Psihologijske teme, 27 (2018), 3, 481-497

Izvorni znanstveni rad – UDK – 159.97.072-057.875 616.89 doi:https://doi.org/10.31820/pt.27.3.7

Can Psychopathic Traits be Adaptive? Sex Differences in Relations between Psychopathy and Emotional Distress

Janko Međedović

Institute of Criminological and Sociological Research, Belgrade, Serbia

Anja Wertag

Institute of Social Sciences Ivo Pilar, Zagreb, Croatia

Katarina Sokić

EFFECTUS University College for Law and Finance, Zagreb, Croatia

Abstract

One of the most prominent models of psychopathy operationalizes this construct as consisting of four factors: interpersonal, affective, lifestyle and antisocial traits. These traits show different relationship patterns with other constructs, and these relations may differ in men and women. The aim of this study was to investigate whether the relations between psychopathic traits and indicators of emotional distress (depression, anxiety and stress), differ between men and women. Data was collected on 650 students (60% women) at the University of Zagreb. The results of Canonical Correlation Analysis indicated that affective psychopathic traits have adaptive potential and represent a protective factor for experiencing emotional distress, while Lifestyle and Antisocial behavior represent risk factors for emotional distress. Moreover, sex had a moderating role in the relationship between Interpersonal and Lifestyle traits and distress, indicating that psychopathic traits seem to be more adaptive in males, compared to females.

Keywords: psychopathic traits, emotional distress, gender differences

Introduction

Psychopathy represents a complex construct involving distinguishable features in the domains of affect (e.g., lack of empathy/remorse, callousness, fearlessness,

Anja Wertag, Institute of Social Sciences Ivo Pilar, Marulićev trg 19/I, 10000 Zagreb, Croatia. E-mail: *Anja.Wertag@pilar.hr*

shallow emotions, immunity to stress), interpersonal style (e.g., manipulativeness, social dominance, grandiosity), and behavioral functioning (e.g., poor behavioral control, aggression) (Hare, 1996; Hare & Neumann, 2008). One of the most prominent models of psychopathy operationalizes this construct as consisting of four factors: Interpersonal (characterized by superficial charm, grandiose self-worth, manipulativeness and deception), Affective (shallow emotions, lack of empathy and callousness, lack remorse or guilt, absence of responsibility), Lifestyle (characterized by impulsivity, parasitic orientation, stimulation seeking, irresponsibility and lack of long-term goals) and Antisocial tendencies (poor behavioral control, early behaviors problems, juvenile criminal versatility) (Hare & Neumann, 2008).

These facets form two higher-ordered factors, simply labeled as *Factor 1*, which consist of items related to interpersonal and affective traits, and *Factor 2*, which consists of items related to an unstable and antisocial lifestyle (Hare & Neumann, 2008). The distinction between Factors 1 and 2 seem rather important, as they show different relationship patterns with other constructs. Moreover, it is important to distinguish between two types of psychopathy: *primary* and *secondary*, that correspond to higher scores on Factor 1 and 2, respectively (Vassileva, Kosson, Abramowitz, & Conrod, 2005).

Psychopathy and Psychopathology

Blackburn (1975, 1979) hypothesized that the anxiety is the key phenotypic distinction between the two psychopathy types, with primary psychopathy being characterized by low anxiety and social dominance, and secondary by high anxiety and social withdrawal. Indeed, previous studies found a negative association between Factor 1 and trait anxiety, and/or a positive relation between Factor 2 and anxiety (Hansen, Stokkeland, Pallesen, Johnsen, & Waage, 2013; Harpour, Hare, & Hakstian, 1989; Hicks, Markon, Patrick, Krueger, & Newman, 2004; Hicks & Patrick, 2006; Sandvik, Hansen, Hystad, Johnsen, & Bartone, 2015). Moreover, the importance of distinction between Factor 1 traits and Factor 2 psychopathy characteristics can be observed in their relations with several forms of psychopathology. Interpersonal and affective traits are negatively related, while lifestyle and antisocial characteristics are positively related to personality disorders (Benning, Patrick, Salekin, & Leistico, 2005; Skeem, Johansson, Andershed, Kerr, & Louden, 2007). Somatization is negatively associated with primary psychopathy and positively with secondary psychopathy (Wilson, Frick, & Clements, 1999), and Factor 1 traits are negatively related to internalizing psychological dysfunctions (Willemsen & Verhaeghe, 2012). Finally, empirical evidence suggest that manipulative traits and emotional shallowness have negative associations with schizotypal (pro-psychotic) experience, while impulsive and antisocial traits are positively related to schizotypy (Ragsdale & Bedwell, 2013).

Can Psychopathy Have an Adaptive Function?

Although there are debates on whether some of psychopathy features can be conceived as adaptive (see Skeem, Polaschek, Patrick, & Lilienfeld, 2011), previous findings imply that psychopathic traits can serve as an adaptation, and this refers especially to manipulative behavior and emotional shallowness. Indeed, there are some conceptual frameworks which posit a possible adaptive role of psychopathy. One is proximal in nature and it is labeled "successful" psychopathy (Lilienfeld, Watts, & Smith, 2015). Some of the explanations of a possible adaptive function of psychopathy state that the Factor 1 traits can facilitate adequate psychological functioning, at least in some contexts, if Factor 2 traits are not highly pronounced (Hall & Benning, 2006) and the empirical are in accordance with this assumption (Mullins-Sweatt, Glover, Derefinko, Miller, & Widiger, 2010). For example, unlike Factor 2 traits, Factor 1 traits are positively related to mental health, intelligence and executive functions (Međedović, 2015).

