Different Paths to Different Strategies? Unique Associations Among Facets of the Dark Triad, Empathy, and Trait Emotional Intelligence

Edit Szabó and Tamás Bereczkei

Institute of Psychology, University of Pécs, Hungary

ABSTRACT

Emotional deficits, such as limited empathy, are considered a fundamental aspect of the *Dark Triad* traits (narcissism, Machiavellianism, and psychopathy). However, the nature and extent of such deficiencies seem to vary among dark personalities. By applying multidimensional measures of empathy, emotional intelligence, and the Dark Triad, we aimed to investigate in more detail how individuals high in various dark traits understand and evaluate emotions. Results indicated that each trait, and, moreover, each facet thereof entailed unique emotional deficiencies. Narcissism was positively associated with trait emotional intelligence, whereas the secondary factor of psychopathy was associated negatively. With respect to empathy, only primary psychopathy was linked to an overall deficit, while a positive relationship was found between Machiavellianism and the perspective-taking facet of cognitive empathy. We argue that the specific emotional limitations of the Dark Triad traits might contribute to the successful deployment of different socially aversive strategies.

KEYWORDS

Dark Triad, emotional intelligence, empathy

INTRODUCTION

All three traits of the *Dark Triad* of personality—narcissism, Machiavellianism, and psychopathy—share a callous core that evokes the manipulation of others (e.g., Jones & Figueredo, 2013; Paulhus & Jones, 2015; Paulhus & Williams, 2002). Dark personalities are disagreeable (Jakobwitz & Egan, 2006); lack honesty and humility (Furnham, Richards, & Paulhus, 2013), and prefer to form antagonistic short-term relationships (Jonason, Li, Webster, & Schmitt, 2009). Besides these antisocial outcomes, emotional and empathic deficits are considered a fundamental aspect of the Dark Triad. Furthermore, their affective limitations are likely to contribute to the aversive characteristics and manipulative nature of these traits. Thus, low levels of emotional intelligence (EI) and limited empathy might engender exploitative social styles (Ali & Chamorro-Premuzic, 2010; Jonason & Krause, 2013).

The major emotional difficulties of Dark Triad traits have been found in relation to empathy. However, these deficits appear to be oriented to the affective component (experiencing emotions), whereas little evidence was found of impairment in the cognitive component (understanding emotions) of empathy (Jonason & Krause, 2013; Wai & Tiliopoulos, 2012). Moreover, it is possible that the nature and extent of emotional impairments differ between Machiavellian, psychopathic, and narcissistic individuals. Although intercorrelated, these traits represent distinct elements of socially aversive behavior (e.g., Jones & Paulhus, 2011; Paulhus & Jones, 2015; Petrides, Vernon, Schermer, & Veselka, 2011). Narcissism involves a grandiose self-concept and excessive self-love, Machiavellianism involves cynicism and strategic interpersonal manipulation, psychopathy is characterized by an antisocial behavioral style, thrill-seeking and a lack of remorse. Considering their specific characters, the current study aims to investigate in more detail how Dark Triad traits are linked to individual differences in understanding and evaluating emotions in order to highlight possible patterns in their manipulative behaviors.

Corresponding author: Tamás Bereczkei, University of Pécs, Institute of Psychology, Pécs, Ifjúság u. 6, H–7624, Hungary.

