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Cognitive empathy distinguishes sadism from psychopathy: Effects on antisocial behaviour

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Abstract

The aim of this study was to explore relations between two dark traits, psychopathy and sadism, and affective and cognitive empathy, as the moderation effect of both empathy components in the relations between these traits and antisocial behaviour. Data were obtained from 221 high school students (66.1% females). Four scales were used: Psychopathy scale from Short Dark Triad – SD3, Short Sadistic Impulse Scale – SSIS, Basic Empathy Scale – BES and Antisocial Behaviour Questionnaire – ABQ. Results showed that sadism was negatively related to both cognitive and affective empathy, while psychopathy was negatively related only to affective empathy. Furthermore, cognitive empathy had a moderation effect on relations between sadism and antisocial behaviour. Sadism had a positive effect on antisocial behaviour on all levels of cognitive empathy, indicating that those with high sadism and sufficiently cognitive empathy are more prone to antisocial behaviour. Although sadism was related to affective empathy, the interaction between them was not significant. On the other side, psychopathy obtained solely effect on antisocial behavior, with no significant moderation effects of empathy components. Results suggest that recognising and understanding another's suffering might be the feature that distinguishes sadism from psychopathy.

Keywords: psychopathy; sadism; cognitive empathy; affective empathy; antisocial behavior

Introduction

The Dark Tetrad (Machiavellianism, narcissism, psychopathy and sadism) represents a set of distinct, but overlapping personality traits (Paulhus, 2014). However, due to many common features shared by psychopathy and sadism, there are authors suggesting that sadism is an aspect of the psychopathic personality constellation (Murphy & Vess, 2003). By definition, psychopathy refers to dishonesty, egocentricity, failure to form close emotional bonds, low anxiety proneness, superficial charm and blame externalization (Hare, 1999), whereas sadism is usually characterized by enjoyment from hurting others (Buckels, Jones, & Paulhus, 2013). Since sadism and psychopathy are both consistently associated with antisocial behaviour (Chabrol, Van Leeuwen, Rodgers, & Séjourné, 2009), in this study we decided to focus particularly on this two dark trait.

One of the features that is known to be common for all of the four dark traits is the callousness, which is related to a lack of empathy (Paulhus, 2014). Although many studies indicated that all of the four dark personality traits are associated with the general lack of empathy (Book et al., 2016; Wai & Tiliopoulos, 2012), some authors suggest that empathy is a complex phenomenon, thus, that should not be studied as a unitary, but rather as a multidimensional construct (e.g. Davis, 1983). Namely, empathy involves both the ability to recognize and understand another's emotions – known as cognitive empathy, and the ability to experience, internalize, and respond to the emotions of others – known as affective empathy.

After delineating the global empathy into cognitive and affective dimensions, the relations between empathy and the dark traits become rather inconsistent. Previous studies have consistently shown negative correlations between affective empathy and both psychopathy and sadism (Pajević, Vukosavljević-Gvozden, Stevanović, & Neumann, 2018; Wai & Tiliopoulos, 2012). However, the relations between cognitive empathy and these two traits remain unclear: in some studies psychopathy is negatively correlated with cognitive empathy (Pajević et al., 2018; Vonk, Zeigler-Hill, Ewing, Mercer, & Noser, 2015), in others there was no significant relationship between the two (Mullins-Nelson, Salekin, & Leistico, 2006; Wai & Tiliopoulos, 2012). Moreover, a small number of studies that explored the relationship between everyday sadism and empathy also reported inconsistent findings. Some authors found negative correlation between sadism and perspective-taking (a concept closely related to cognitive empathy, see Buckels et al., 2013), whereas others argue that a sadist may at least possess an unimpaired cognitive empathy to be able to successfully hurt another (Baumeister, 1997; O'Meara, Davies, & Hammond, 2011).