The other explanatory framework for understanding a possible adaptive role of psychopathy comes from evolutionary theory (Glenn, Kurzban, & Raine, 2011). Basic mechanism suggested for the rationale that psychopathy can be a biological adaptation refers to the postulate that individuals who live in stressful environments (Farrington, 2006; Gao, Raine, Chan, Venables, & Mednick, 2010), or have decreased tolerance to frustration more frequently develop psychopathy (and specifically the Affective traits; Mills-Koonce et al., 2015). In this individuals psychopathy may serve to buffer their negative emotional reactions and avoid stress-related pathology (Međedović, 2015). In support for these predictions, it has been found that psychopathy may elevate biological fitness (Neumann, Schmitt, Carter, Embley, & Hare, 2012), especially in individuals who lived in harsh and stressful environment (Međedović, Petrović, Želeskov-Đorić, & Savić, 2017). This way, psychopathy could promote successful adaptation and elevate fitness of psychopathic individuals.

Sex Differences in the Psychopathy-Psychopathology Link

Compared to men, women with pronounced psychopathic traits possess more negative personality traits and exhibit greater problematic behaviors (Lee & Salekin, 2010), and emerging evidence suggests that there may be sex differences in relation between psychopathy and different forms of maladaptive behaviors. For example, psychopathy was more associated with violence and criminal recidivism (Verona & Vitale, 2006), and with impulsivity-related tendencies (e.g., difficulties resisting urges, sensation seeking) (Miller, Watts, & Jones, 2011) in men than in women. In contrast, psychopathy was more associated with somatization (Lilienfeld & Hess, 2001), internalizing symptoms such as depression and stress (Lynam & Miller, 2015; Sica et al., 2015) and with suicide behaviors (Sevecke, Lehmkuhl, & Krischer, 2009; Verona, Hicks, & Patrick, 2005) in women than in men. Furthermore, positive

associations between Factor 2 psychopathy traits and borderline personality disorders are characteristic for women and not men (Sprague, Javdani, Sadeh, Newman, & Verona, 2012; de Vogel & Lancel, 2016).

Current Study and Hypotheses

While the previous research tapped the differences between psychopathic traits in the terms of relations to stress, anxiety and psychopathology, it has not been explicitly examined whether sex moderates the relations between psychopathy and distress. Therefore, the main aim of the present study was to investigate whether relations between psychopathy and indicators of emotional distress (depression, anxiety and stress) differ between men and women.

Following original conceptualization of psychopathy as constituted by four factors (Hare & Neumann, 2008, 2009), as well as importance of Affective traits in development of psychopathic traits as adaptation (see Mills-Koonce et al., 2015), we decided to investigate the relations of these four factors and emotional distress. Based on findings that the interpersonal and affective aspects of psychopathy are associated with measures of adaptive functioning (e.g. emotional stability and immunity to anxiety/distress) (Fanti, Kyranides, Drislane, Colins, & Andershed, 2015; Sica et al., 2015), we hypothesized that Interpersonal and especially Affective (Factor 1) traits would show more adaptive potential that Lifestyle and Antisocial (Factor 2) traits. However, we hypothesize that psychopathy (especially Affective traits) is a sexspecific adaptation, and that it can be a protective factor in relations to distress for men, but not for women.

More specifically, we set our hypotheses as follows:

Hypothesis 1: Factor 1 traits (Interpersonal and Affective) should have higher adaptive potential in difference to Factor 2 traits (Lifestyle and Antisocial) which should elevate emotional distress.

Hypothesis 2: The potential adaptive role of psychopathy should be more pronounced in males than in females.

Method

Participants and Procedure

The study comprised 650 students from various faculties of the University of Zagreb, Croatia. Total of 60% of the sample were women (N = 388) and 40% men (N = 260). Participants ranged from 19 to 38 years of age (M = 21.73 years; SD = 1.94 years) and consisted of both undergraduate (83.7%) and graduate (16.3%) students.

Data collection was organized within the larger study between February and July 2012. Students were approached by the researchers during regularly-scheduled classes, and were provided with detailed information about the purpose and procedure of the study. Students were then asked to complete the self-report questionnaires at home and return them during the next class time. All students who participated in the study provided informed consent. The approval of an institutional review board was obtained for all aspects of the study.

Measures

Psychopathy. Psychopathy was assessed by the *Self-Report Psychopathy Scale* (*SRP-III* – *R13*; Paulhus, Neuman, & Hare, in press), which consists of 64 items that are scored on a five-point Likert scale ($1 = disagree \ strongly$ to $5 = agree \ strongly$). The SRP-III constitutes of an Interpersonal, Affective, Lifestyle and Antisocial factor (16 items per factor), that mirror the suggested four-factor structure of the PCL-R.