E-mail: bereczkei.tamas@pte.hu

This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Research has indicated that not all Dark Triad traits show the same style of emotional deficits. Narcissism was reported to display negative associations with affective empathy but showed mixed results with respect to cognitive empathy (Delic, Novak, Kovacic, & Avsec, 2011; Vonk, Zeigler-Hill, Mayhew, & Mercer, 2013; Wai & Tiliopoulos, 2012). Several studies demonstrate a positive relationship between narcissism and trait EI (Nagler, Reiter, Furtner, & Rauthmann, 2014; Petrides et al., 2011; Veselka, Schermer, & Vernon, 2012). These findings indicate that some narcissists might be able to understand others' emotions although they are not motivated to express empathic concern for others. They rather use these skills to serve their own ego-needs (Jonason & Kroll, 2015; Petrides et al., 2011). Narcissism has a recent conceptualization as a two-dimensional construct that is built of a grandiose and a vulnerable aspect. Grandiose narcissism is characterized by self-admiration and exhibitionism. On the contrary, individuals with vulnerable narcissism appear to be more insecure and hypersensitive (Houlcroft, Bore, & Munro, 2012; Zeigler-Hill, Clark, & Pickard, 2008). It is the grandiose aspect of narcissism that is considered the more "toxic element" and the more relevant to the Dark Triad (Furnham et al., 2013; Jones & Paulhus, 2011; Paulhus & Jones, 2015), and grandiose narcissism can be further divided into three factors including leadership/authority, grandiose exhibitionism, and entitlement/ exploitativeness (Ackerman et al., 2011). In a related study, Vonk and colleagues (2013) found that individuals high in grandiosity were positively associated with EI, whereas other facets of narcissism, as well as the overall construct, displayed a negative association. Besides, grandiose exhibitionism predicted greater fantasy, while leadership/authority predicted lower levels of fantasy suggesting that the various facets of narcissism may differ in their affective nature.

Machiavellianism, besides its foregoing association with limited affective empathy, has consistently shown a negative relationship with EI (Ali, Amorim, & Chamorro-Premuzic, 2009; Bereczkei, 2015; Szijjarto & Bereczkei, 2015). However, Austin, Farrelly, Black, and Moore (2007) found a positive correlation between Machiavellianism and emotional manipulation as they extended the existing concept of EI with a malicious aspect. However, it should be noted that a more recent study demonstrated positive associations between emotional manipulation and all three Dark Triad traits (Nagler et al., 2014), suggesting that dark personalities use their knowledge about emotions as a tool to a selfish, manipulative end. Research has also shown that after distinguishing two subdimensions (O'Connor & Athota, 2013) the negative relationship between trait EI and Machiavellianism remained in regard of such positive components as managing others' emotions (generally with the inclination to help others) but not in regard of a neutral component: perceived emotional competence (the perceived ability to understand and use emotions).

Like Machiavellianism, psychopathy has been found to display negative associations with EI (Ali et al., 2009; Austin, Saklofske, Smith, & Tohver, 2014; Jauk, Freudenthaler, & Neubauer, 2016). However, some studies reported mixed (Nagler et al., 2014) or positive results (Veselka

et al., 2012). Psychopathy appears to be a multidimensional construct (Levenson, Kiehl, & Fitzpatrick, 1995) that can be differentiated into two related factors: primary and secondary. As a notable difference between these two, negative affect is absent from primary psychopathy, whereas secondary psychopathy is engaged with negative affect, especially with anxiety (Ali et al., 2009; Del Gaizo & Falkenbach, 2008; Grieve & Mahar, 2010). The few studies that addressed psychopathy as a heterogeneous construct in relation to emotionality revealed that it was mainly secondary psychopathy that negatively affected trait EI (Ali et al., 2009; Grieve & Mahar, 2010), whereas primary psychopathy showed weak or no significant association (Ali et al., 2009; Malterer, Glass, & Newman, 2008). However, the primary factor of psychopathy appeared to be the main predictor of empathic deficits within the Dark Triad (Jonason, Lyons, Bethell, & Ross, 2013; Wai & Tiliopoulos, 2012). Thus, results indicate that primary and secondary psychopaths do not experience the same levels of emotion.

Nevertheless, few studies have examined the different facets of Dark Triad traits in reference to their relationship with empathy and EI. Besides, many of the relevant studies did not include all three members of the Dark Triad or failed to assess the heterogeneous nature of empathy and EI. For these reasons we applied multidimensional measures in the present study to investigate the links between empathy, trait EI, and the Dark Triad in order to better detail the emotional motivations of dark personalities. Our goal here was to expand previous research by providing more focus on the multi-faceted nature of these constructs.