It has been shown that persons with high levels of sadism react with higher enjoyment if the observed person is in a state of more severe misfortune (Schumpe & Lafrenière, 2016) and that others' suffering represents a positive reinforcement for the sadist (Palermo, 2013). With that in mind, it appears that by the definition, those scoring high on sadism ought to have the ability to recognise and understand another's emotions, i.e. cognitive empathy. On the other side,

psychopathic individuals employ destructive patterns of dysfunctional interpersonal behaviours, augmented by aberrant cognitions, and utilise charm and manipulative techniques for personal gain, regardless of the cost to others (Hare, 1999). It seems that their goals are rather instrumental (Paulhus & Jones, 2015; Woodworth & Porter, 2002). Thus, it is assumed that a person with a high level of psychopathy does not necessarily need a high level of cognitive empathy in order to manifest antisocial behavior.

The relations between empathy and dark traits are more complex and are under developmental factors. Studies conducted on children showed that psychopathic traits are associated with significant deficits in cognitive empathy, but also that there is a recovery to comparatively healthy levels of cognitive empathy in the oldest 9- to 12-year-old age group (Dadds, Hawes, Frost, Vassallo, Bunn, Hunter, & Merz, 2009). This implies that there should be no significant correlation between psychopathy and cognitive empathy in adolescents or adults.

The aim of this study was to explore relations between sadism and psychopathy with empathy components among adolescents. Furthermore, the moderation effect of both cognitive and affective empathy on the relationship between these dark traits and antisocial behavior. We expect the significant moderation effect of cognitive empathy on the relation between sadism and antisocial behaviour, but not between psychopathy and antisocial behaviour. In the case of affective empathy, we expect significant moderation effect on relations between both psychopathy and sadism and antisocial behaviour. If the different pattern of relations were obtained, we could determine which features could distinguish sadism from psychopathy.

Method

Participants and procedure

The sample included 221 secondary school students (66.1 % females), aged from 16 to 19 ($M = 17.3$, $SD = 0.91$). Data were collected in 9 secondary schools (3 gymnasiums and 6 professional schools) in 3 cities in Serbia (Subotica, Novi Sad and Jagodina). The study was approved by the Institutional Review Board. All participants were given the written consent and for students under the age of 18 consent was also given to the parents.

Instruments

Four scales were used: 1. Psychopathy scale from Short Dark Triad Scale (SD3; Paulhus & Jones, 2014, for Serbian adaptation see Dinić, Petrović, & Jonason, 2018), 2. Short Sadistic Impulse Scale (SSIS; O'Meara et al., 2011, for Serbian adaptation see Dinić, Bulut, Petrović, & Wertag, 2018) which measures the trait sadism, 3. Basic Empathy Scale (BES; Jolliffe & Farrington, 2006, for Serbian adaptation, see Dinić, Kodžopeljić, Sokolovska, & Milovanović, 2016) which measures cognitive and affective

empathy, 4. Antisocial Behaviour Questionnaire (ABQ; Luengo, Otero, Romero, Gómez-Fraguela, & Tavares-Filho, 1999) which contains 33 items and measures several types of antisocial behaviour: drug abuse, rule-breaking, theft, aggression and vandalism. In this study, the total score was used (one item with zero variance was excluded, "Stealing the material from the warehouse or from the repairman."). All instruments have 5-point Likert type scale for answering (from 1 = *strongly disagree*, to 5 = *strongly agree*). Reliabilities were given in Table 1.

Results

Sadism and antisocial behaviour variables did not meet the criteria for normal distribution (± 2.00 , see Gravetter & Wallnau, 2014), thus, their scores were normalized (Table 1).

Table 1: Descriptives and reliabilities

	M	SD	Sk	Ku	α	n
Psych	2.48	0.72	0.16	-0.38	.74	9
Sadism	1.87	0.64	1.28	2.53	.80	10
Cognitive	4.02	0.56	- 0.61	1.51	.80	9
Affective	3.43	0.65	- 0.30	0.36	.84	11
AB	0.35	0.29	1.60	4.16	.88	32

Note. n – Number of items

Psychopathy and sadism correlated highly positive and both dark traits were also positively related to antisocial behavior. However, whereas sadism showed significant negative correlations with both affective and cognitive empathy, psychopathy was only negatively associated with affective empathy (Table 2). When the effect of sadism and other variables were controlled, psychopathy obtained no significant correlation with affective empathy. Moreover, antisocial behaviour was significantly negatively related only to affective empathy, but not to cognitive empathy

Table 2: Correlations between variables

	P	S	AE	CE
Psychopathy (P)	1			
Sadism (S)	.53** (.37**)	1		
Affective empathy (AE)	-.29** (-.11)	-.41** (-.19**)	1	
Cognitive empathy (CE)	-.08 (.10)	-.29** (-.18**)	.50**	1
Antisocial behaviour	.50** (.32**)	.43** (.22**)	-.23**	-.05

Note. Partial correlations are in parentheses with controlling for empathy, antisocial behaviour, and sadism or psychopathy.