The permission for research use was obtained from the instruments' first author, Delroy L. Paulhus. SRP-III was validated in a Croatian student sample (Pačić-Turk & Gajski, 2014). In the present study, Cronbach's alpha coefficients for Interpersonal, Affective, Lifestyle and Antisocial factor were .85, .81, .79 and .75, respectively.

Negative emotional states. *The Depression Anxiety Stress Scales* – 21 (*DASS-*21; Lovibond & Lovibond, 1995) is a self-report instrument consisting of 21 items, designed to measure acute negative emotional states of depression, anxiety, and stress. Participants are asked to report how much each item applied to them over the past week. The items are scored on a four-point scale (0 = did not apply to me at all to 3 = applied to me very much, or most of the time). In the present study, Cronbach's alpha coefficients for the depression, anxiety and stress subscales were .87, .79, and .84, respectively.

Results

Descriptive Statistics and the Inter-Correlations of the Examined Scales

Descriptive statistics for woman and men including means and standard deviations are presented in Table 1, together with Cronbach alpha coefficients for the whole sample. Sex differences were analyzed via *t*-tests, which indicated that men scored higher on all psychopathy traits, while women scored higher on Stress (Table 1).

Table 1

Descriptive Statistics for SRP-III Factors and DASS-21 Scales in Women (Ns Range from 377 to 387) and Men (Ns Range from 246 to 260), and Internal Consistency Values for Overall Sample (N = 650)

	Women		Me	Men		J	~
	М	SD	М	SD	- t	d	α
SRP-III							
Interpersonal	2.44	.54	2.80	.62	-7.73**	62	.85
Affective	2.08	.46	2.64	.50	14.63**	-1.17	.81
Lifestyle	2.38	.53	2.73	.54	-8.07**	65	.79
Antisocial	1.38	.39	1.63	.50	-6.71**	56	.75
DASS-21							
Stress	25.51	4.43	26.46	4.60	-2.58*	21	.84
Anxiety	23.77	6.44	24.11	5.87	-0.66	06	.79
Depression	3.87	4.05	4.05	4.35	-0.56	05	.87

Notes: d =Cohen's d index. According to Cohen's (1988) interpretation of effect size, effect sizes around 0.2 are considered small, 0.5 medium, and 0.8 large. $\alpha =$ Cronbach's α .

 $p^* < .05; p^* < .01.$

Pearson's correlation coefficients between the explored measures are shown in Table 2. Psychopathy traits correlated positively between themselves in both men and women, and the same can be said for the negative emotional states, with the exception of depression and stress, which were not related in males. Psychopathic lifestyle was positively related to all of the negative emotional states scales in females, but unrelated to any negative emotional state in men. Antisocial tendencies were positively associated with depression only in women. Both Interpersonal and Affective psychopathy traits were positively related to all three negative emotional states in women, and only to stress and anxiety in men. All of the correlations between two sets of measures were small in magnitude.

Table 2

	1	2	3	4	5	6	7
1. Interpersonal	-	.64**	.51**	.26**	.25**	.31**	.18**
2. Affective	.66**	-	.51**	.33**	.30**	.21**	$.22^{**}$
Lifestyle	.49**	.45**	-	.41**	.23**	.24**	.15**
4. Antisocial	.36**	.38**	$.42^{**}$	-	.09	.10	$.10^{*}$
5. Stress	.26**	.32**	.10	.03	-	$.57^{*}$.32**
6. Anxiety	$.22^{**}$	$.18^{**}$.01	.08	.45**	-	.42**
7. Depression	04	07	.04	04	.10	.30**	-

Zero Order Correlations between Explored Measures

Notes: Data for women (*ns* range from 376 to 387) are presented above the diagonal and below the diagonal for men (*ns* range from 241 to 260).

 $p^* < .05; p^* < .01.$

Psychopathy Traits as Predictors of the Emotional Distress

Multivariate analysis of the relations between psychopathy and emotional distress should provide more detailed insight into the associations between the two sets of measures. Bivariate relations revealed that the multicollinearity is high in both sets of administrated measures. This finding implies that Canonical Correlation Analysis (CCA) is better suited for the examination of the predictive power of psychopathy traits. This analysis controls, not only the co-variation of the variables in the predictor set but the co-linearity of the criterion variables, too (Tabachnick & Fidell, 2001). The second advantage of CCA is that it reduces the probability of type 1 error because prediction of all criterions is obtained via singular statistical analysis (Sherry & Henson, 2005). We set psychopathy traits in the first set of canonical variables (predictors) and negative emotional states scales in the second set (criterions). Three statistically significant canonical correlations were obtained. Structure coefficients and standardized weights of examined variables are shown in Table 3.

Table 3

	First canonical function			cond	Third		
	canonica	al function	canonical function		canonical function		
Predictors	С	rs	С	rs	С	rs	
Interpersonal	.24	31	05	63	.51	.02	
Affective	.49	.26	.57	1.40	.54	.27	
Lifestyle	.50	55	25	55	.83	.97	
Antisocial	.97	26	15	26	07	64	
Criterions	С	rs	С	rs	С	rs	
Stress	10	-1.04	66	-1.06	.74	.27	
Anxiety	.66	1.36	51	35	.55	14	
Depression	.13	.02	.12	.10	.98	.89	

Canonical Solution for Psychopathy Traits as Predictors of Emotional Distress

Notes: C - standardized canonical function coefficient; rs - structure coefficients.