We assessed cognitive (perspective-taking) and affective (fantasy, empathic concern, and personal distress) dimensions of empathy (M. H. Davis, 1980; Kulcsar, 2002). We measured trait EI, that is, trait emotional self-efficacy, a construct that refers to emotion-related behavioral dispositions and self-perceptions (S. K. Davis & Nichols, 2016; Petrides, Pita, & Kokkinaki, 2007; Zhang, Zou, Wang, & Finy, 2015). In contrast, ability EI refers to emotion-related cognitive abilities (e.g., emotion perception or understanding). Here, we applied a four-factor model of trait EI containing appraisal, regulation, and utilization of emotions (Nagy, 2010; Schutte et al., 1998). Besides, we employed a two-factor model introduced by O'Connor and Athota (2013) in order to investigate whether emotional deficits of all Dark Triad traits appear only in relation to positive, pro-social aspects of EI but not in relation to neutral aspects.

Based on prior research and theoretical assumptions, we set up the following predictions:

- 1. The different facets of Dark Triad traits are expected to reveal unique associations with empathy and trait EI.
- 2. Subscales of trait EI are expected to negatively correlate with secondary psychopathy, but positively correlate with narcissism.
- 3. Grandiose exhibitionism is predicted to reveal a positive relation, whereas leadership-oriented narcissism a negative one, with the fantasy factor of empathy. Further, the subscales of empathy are expected to show strong negative relationships with primary psychopathy and weaker negative associations with Machiavellianism and the rest of the Dark Triad.

METHOD

Participants and procedure

We recruited students of the University of Pécs as participants via the university's mailing list. Participants (N=143;103 female) aged 18–33 years ($M_{\rm age}=21.89,\,SD_{\rm age}=2.77$) completed an online survey with a series of self-report questionnaires that assessed the variables of interest. Questionnaires were answered anonymously. All participants volunteered to participate in the study. After being directed to the survey webpage, participants could complete the survey at their own pace.

Measures

Subclinical narcissism was assessed with the Narcissistic Personality Inventory (NPI; Raskin & Hall, 1979; Hungarian translation by Bandi, 2014; Kelemen, 2010). This measure consists of 40 forced-choice items. Responses are scored positively, that is, the higher the score, the greater the narcissism. For analyzing the subscales of the NPI, we used the three-factor structure (Ackerman et al., 2011), consisting of the dimensions of leadership/authority, grandiose exhibitionism, and entitlement/exploitativeness. As the third subscale had unacceptable internal consistency (Cronbach's α = .33), we omitted it from further analyses. The remaining Cronbach's α values are shown in Table 1.

Machiavellianism was measured with the MACH-IV (Christie & Geis, 1970; Hungarian translation by Paal & Bereczkei, 2007). The scale has 20 items covering the use of manipulation in interpersonal relationships, a cynical worldview, and a lack of concern for conventional morality. Participants rate how much they agree with each item on a seven-point Likert scale, with higher scores indicating higher levels of Machiavellianism.

The Levenson Self-Report Psychopathy Scale (LSRP; Levenson et al., 1995; Hungarian translation by Kokonyei, 2004) was used to assess subclinical psychopathy. Responses are given in a four-point Likert format. The primary psychopathy scale consists of 16 items, designed to assess the selfish and uncaring manifestation of psychopathy. The secondary psychopathy scale consists of 10 items assessing a self-defeating lifestyle and impulsivity.

Empathy was assessed with the Interpersonal Reactivity Index (IRI; M. H. Davis, 1980; Hungarian translation by Kulcsar, 2002). Participants reported the extent they agreed (0 = strongly disagree; 4 = strongly agree) with 28 statements. The scale measures four dimensions of empathy with each subscale comprising seven items: perspective-taking, fantasy, empathic concern, and personal distress. All subscales showed good internal consistency (Cronbach's α values of .72 to .86).