** $p < .01$.

Moderation analysis was done in macro PROCESS 3.0 (Hayes, 2017) with sex and age entered as covariates. Results of moderation analysis showed that cognitive empathy obtained significant moderation effect only in relations between sadism and antisocial behavior (total $R^2 = .33$, $p < .01$, for interaction effect $R^2 = .02$, $p < .01$, $B = 0.23$, $SE = 0.08$). Sadism had a positive effect on antisocial behaviour on all levels of cognitive empathy, but the effect was significant only when the cognitive empathy scores were average or high (Figure 1). Interaction between sadism and affective empathy was not significant (total $R^2 = .30$, $p < .01$, for interaction effect $R^2 = .01$, $p = .06$, $B = 0.14$, $SE = 0.08$).

In case of psychopathy, there were no significant moderation effects (cognitive empathy: total $R^2 = .35$, $p < .01$, for interaction effect $R^2 = .00$, $p = .79$, $B = 0.03$, $SE = 0.12$, affective empathy: total $R^2 = .35$, $p < .01$, for interaction effect $R^2 = .00$, $p = .30$, $B = 0.11$, $SE = 0.11$). Thus, only effect of psychopathy on antisocial behavior was significant (cognitive empathy: $B = 0.58$, $SE = 0.18$, $p < .01$, affective empathy: $B = 0.58$, $SE = 0.08$, $p < .01$).

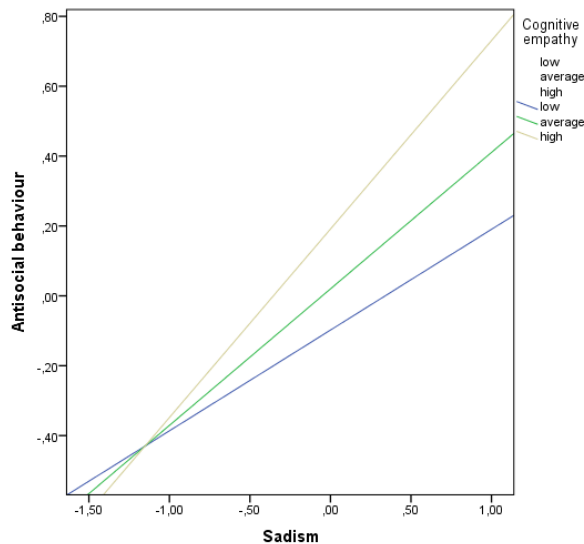


Figure 1: Interaction between sadism and cognitive empathy on antisocial behavior

Discussion

Results showed that psychopathy and sadism are positively related to antisocial behaviour, which is in line with previous studies (Chabrol et al., 2009). As expected, and in accordance with previous studies, the lack of affective empathy is related to antisocial behavior (Jolliffe, & Farrington, 2006; de Kemp Overbeek, de Wied, Engels, & Scholte, 2007). However, cognitive empathy is not related to antisocial behaviour. These results are in accordance with previous studies on bullying, showing a significant negative relationship between bullying and affective empathy, but not cognitive empathy (Jolliffe & Farrington, 2006). Whereas being able to experience others' feelings might actually prevent antisocial behavior, some authors suggest that sufficient cognitive

empathy could even facilitate antisocial behavior (Sutton, Smith, & Swettenham, 1999).

Results of this study showed that psychopathy and sadism could be distinguished in two ways. Firstly, the two traits have different patterns of relations with empathy. Precisely, sadism is negatively related to both cognitive and affective empathy, while psychopathy is only negatively related to affective empathy. These results are partly consistent with the results of previous studies, suggesting negative relations between both dark traits and affective empathy (Pajević, et al., 2018; Wai & Tiliopoulos, 2012). The nonsignificant relations between psychopathy and cognitive empathy is in line with some of the previous studies conducted on adults (Mullins-Nelson, Salekin, & Leistico, 2006; Wai & Tiliopoulos, 2012), and on older children (9-12 years, see Daads et al., 2009). These results imply that relation between psychopathy and cognitive empathy changes during ontogenesis. However, longitudinal studies have to be conducted in order to examine this change in a more detailed manner.