The first pair of canonical variables (Rc = .19; $\lambda = .93$; $\chi^2 = 48.36$, df = 12; p < .01) highlights the positive relation between Antisocial tendencies and anxiety. The second pair of canonical variables (Rc = .17; $\lambda = .96$; $\chi^2 = 25.53$, df = 6; p < .01) emphasizes the negative relation between Affective psychopathic traits and stress and anxiety. Finally, the third pair of canonical variables (Rc = .11; $\lambda = .99$; $\chi^2 = 7.18$, df = 2; p < .05) underlies the positive relation between psychopathic Lifestyle and depression, while Antisocial behavior is negatively related to depressive experiences. It should be noted that all of the canonical correlations have low effect sizes (< .20).

Sex as a Moderator of the Relation between Psychopathy and Distress

Since the participants' sex is a plausible moderator of the link between psychopathy and distress, we calculated interactions between sex and psychopathy traits. In order to reduce the number of analyzed interactions, we calculated the total score on the DASS inventory. It represents the total amount of negative emotional states. This total score was entered as the criterion variable in the regression model, while psychopathy traits and participants' sex were entered as predictors. Obtained regression model was statistically significant ($R^2 = .10$; $F_{(5,605)} = 12.84$; p < 01). Significant predictors in this model were Interpersonal ($\beta = .17$; p < .01) and Affective psychopathy traits ($\beta = .16$; p < .01). The interactions were explored using the hierarchical regression analysis: products add terms of psychopathy and sex were entered on the second level of analysis. Four interactions were tested and two of them turned out to be statistically significant. The interaction between sex and Interpersonal psychopathy features is shown in Figure 1.



Figure 1. Interaction between the participants' sex and Interpersonal psychopathy characteristics on the total DASS score.

Obtained interactions depict the different relations between psychopathy and negative emotions in men and women. Men with high Interpersonal features are less prone to experience negative emotions, however, it is the opposite for women ($\Delta R^2 = .01$; $\Delta F_{(1,604)} = 3.91$; $\beta = .26$, p < .05). The second obtained interaction reveals the moderating role of sex in the relation between Lifestyle psychopathic traits and negative emotions ($\Delta R^2 = .01$; $\Delta F_{(1,604)} = 7.64$; $\beta = .38$, p < .01). This interaction in Figure 2 shows that men high in Lifestyle traits have the lowest levels of negative emotions, compared to men low in Lifestyle traits and women both high and low in these traits.



Figure 2. Interactions between the participants' sex and Lifestyle psychopathy characteristics on the total DASS score.

Discussion

The current study investigated the relations between psychopathy and indicators of emotional distress (depression, anxiety and stress), and whether these relations differ between men and women. In line with previous findings, psychopathy was more pronounced in men than in women (e.g. de Vogel & Lancel, 2016; Issa, Falkenbach, Trupp, Campregher, & Lap, 2017; Miller et al., 2011). This finding corroborates the validity of the data obtained in the present study, together with the importance of studying sex differences in psychopathy. As for the previously set hypotheses, we could concur that the both hypotheses are mostly supported: we found the evidence that Interpersonal and Affective (Factor 1) traits can have a protective role regarding the emotional distress and that the adaptive role of psychopathy (negative relations with distress) is more pronounced in males than in females.

Interpersonal Traits are Negatively Linked to Emotional Distress Only in Men

The main effects both in univariate and multivariate analyses revealed only detrimental effects of Interpersonal features regarding the indicators of emotional distress. Somewhat unexpected finding that Interpersonal features were not negatively related to indicators of emotional distress may reflect differences in how these features are manifested in men and women (e.g. greater stress reactivity versus impulsivity in women than men). This was shown in subsequent moderation analyses, indicating that men with high Interpersonal features are less prone to

experience negative emotions, while women with high Interpersonal features are more prone to negative emotions. These results are in line with previous studies (Sica et al., 2015), and suggest that adaptive/maladaptive function of Interpersonal psychopathy features in relations with distress differ across sex. Moreover, this finding is in line with previous results of negative relations between Interpersonal psychopathy features and internalizing psychopathology, obtained in a sample of men (Willemsen & Verhaeghe, 2012). It suggests that other findings regarding the negative relations between Interpersonal psychopathy features and psychopathology (e.g. Benning et al., 2005; Ragsdale & Bedwell, 2013) could be specific only for men, a hypothesis which demands further research.