We used a modified Hungarian translation of the Self-Report Emotional Intelligence Test (SREIT/EIS; Nagy, 2010; Schutte et al., 1998) to measure EI. Responses are given on a five-point Likert scale (1 = strongly disagree; 5 = strongly agree). The scale consists of 28 items. The subscales of the measure cover the appraisal of emotions in the self, the appraisal of emotions in others, emotional regulation of the self, and the utilization of emotions in problem solving. Cronbach's αs fall within the range of .66 to .86. Two subscales were left out of the Hungarian validation of the questionnaire (Nagy, 2010), emotional expression and emotional regulation of others, due to a low level of internal consistency. We also applied a two-factor model of SREIT (O'Connor & Athota, 2013) containing the factors of perceived emotional competence and positive emotional functioning. Internal consistency for both factors was high (α greater than .80).

RESULTS

Intercorrelations among the Dark Triad, trait EI, and empathy are shown in Table 1. Men scored higher than women in Machiavellianism but not in other Dark Triad traits. Women scored higher in global empathy. Machiavellianism correlated with primary psychopathy, and both correlated with secondary psychopathy and the leadership/authority facet of narcissism. Narcissism correlated with primary psychopathy.

We tested for correlations between the Dark Triad traits and the subscales of empathy and EI. We also controlled for the shared variance among the traits through multiple regression, as shown in Tables 2 and 3. Regression analyses unveiled the unique effects of each trait in their links with empathy and trait EI (e.g., the effect of narcissism controlling for Machiavellianism and psychopathy).

TABLE 1.Descriptives, Cronbach's Alphas, and Pearson's Correlation Coefficients Between Dark Triad, Empathy, Trait Emotional Intelligence, and Gender

| | M | SD | α | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------------------|-------|-------|-----|---|-----|-----|--------|--------|--------|--------|--------|--------|
| 1. Gender | | | | | 16* | 12 | 11 | 03 | 06 | .03 | .09 | .29*** |
| 2. Machiavellianism | 96.82 | 15.60 | .81 | | | .12 | .19* | .04 | .62*** | .35*** | 13 | 16* |
| 3. Narcissism | 15.08 | 5.50 | .75 | | | | .78*** | .60*** | .34*** | 03 | .29*** | 17* |
| 4. Leadership/Authority | 3.43 | 2.16 | .61 | | | | | .26** | .37*** | .06 | .21* | 26** |
| 5. Grandiose Exhibitionism | 3.22 | 2.18 | .67 | | | | | | .16* | 02 | .19* | .05 |
| 6. Primary psychopathy | 30.10 | 7.42 | .83 | | | | | | | .32*** | 12 | 39*** |
| 7. Secondary psychopathy | 20.59 | 4.57 | .65 | | | | | | | | 38*** | 11 |
| 8. Global Trait EI | 3.71 | .48 | .86 | | | | | | | | | .30*** |
| 9. Global empathy | 68.52 | 14.51 | .86 | | | | | | | | | |

 $Note.\ 1 = {\it Males};\ 2 = {\it Females};\ EI = {\it emotional intelligence}.\ ^*p < .05;\ ^{**}p < .01;\ ^{***}p < .001$

Narcissism was positively (β = .33, t = 4.08, p < .001) whereas secondary psychopathy negatively ($\beta = -.33$, t = -4.09, p < .001) associated with global trait EI (see Table 2). Narcissism positively correlated with three factors of the four-factor model (appraisal of emotions in others, emotional regulation of the self, utilization of emotions in problem solving), and also with both factors of the two-factor model (positive emotional functioning, perceived emotional competence). The leadership/authority facet was positively related to the appraisal of emotions in others and perceived emotional competence, while grandiose exhibitionism was positively associated with the emotional regulation of the self and positive emotional functioning. Machiavellianism correlated negatively with the emotional regulation of the self and positive emotional functioning, but these associations disappeared in regression analysis. Primary psychopathy was negatively related to positive emotional functioning. Secondary psychopathy showed negative relationships with three factors out of four (appraisal of emotions in the self, appraisal of emotions in others, emotional regulation of the

self) and with both factors of the two-factor model (positive emotional functioning and perceived emotional competence).