Bivariate correlations between sadism and cognitive empathy indicated that there is a lack of cognitive empathy in those who scored high in sadism. These findings suggest that the lack of understanding of other's emotions could be the reason why sadists do harm to another. However, the pattern of relations becomes a bit more complex when predicting the actual outcome, such as antisocial behavior, which brings us to the second distinction between psychopathy and sadism. Specifically, cognitive empathy emerged as a moderator in the relation between sadism and antisocial behaviour, but not in the relation between psychopathy and antisocial behaviour. Although sadism and cognitive empathy were negatively correlated, sadism had a positive effect on antisocial behavior on average and high levels of cognitive empathy. It appears that those who scored high on sadism generally have lower levels of cognitive empathy, but the higher is the level of their cognitive empathy, the higher is the tendency towards antisocial behaviour. It could be concluded that although "sadists" generally do not understand other's emotions very well, the better they do, the more antisocial behaviour they express. A possible explanation might be that "sadists" with higher levels of cognitive empathy derive more pleasure from hurting others and damaging property since they recognise that these behaviors make others suffering.

On the other side, psychopathy obtained a solely positive effect on antisocial behavior, i.e. there was no moderation effect of cognitive or affective empathy on this relation. It seems that psychopaths are probably instrumental goal-driven, rather than motivated by the suffering of others. For example, aggression in psychopaths is thought to be controlled, purposeful, and used for achieving a desired external goal (e.g. obtaining money or drugs), whereas injury to others is typically secondary to the acquisition of that goal (Glenn & Rainne, 2009). Moreover, it is possible that psychopaths manifest antisocial behavior solely due to their impulsivity, rather than the actual intent to harm. Taken together, results of the current study suggest that recognizing

and understanding others' emotional states might be one of the features that distinguish sadism from psychopathy.

Finally, due to the fact that these findings were based only on the self-reported measures, they ought to be taken with caution. The limitation of using self-reported measures is especially important when it comes to the operationalisation of empathy. Though self-report measures are by far the most typical instrument used in empathy research, they usually tell us very little about empathic accuracy (Gerdes, Segal, & Lietz, 2010). Therefore, using a different measure of empathy, instead of self-report is recommended.