Affective Psychopathy Traits and Emotional Distress

Bivariate correlations detected only positive associations between Affective characteristics and emotional distress, similarly to Interpersonal psychopathy features. However, since all of the variables studied were positively inter-correlated, a multivariate analysis should provide more reliable results. As expected, CCA showed that Affective factor was negatively related to stress and anxiety. These results are in line with theoretical assumptions that some of psychopathy features can be conceived as adaptive (Lilienfeld, Smith et al., 2015) and can, therefore, be useful for identifying "successful" expressions of psychopathy (Hall & Benning, 2006; Patrick & Drislane, 2015). Additionally, these findings are consistent with previous studies showing that affective aspects of psychopathy were related to some forms of adaptive behavior such as low anxiety/distress and emotional stability (e.g. Fanti et al., 2016; Hansen et al., 2013; Sica et al., 2015). One possible explanation is that callous and emotional detachment traits of psychopathy lead to higher levels of hardiness, which refers to a set of personality characteristics that appear to protect individuals from the negative physical and mental health effects of stress (Kobasa, 1979), and was found to be a partial mediator of the relationship between psychopathy and anxiety (Sandvik et al., 2015). The other mechanism that explains relations of Affective factor and anxiety is through higher resilience due to lower sensitivity.

The Associations between Behavioral Psychopathy Traits and Emotional Distress

The hypothesis regarding the relations of Lifestyle and Antisocial factors and emotional distress in women was confirmed, as Lifestyle psychopathic traits were positively associated with all indicators of emotional distress, and Antisocial tendencies were positively associated with depression. Additionally, our results showed moderating role of sex in the relation between Lifestyle psychopathic traits and negative emotions; men high in Lifestyle traits had the lowest levels of negative emotions. These results are in line with findings that Antisocial and Lifestyle traits are more strongly associated with internalizing symptoms (e.g. Lynam & Miller, 2015; Sica et al., 2015), self-destructive behavior and borderline personality disorder (de Vogel & Lancel, 2016) among women than men. Moreover, our results are consistent with findings that women with more pronounced secondary psychopathic traits demonstrate more pathology and internalizing problems than men with these traits (Falkenbach, Reinhard, & Larson, 2017). Positive relations between Antisocial and Lifestyle psychopathic traits with distress in women may be a result of the fact that internalizing problems (e.g. mood disorders, anxiety disorders, and related subclinical problems), and neuroticism, are more common in women than in men (Goodwin & Gotlib, 2004; Zahn-Waxler, Crick, Shirtcliff, & Woods, 2015). Neuroticism includes anger/hostility as well as emotions more directly related to internalizing problems (e.g. impulsivity, poor behavioral controls, early behaviors problems).

Theoretical Reflections on the Psychopathy-Psychopathology Link

Two theoretical frameworks can be used to analyze the psychopathypsychopathology link: the concept of successful psychopathy and the evolutionary accounts of psychopathy. Successful psychopathy hypothesis posits that the key markers of psychopathy (Factor 1 traits) can provide more adaptive responses if the behavioral markers of psychopathy are not highly expressed (Mullins-Sweatt et al., 2010). Indeed, our current data are in line with previous findings of negative relations between Factor 1 traits and psychopathology (Benning et al., 2005; Ragsdale & Bedwell, 2013). Thus, the present findings corroborate the concept of successful psychopathy, showing that affective and interpersonal psychopathic traits do not need to drive individuals into maladaptive psychological and behavioral outcomes.

While successful psychopathy is a proximal framework for understanding psychopathy, evolutionary theory can provide the ultimate view of psychopathy. However, these two frameworks are closely linked one to another. Evolutionary psychologists mostly assume that Factor 1 traits could enhance biological fitness, in contrast to Factor 2 traits (Glenn et al., 2011). In fact, this hypothesis has been empirically confirmed recently (Međedović et al., 2017). Since mental health can be considered as an indirect marker of fitness (individuals with higher health have higher longevity), the present findings are in accordance with the evolutionary notions of psychopathy. Factor 1 traits may be associated with higher mental health which is probably an adaptation to harsh, depriving and stressful environment (Međedović, 2015; Međedović et al., 2017). Of course, we must underline that these findings *only indirectly* confirm the evolutionary hypotheses of psychopathy, because no direct fitness measures have been administrated in the present study.

Concluding Remarks and Future Directions

Although the present study has a valuable contribution to the field, it has some limitations that need to be addressed. The main limitation is the use of self-report measures. Therefore, inclusion of behavioral and/or biographical data of psychopathy markers is recommended in the future studies. Moreover, inclusion of environmental factors as potential mediators in the future studies would enable capturing the broader perspective on sex differences in relations of psychopathy and emotional distress. Finally, our sample comprised only students, so it would be good to replicate the findings on a general population sample.

Overall, the present study suggests that psychopathy operates in a relatively different manner across sex, with sex having a moderating role in the relationship between Interpersonal and Lifestyle traits and distress. This is a finding that can be useful in defining specific treatment programs for women high on these traits. Furthermore, we provided novel data which corroborates that psychopathy may be linked with higher mental health but only in males. This implies that psychopathy is not always associated with maladaptive psychological characteristics and behavior. Finally, the present data gave new corroborations for the successful psychopathy concept and the evolutionary theories on psychopathy.