In their relationship with global empathy, with the exception of secondary psychopathy, all Dark Triad traits had negative correlations. However, after controlling for the shared variance, only primary psychopathy ($\beta = -.45$, t = -4.24, p < .001) and the leadership/authority facet of narcissism ($\beta = -.30$, t = -3.52, p < .001) predicted lower overall empathy (see Table 3). Further, primary psychopathy showed negative associations in relation to all subscales of the IRI. Narcissism and leadership/authority had lower personal distress. Leadership/authority was negatively whereas grandiose exhibitionism positively related to the fantasy scale. Secondary psychopathy had a negative relationship with perspective-taking and empathic concern but a positive relationship with personal distress. Although there was a negative correlation between Machiavellianism and empathic concern, this association was not present in regression analysis. Nevertheless, regression revealed a positive relationship between Machiavellianism and perspectivetaking, β = .20, t = 1.96, p = .05.

TABLE 2.Zero-Order Correlations and Standardized Regression Coefficients Using the Dark Triad to Predict Subdimensions of Trait Emotional Intelligence

| | $r\left(eta ight)$ | | | | | | | |
|-------------------------|----------------------|---------------|-----------------|-----------------|---------------|-----------------|-----------------|--|
| Dark Triad | Trait EI | AES | AEO | ERS | UEPS | PEF | PEC | |
| Machiavellianism | 13 (.05) | 10 (.02) | .01 (.10) | 23** (13) | 01 (.17) | 18* (.03) | .01 (.07) | |
| Narcissism | .29*** (.33***) | .07 (.06) | .28*** (.25**) | .29*** (.33***) | .20* (.28***) | .27*** (.34***) | .26** (.21*) | |
| Leadership/Authority | .21* (.17*) | .02 (.02) | .30*** (.29***) | .15* (.10) | .07 (.04) | .14 (.10) | .28*** (.27***) | |
| Grandiose Exhibitionism | .19* (.14) | .03 (.02) | .11 (.04) | .23** (.20*) | .15* (.14) | .20* (.17*) | .11 (.04) | |
| Primary psychopathy | 12 (16) | 09 (01) | .05 (.02) | 13 (08) | 13 (31**) | 20° (25°) | .06 (.07) | |
| Secondary psychopathy | 38*** (33***) | 35*** (35***) | 35*** (38***) | 33*** (25**) | 11 (07) | 34*** (26**) | 35*** (39***) | |

Note. EI = emotional intelligence; AES = appraisal of emotions in the self; AEO = appraisal of emotions in others; ERS = emotional regulation of the self; UEPS = utilization of emotions in problem solving; PEF = positive emotional functioning; PEC = perceived emotional competence. *p < .05; **p < .01; ***p < .01;

TABLE 3.Zero-Order Correlations and Standardized Regression Coefficients Using the Dark Triad to Predict Subdimensions of Empathy

| Dark Triad | Empathy | PT | FS | EC | PD | |
|-------------------------|-----------------------|---------------|-----------------------|----------------------|----------------|--|
| Machiavellianism | 16 [*] (.13) | 11 (.20*) | 01 (.16) | 29*** (03) | 06 (01) | |
| Narcissism | 17* (03) | 08 (.02) | 01 (.07) | 07 (.06) | 32*** (25**) | |
| Leadership/Authority | 26** (30***) | 14 (16*) | 12 (18 [*]) | 13 (14) | 33*** (34***) | |
| Grandiose Exhibitionism | .05 (.13) | .03 (.07) | .15* (.20*) | .01 (.04) | 06 (.03) | |
| Primary psychopathy | 39*** (45***) | 32*** (39***) | 15* (27*) | 41*** (38***) | 19* (19*) | |
| Secondary psychopathy | 11 (01) | 25** (19*) | 06 (03) | 21 [*] (08) | .22** (.28***) | |

 $Note. \ \ PT = perspective-taking; \ FS = fantasy \ scale; \ EC = empathic \ concern; \ PD = personal \ distress. *p < .05; **p < .01; ***p < .001; **p <$