References

- Baumeister, R. F. (1997). *Evil: Inside human violence and cruelty*. New York: W. H. Freeman.
- Buckels, E. E., Jones, D. N., & Paulhus, D. L. (2013). Behavioral confirmation of everyday sadism. *Psychological Science*, 24, 2201-2209.
- Chabrol, H., Van Leeuwen, N., Rodgers, R., & Séjourné, N. (2009). Contributions of psychopathic, narcissistic, Machiavellian, and sadistic personality traits to juvenile delinquency. *Personality and Individual Differences*, 47, 734-739.
- Dadds, M., Hawes, D., Frost, A., Vassallo, S., Bunn, P., Hunter, K., & Merz, S. (2009). Learning to 'talk the talk': the relationship of psychopathic traits to deficits in empathy across childhood. *Journal of Child Psychology and Psychiatry*, 50(5), 599-606.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44, 113.
- de Kemp, R. A., Overbeek, G., de Wied, M., Engels, R. C., & Scholte, R. H. (2007). Early adolescent empathy, parental support, and antisocial behavior. *The Journal of Genetic Psychology*, 168, 5-18.
- Dinić, B. M., Kodžopeljić, J. S., Sokolovska, V. T., & Milovanović, I. Z. (2016). Empathy and peer violence among adolescents: Moderation effect of gender. *School Psychology International*, 37, 359-377.
- Dinić, B. M., Bulut, T., Petrović, B., & Wertag, A. (2018). A test of three sadism measures: Short Sadistic Impulse Scale, Varieties of Sadistic Tendencies, and Assessment of Sadistic Personality. Manuscript under review.
- Dinić, B., Petrović, B., & Jonason, P. K. (2018). Serbian adaptations of the Dark Triad Dirty Dozen (DTDD) and Short Dark Triad (SD3). *Personality and Individual Differences*, 134, 321-328.
- Gerdes, K. E., Segal, E. A., & Lietz, C. A. (2010). Conceptualising and measuring empathy. *British Journal of Social Work*, 40, 2326-2343.
- Glenn, A. L., & Raine, A. (2009). Psychopathy and instrumental aggression: Evolutionary, neurobiological, and legal perspectives. *International Journal of Law and Psychiatry*, 32, 253-258.
- Gravetter, F., & Wallnau, L. (2014). *Essentials of statistics for the behavioral sciences* (8th Ed.). Belmont, CA: Wadsworth.
- Hare, R. D. (1999). Psychopathy as a risk factor for violence. *Psychiatric Quarterly*, 70, 181-197.
- Hayes, A. F. (2017). Introduction to mediation, moderation and conditional process analysis: A regression based approach (2nd ed.). New York, NY, US: Guilford Press.
- Jolliffe, D., & Farrington, D. P. (2006). Development and validation of the Basic Empathy Scale. *Journal of Adolescence*, 29, 589-611.
- Jolliffe, D., & Farrington, D. P. (2006). Examining the relationship between low empathy and bullying. *Aggressive Behavior*, 32, 540-550.
- Luengo, M. A., Otero, J. M., Romero, E. S. T. R. E. L. L. A., Gómez-Fraguela, J. A., & Tavares-Filho, E. T. (1999). Análisis de ítems para la evaluación de la conducta antisocial: un estudio transcultural. *Revista Iberoamericana de Diagnóstico y Evaluación Psicológica*, 1, 21-36.
- Mullins-Nelson, J. L., Salekin, R. T., & Leistico, A. M. R. (2006). Psychopathy, empathy, and perspective-taking ability in a community sample: Implications for the successful psychopathy concept. *International Journal of Forensic Mental Health*, 5, 133-149.
- Murphy, C., & Vess, J. (2003). Subtypes of psychopathy: Proposed differences between narcissistic, borderline, sadistic, and antisocial psychopaths. *Psychiatric Quarterly*, 74, 11-29.
- O'Meara, A., Davies, J., & Hammond, S. (2011). The psychometric properties and utility of the Short Sadistic Impulse Scale (SSIS). *Psychological Assessment*, 23(2), 523-531.
- Pajević, M., Vukosavljević-Gvozden, T., Stevanović, N., & Neumann, C. S. (2018). The relationship between the Dark Tetrad and a two-dimensional view of empathy. *Personality and Individual Differences*, 123, 125-130.
- Palermo, G. B. (2013). The various faces of sadism. *International Journal of Offender Therapy and Comparative Criminology*, 57, 399-401.
- Paulhus, D. L. (2014). Toward a taxonomy of dark personalities. *Current Directions in Psychological Science*, 23, 421-426.
- Paulhus, D. L., & Jones, D. N. (2015). Measures of dark personalities. In G. J. Boyle, D. H. Saklofske, & G. Matthews (Eds.), *Measures of personality and social psychological constructs* (pp. 562-594). London, United Kingdom: Academic Press.
- Schumpe, B. M., & Lafrenière, M. A. K. (2016). Malicious joy: Sadism moderates the relationship between schadenfreude and the severity of others' misfortune. *Personality and Individual Differences*, 94, 32-37.
- Shechtman, Z. (2002). Cognitive and affective empathy in aggressive boys: Implications for counseling. *International Journal for the Advancement of Counseling*, 24, 211-222.

- Vonk, J., Zeigler-Hill, V., Ewing, D., Mercer, S., & Noser, A. E. (2015). Mindreading in the dark: Dark personality features and theory of mind. *Personality and Individual Differences*, 87, 50-54.
- Wai, M., & Tiliopoulos, N. (2012). The affective and cognitive empathic nature of the dark triad of personality. *Personality and Individual Differences*, 52, 794-799.
- Woodworth, M., & Porter, S. (2002). In cold blood: Characteristics of criminal homicides as a function of psychopathy. *Journal of Abnormal Psychology*, 111, 436-445.