References

- Benning, S. D., Patrick, C. J., Salekin, R. T., & Leistico, A. R. (2005). Convergent and discriminant validity of psychopathy factors assessed via self-report: A comparison of three instruments. *Assessment*, 12(3), 270 -289. doi:10.1177/1073191105277110
- Blackburn, R. (1975). An empirical classification of psychopathic personality. *The British Journal of Psychiatry*, 127(5), 456-460. doi:10.1192/bjp.127.5.456
- Blackburn, R. (1979). Cortical and autonomic arousal in primary and secondary psychopaths. *Psychophysiology*, *16*(2), 143-150. doi:10.1111/j.1469-8986.1979.tb01460.x
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*, 2nd edition. Hillsdale, N.J.: Lawrence Erlbaum.
- de Vogel, V., & Lancel, M. (2016). Gender differences in the assessment and manifestation of psychopathy: Results from a multicenter study in forensic psychiatric patients. *International Journal of Forensic Mental Health*, 15(1), 97-110. doi:10.1080/ 14999013.2016.1138173
- Falkenbach, D. M., Reinhard, E. E., & Larson, R. F. R. (2017). Theory based gender differences in psychopathy subtypes. *Personality and Individual Differences*, 105, 1-6. doi:10.1016/j.paid.2016.09.023
- Fanti, K. A., Kyranides, M., Drislane, L. E., Colins, O. F., & Andershed, H. (2016). Validation of the Greek Cypriot Translation of the Triarchic Psychopathy Measure. *Journal of Personality Assessment*, 98(2), 146-154. doi:10.1080/00223891.2015.1077452

- Farrington, D. P. (2006). Family background and psychopathy. In C. Patrick (Ed.), *Handbook* of psychopathy (pp. 229-250). New York: The Guilford Press.
- Gao, Y., Raine, A., Chan, F., Venables, P. H., & Mednick, S. A. (2010). Early maternal and paternal bonding, childhood physical abuse and adult psychopathic personality. *Psychological Medicine*, 40(6), 1007-1016. doi:10.1017/S0033291709991279
- Glenn, A. L., Kurzban, R., & Raine, A. (2011). Evolutionary theory and psychopathy. *Aggression and Violent Behavior*, *16*(5), 371-380. doi:10.1016/j.avb.2011.03.009
- Goodwin, R. D., & Gotlib, I. H. (2004). Gender differences in depression: The role of personality factors. *Psychiatry Research*, 126(2), 135-142. doi:10.1016/j.psychres. 2003.12.024
- Hall, J. R., & Benning, S. D. (2006). The "successful" psychopath: Adaptive and subclinical manifestations of psychopathy in the general population. In C. J. Patrick (Ed.), *Handbook of psychopathy* (pp. 459-478). New York: Guilford Press.
- Hansen, A. L., Stokkeland, L., Pallesen, S., Johnsen, B. H., & Waage, L. (2013). The relationship between the psychopathy checklist-revised and the MMPI-2: A pilot study. *Psychological Reports*, *112*(2), 445-457. doi:10.2466/03.09.PR0.112.2.445-457
- Hare, R. D. (1996). Psychopathy: A clinical construct whose time has come. *Criminal Justice and Behavior*, 23(1), 25-54. doi:10.1177/0093854896023001004
- Hare, R. D., & Neumann, C. S. (2008). Psychopathy as a clinical and empirical construct. *Annual Review of Clinical Psychology*, 4(1), 217-246. doi:10.1146/annurev.clinpsy.3. 022806.091452
- Hare, R. D., & Neumann, C. S. (2009). Psychopathy and its measurement. In P. J. Corr & G. Matthews (Eds.), *Cambridge handbook of personality psychology* (pp. 660-686). Cambridge: Cambridge University Press.
- Harpour, T. J., Hare, R. D., & Hakstian, A. R. (1989). Two-factor conceptualization of psychopathy: Construct validity and assessment implications. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 1(1), 6-17. doi:10.1037/ 1040-3590.1.1.6
- Issa, M. A., Falkenbach, D. M., Trupp, G. F., Campregher, J. G., & Lap, J. (2017). Psychopathy in Lebanese college students: The PPI-R considered in the context of borderline features and aggressive attitudes across sex and culture. *Personality and Individual Differences*, 105, 64-69. doi:10.1016/j.paid.2016.09.035
- Hicks, B. M., Markon, K. E., Patrick, C. J., Krueger, R. F., & Newman, J. P. (2004). Identifying psychopathy subtypes on the basis of personality structure. *Psychological Assessment*, 16(3), 276. doi:10.1037/1040-3590.16.3.276
- Hicks, B. M., & Patrick, C. J. (2006). Psychopathy and negative affectivity: Analyses of suppressor effects reveal distinct relations with trait anxiety, depression, fearfulness, and anger-hostility. *Journal of Abnormal Psychology*, 115(2), 276-287. doi:10.1037/0021-843X.115.2.276

