	0.49	-.08	.160	.99	.320
Psychopathy	229	2.05	0.60	.47	.161	.22	.320
Behavioral stress	233	2.02	0.77	.84	.159	.65	.318
Somatic stress	230	1.69	0.77	1.37	.160	1.58	.320
Cognitive stress	230	1.74	0.76	1.13	.160	.96	.320

Table 1. Descriptive data for the variables included in the study

	B	St. p	$\beta$	t	p
Machiavellianism	.270	.121	.244	2.238	.028
Narcissism	.050	.184	.029	.270	.788
Psychopathy	.176	.119	.158	1.479	.143

  

R =	0.286
R <sup>2</sup> =	.082
cR <sup>2</sup> =	.048
F (3,80) =	2.41

Table 4. Standards of the Dark Triad regression model in the prediction of behavioral stress

only significant predictor is psychopathy  $\beta=0.349$  ( $p<0.001$ ).

The regression model in explaining somatic stress is not significant (F value is 1.98). From Table 3 we can see that the predictive power of psychopathy is at the limit of statistical significance  $\beta=0.228$  ( $p<0.05$ ), however, given that the model is statistically insignificant, the obtained finding is not justified to interpret.

We found similar results in examining the contribution of dark triad traits in explaining behavioral stress. From Table 4 we can see that the model is not statistically significant (F value is 2.41). Of the features of the dark triad, Machiavellianism is on the verge of statistical significance  $\beta=2.44$  ( $p<0.05$ ). Also, for the reason that the model is not a significant contribution of Machiavellianism cannot be interpreted.

#### 5. DISCUSSION

The authors Bauer & Erdogan defined workplace stress as a construct that manifests through an individual's cognitive, affective, and behavioral responses (18). Stress at work is the perception of employees that they deal with excessive demands at the workplace, that their superiors are not sensitized to the needs of workers, do not have autonomy in the distribution of their work responsibilities, and that they consider their work environment socially unstimulating. In addition to these factors, working hours, shift work, task content, career development, salary, employee status, and interpersonal relationships within the organization contribute to stress at work. However, in addition to work environment factors, individual characteristics, primarily personality traits, contribute to stress to a large extent. In

fact, the factors that contribute to stress are classified by Bauer & Erdogan into three groups: environmental, organizational, and individual. The idea in the conception of the research originated from previous empirical findings in which a loose connection was found between Machiavellianism and stress and narcissism and stress (18). In most studies, psychopathy is not predictive in explaining workplace stress. A small number of studies have shown that psychopathy and stress are related (13).

The targeted study found that psychopathy was a statistically significant predictor of cognitive stress. In previous research, cognitive stress is highly associated with private and business role conflict, role clarity, role conflict, and job security (17). We hypothesize that in structured organizations such as a pharmaceutical company in which research has been conducted in psychopaths, there is a conflict between their antisocial and other characteristics with a conflict of business role. Perhaps psychopaths who perform more complex and challenging tasks cannot meet the demands of the workplace and therefore experience a certain “cognitive stress storm,” which manifests on a cognitive level rather than a somatic and behavioral level. The second explanation of the obtained results can be interpreted through the expressed need for power that is characteristic of psychopaths. Namely, due to the need to have control over the situation and over people, these individuals experience „stress due to power“. It is possible that the predictiveness of psychopathy in experiencing cognitive stress is sampled by this form of stress, which most often occurs due to conflicts within a certain group.

Psychopathy does not explain behavioral and somatic stress, which can be explained by the fact that individuals with high levels of psychopathy are often very insensitive (2), and psychopathic stress is poorly observed in social settings (19,20,21). Therefore, we might assume that the experience of stress in people with high levels of psychopathy is relatively low. Consequently, psychopathic attributions are unlikely to be associated with anxiety-based defensive responses, but with immature defenses associated with poor impulse control and destructive excitement seeking (10). Noser, Zeigler-Hill, & Besser, found that psychopathy moderates the association between stress and affective experience (16). It is possible that this moderation process takes place through mechanisms such as immature projection and immature denial, which have been found to be strong predictors of psychopathy. Richardson & Boag found that Machiavellianism was moderately associated with stress but not with psychopathy (10). According to the descriptors of psychopathy, this finding was expected especially due to the findings of the authors that psychopaths are characterized by the use of extreme negative behavior of expressing thoughts and feelings. Also, the result we obtained that psychopathy does not contribute to behavioral and somatic stress can be interpreted by using the defense mechanisms of psychopaths. Namely, Richardson & Boag found that psychopathy is not associated with the somatization defense mechanism, but is associated with neurotic reversal defense and immature defense mechanisms: dissociation, passive aggression, isolation, devaluation, autistic fantasy, and splitting (10).

The characteristics of the dark triad participate differently in the process of stress management. Emotional intelligence, also thought to be associated with positive stress management and defense mechanisms, has been shown to be positively associated with narcissism but negatively associated with Machiavellianism and psychopathy (22).

Characteristics of the dark triad are characterized by being known for antagonism in social situations, which could increase or decrease the perceived stress (21). In a study of 175 recruiters employed in human resources departments and contingency employment agencies, Prusik & Srulawski found that instrumental motivation was the strongest motivator for recruiters with high psychopathy (13). That is, a higher level of psychopathy among recruiters was mostly associated with a slightly higher level of professional burnout than the other two traits of the dark triad. In general, people who are high on psychopathy are emotionally more indifferent and as a result feel less stress, anxiety and exhaustion. However, it seems that the job of a recruiter would be challenging for people who have high scores in psychopathy. The authors conclude that employees who are high in psychopathy cannot naturally adapt to these social contexts but must control themselves so as not to „push boundaries“, which in turn can cause exhaustion and dissociation that contributes to burnout in psychopaths. Although we don't have an insight to work done by participants in our research, the data obtained that psychopathy is a predictor of cognitive stress could also be explained in the way stated by Prusik & Srulawski (13).

Despite the inconsistent results so far between the characteristics of the dark triad and stress, especially psychopathy and stress, research conducted shows that psychopathy explains cognitive stress. No other feature of the dark triad has participated in explaining the three types of workplace stress (Kajonius & Björkman,) report that Machiavellians and maladaptive narcissists experience more stress than psychopathy (2). There are numerous reasons for inconsistent findings in this area. First, the authors use different instruments to examine stress and on different groups of employees, which can affect the obtained results. It is obvious that psychopathy behaves differently depending on contextual variables, and in future research, we should include this set of variables with the obligatory formation of subsamples with regard to the workplace. In our study, we could not control this variable due to the epidemic situation but we collected data on a convenient sample of employees of a pharmaceutical company. Furthermore, as in the Kajonius study, more women participated in the study (2). Women are somewhat less narcissistic and compared to men are much less on psychopathy, which could have affected the distortion of results.

## 6. CONCLUSION

The implication of this study is important information for employers to match personality traits with jobs, so that the benefits are reached, as much as possible, by both employees and work organizations.

- **Declaration of participants consent:** The author certifies that he has obtained all appropriate consent forms.

- **Authors' contributions:** TM gave substantial contribution to the conception or design of the article and in the acquisition, analysis and interpretation of data for the work. TM had role in article drafting and in process of revision. TM gave final approval of the version to be published and they agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.
- **Conflict of interest:** There are no conflicts of interest.
- **Financial support and sponsorship:** Nil.

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