- Kobasa, S. C. (1979). Stressful life events, personality, and health: An inquiry into hardiness. *Journal of Personality and Social Psychology*, *37*(1), 1-11. doi:10.1037/0022-3514. 37.1.1
- Lee, Z., & Salekin, R. T. (2010). Psychopathy in a noninstitutional sample: Differences in primary and secondary subtypes. *Personality Disorders: Theory, Research, and Treatment, 1*(3), 153. doi:10.1037/a0019269
- Lilienfeld, S. O., & Hess, T. H. (2001). Psychopathic personality traits and somatization: Sex differences and the mediating role of negative emotionality. *Journal of Psychopathology and Behavioral Assessment*, 23(1), 11-24. doi:10.1023/A:1011035306061
- Lilienfeld, S. O., Smith, S. F., Sauvigné, K. C., Patrick, C. J., Drislane, L. E., Latzman, R. D., & Krueger, R. F. (2015). Is boldness relevant to psychopathic personality? Metaanalytic relations with non-psychopathy checklist-based measures of psychopathy. *Psychological Assessment*, 28(10), 1172-1185. doi:http://dx.doi.org/10.1037/pas 0000244
- Lilienfeld, S. O., Watts, A. L., & Smith, S. F. (2015). Successful psychopathy a scientific status report. *Current Directions in Psychological Science*, 24(4), 298-303. doi:10.1177/ 0963721415580297
- Lovibond, S. H., & Lovibond, P. F. (1995). *Manual for the Depression Anxiety Stress Scales*. (2nd Ed.) Sydney: Psychology Foundation.
- Lynam, D. R., & Miller, J. D. (2015). Psychopathy from a basic trait perspective: The utility of a five-factor model approach. *Journal of Personality*, 83(6), 611-626. doi:10.1111/ jopy.12132
- Miller, J. D., Watts, A., & Jones, S. E. (2011). Does psychopathy manifest divergent relations with components of its nomological network depending on gender? *Personality and Individual Differences*, 50(5), 564-569. doi:10.1016/j.paid.2010.11.028
- Mills-Koonce, W. R., Wagner, N. J., Willoughby, M. T., Stifter, C., Blair, C., & Granger, D. A. (2015). Greater fear reactivity and psychophysiological hyperactivity among infants with later conduct problems and callous-unemotional traits. *Journal of Child Psychology and Psychiatry*, 56(2), 147-154. doi:10.1111/jcpp.12289
- Međedović, J. (2015). *Nomološka mreža psihopatije* [Nomological network of psychopathy]. Beograd: Institut za kriminološka i sociološka istraživanja.
- Međedović, J., Petrović, B., Želeskov-Đorić, J., & Savić, M. (2017). Interpersonal and affective psychopathy traits can enhance human fitness. *Evolutionary Psychological Science*, 3(4), 306-315. https://doi.org/10.1007/s40806-017-0097-5
- Mullins-Sweatt, S. N., Glover, N. G., Derefinko, K. J., Miller, J. D., & Widiger, T. A. (2010). The search for the successful psychopath. *Journal of Research in Personality*, 44(4), 554 -558. http://dx.doi.org/10.1016/j.jrp.2010.05.010
- Neumann, C. S., Schmitt, D. S., Carter, R., Embley, I., & Hare, R. D. (2012). Psychopathic traits in females and males across the globe. *Behavioral Sciences & the Law*, 30(5), 557-574. doi:10.1002/bsl.2038

- Pačić-Turk, L., & Gajski, M. (2014). Samoizvješće psihopatije SRP-III i povezanost njegovih dimenzija s Velepetorim modelom ličnosti [The Self-Report Psychopathy Scale SRP-III and its correlation with the Five Factor Model]. Društvena istraživanja: Časopis za opća društvena pitanja, 23(1), 155-175. doi:10.5559/di.23.1.08
- Patrick, C. J., & Drislane, L. E. (2015). Triarchic model of psychopathy: Origins, operationalizations, and observed linkages with personality and general psychopathology. *Journal of Personality*, 83(6), 627-643. doi:10.1111/jopy.12119
- Paulhus, D. L., Neumann, C. S., & Hare, R. (in press). *Manual for the Self-report Psychopathy Scale (SRP)*. Toronto: Multi-Heath Systems.
- Ragsdale, K. A., & Bedwell, J. S. (2013). Relationships between dimensional factors of psychopathy and schizotypy. *Frontiers in Psychology*, 4, 1-7. http://dx.doi.org/10.3389/ fpsyg.2013.00482
- Sandvik, A. M., Hansen, A. L., Hystad, S. W., Johnsen, B. H., & Bartone, P. T. (2015). Psychopathy, anxiety, and resiliency - Psychological hardiness as a mediator of the psychopathy-anxiety relationship in a prison setting. *Personality and Individual Differences*, 72, 30-34. doi:10.1016/j.paid.2014.08.009
- 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. doi:10.1007/s00787-008-0707-7
- Sherry, A., & Henson, R. K. (2005). Conducting and interpreting canonical correlation analysis in personality research: A user-friendly primer. *Journal of Personality Assessment*, 84(1), 37-48. doi:10.1207/s15327752jpa8401_09
- Sica, C., Drislane, L., Caudek, C., Angrilli, A., Bottesi, G., Cerea, S., & Ghisi, M. (2015). A test of the construct validity of the triarchic psychopathy measure in an Italian community sample. *Personality and Individual Differences*, 82, 163-168. doi:10.1016/j. paid.2015.03.015
- Skeem, J., Johansson, P., Andershed, H., Kerr, M., & Louden, J. E. (2007). Two subtypes of psychopathic violent offenders that parallel primary and secondary variants. *Journal of Abnormal Psychology*, 116(2), 395. doi:10.1037/0021-843X.116.2.395
- Skeem, J. L., Polaschek, D. L. L., Patrick, C. J., & Lilienfeld, S. O. (2011). Psychopathic personality: Bridging the gap between scientific evidence and public policy. *Psychological Science in the Public Interest*, 12(3), 95-162. doi:10.1177/ 1529100611426706
- Sprague, J., Javdani, S., Sadeh, N., Newman, J. P., & Verona, E. (2012). Borderline personality disorder as a female phenotypic expression of psychopathy? *Personality Disorders: Theory, Research, and Treatment, 3*(2), 127-139. http://dx.doi.org/ 10.1037/a0024134
- Tabachnick, B. G., & Fidell, L. S. (2001). Using multivariate statistics (4th ed.). Boston: Allyn & Bacon.

- Venables, N. C., Sellbom, M., Sourander, A., Kendler, K. S., Joiner, T. E., Drislane, L. E., ... Patrick, C. J. (2015). Separate and interactive contributions of weak inhibitory control and threat sensitivity to prediction of suicide risk. *Psychiatry Research*, 226(2-3), 461-466. doi:10.1016/j.psychres.2015.01.018
- Verona, E., Hicks, B. M., & Patrick, C. J. (2005). Psychopathy and suicidal behavior in female offenders: Mediating influences of temperament and abuse history. *Journal of Consulting and Clinical Psychology*, 73(6), 1065-1073. doi:10.1037/0022-006X. 73.6.1065
- Verona, E., & Vitale, J. (2006). Psychopathy in women: Assessment, manifestations, and etiology. In C. J. Patrick (Ed.), *Handbook of psychopathy* (pp. 415-436). New York, NY: Guilford Press.
- Vassileva, J., Kosson, D. S., Abramowitz, C., & Conrod, P. (2005), Psychopathy versus psychopathies in classifying criminal offenders. *Legal and Criminological Psychology*, 10(1), 27-43. doi:10.1348/135532504X15376
- Willemsen, J., & Verhaeghe, P. (2012). Psychopathy and internalizing psychopathology. *International Journal of Law and Psychiatry*, 35(4), 269-275. doi:10.1016/j. ijlp.2012.04.004
- Wilson, D. L., Frick, P. J., & Clements, C. B. (1999). Gender, somatization, and psychopathic traits in a college sample. *Journal of Psychopathology and Behavioral Assessment*, 21(3), 221-235. doi:10.1023/A:1022825415137
- Zahn-Waxler, C., Crick, N. R., Shirtcliff, E. A., & Woods, K. E. (2015). The origins and development of psychopathology in females and males. Developmental Psychopathology, Second Edition. Published Online. doi:10.1002/9780470939383.ch4

Mogu li psihopatske crte biti adaptivne? Spolne razlike u odnosu između psihopatije i emocionalnog distresa

Sažetak

Jedan od najistaknutijih modela psihopatije uključuje četiri relevantne crte: interpersonalnu, emocionalnu, crtu životnoga stila te antisocijalnu. Ovi čimbenici pokazuju različite obrasce povezanosti s drugim konstruktima, a odnosi među njima mogu biti različiti kod muškaraca i žena. Cilj je ovog rada bio istražiti razlikuju li se odnosi između psihopatskih crta i indikatora emocionalnog distresa (depresije, anksioznosti i stresa) kod muškaraca i žena. Podaci su prikupljeni na uzorku od 650 studenata (60 % žena) Sveučilišta u Zagrebu. Rezultati su kanoničke korelacijske analize pokazali da emocionalnog distresa, dok životni stil i antisocijalno ponašanje predstavljaju ražitini faktor u doživljavanju emocionalnog distres. Također, spol je bio moderator u odnosu između interpersonalnog faktora i životnog stila te distresa, upućujući time na mogućnost da su psihopatske crte adaptivnije za muškarce nego za žene.

Ključne riječi: psihopatske crte, emocionalni distres, spolne razlike

¿Se pueden adaptar los rasgos psicopáticos? Diferencias de género en las relaciones entre la psicopatía y la angustia emocional

Resumen

Uno de los modelos de psicopatía más destacados supone que este constructo consta de cuatro factores: rasgos interpersonales, afectivos, de estilo de vida y antisociales. Estos rasgos muestran diferentes modelos de relación con otros constructos y estas relaciones se diferencian en hombres y mujeres. El objetivo de este trabajo fue investigar si hay diferencia entre los hombres y las mujeres en la relación entre los rasgos psicopáticos y los indicadores de angustia emocional (depresión, ansiedad y estrés). Los datos se recogieron en la muestra de 650 estudiantes (60% mujeres) en la Universidad de Zagreb. Los resultados del análisis de correlación canónica indicaron que los rasgos psicopáticos afectivos tienen un potencial adaptivo y representan un factor para la angustia emocional, mientras que el estilo de vida y la conducta antisocial representan un factor de riesgo. Además, el género tuvo un papel moderador en la relación entre los rasgos psicopáticos parecen ser más adaptivos en hombres, en comparación con las mujeres.

Palabras clave: rasgos psicopáticos, angustia emocional, diferencias de género

Primljeno: 15.02.2018.