DISCUSSION

Results from the present study provided support for the proposed hypothesis that each Dark Triad trait, and, moreover, each facet of each trait, reflected a unique pattern of emotional deficiencies. Consistent with our predictions and previous research, narcissism was associated with enhanced trait EI and with low levels of personal distress. Primary psychopathy showed an overall empathy deficit, while secondary psychopathy was linked to an overall trait EI deficit. As for Machiavellianism, the only significant relationship that remained after controlling for the other Dark Triad traits was a weak positive association with perspective-taking.

There are at least two possible explanations for the finding that narcissistic individuals showed higher levels of trait EI. First, this result may be due to the positive self-presentation, excessive belief in selfworth, and self-enhancement, which lead narcissistic individuals to consistently overrate their abilities. Supporting this idea, narcissism has been found to show lower levels of ability EI, particularly in men (Jauk et al., 2016) and adolescents (Zhang et al., 2015). Second, it is possible that individuals high in narcissism possess elevated trait EI and use it to satisfy their desire for attention and adulation in their social interactions. This way, trait EI can serve as a tool for narcissists to exploit and manipulate their environment (Delic et al., 2011; Jonason & Kroll, 2015; Raskin & Terry, 1988). The fact that they did not show empathy and had lower levels of personal distress provided further support to the idea that narcissistic individuals do not care about others' emotions in a socially expected way. In contrast, they seem to use their understanding about the needs and feelings of others to serve their own ego; to get what they want from others and to bolster their own feelings of self-worth (Paulhus & Jones, 2015; Petrides et al., 2011).

Our results revealed differences between the particular facets of narcissism. Leadership/authority showed lower levels of general empathy and personal distress. Consistent with our prediction, leadership/ authority had lower levels of fantasy, while grandiose exhibitionism was associated with higher levels of fantasy. The grandiose facet of narcissism also had a positive relationship with positive emotional functioning. On the contrary, leadership-oriented narcissism was related to perceived emotional competence. On the one hand, one potential explanation for these results may be that grandiose narcissists pretend to care about others in order to fulfill their need for admiring attention from others (Houlcroft et al., 2012; Jonason & Kroll, 2015). On the other hand, leadership-oriented narcissists might not fantasize about being admired by others. Instead, their low levels of distress and high levels of emotional competence facilitate their social success. These results emphasize the importance of putting more focus on the heterogeneous nature of narcissism in further research.

Although correlation analyses showed some emotional and empathy deficiencies of Machiavellian individuals, after controlling for the shared variance among the Dark Triad traits these associations disappeared, and regression revealed a single positive relationship between perspective-taking and Machiavellianism. Previous study has suggested that those high in Machiavellianism, unlike those high in psychopa-

thy, can see others' perspectives but tend to act selfishly nonetheless (Jones & Paulhus, 2011). This appears to be consistent with the results of neuroimaging studies that found elevated activity in Machiavellian individuals' inferior frontal gyrus (IFG), in the phase when they made their decisions in a social dilemma task (Bereczkei, Deak, Papp, Perlaki, & Orsi, 2013; Bereczkei et al., 2015). The IFG plays a role in cognitive processes related to perspective-taking and analyzing the intentionality of the partners' behavior (Hartwright, Hansen, & Apperly, 2016; Liakakis, Nickel, & Seitz, 2011). Furthermore, Machiavellians were found to permanently monitor their partners in a social dilemma situation and adjust their decisions to other players' actual behavior (Bereczkei & Czibor, 2014; Czibor & Bereczkei, 2012).

Contrary to Machiavellians, individuals high in secondary psychopathy appeared to be less confident in understanding others' perspectives or emotions. It is not surprising that the secondary facet of psychopathy showed an overall deficit in EI, as this construct is characterized by such negative outcomes as aggression and impulsivity (Ali et al., 2009; Jones & Paulhus, 2011). Secondary psychopaths also showed low levels of empathy with respect to perspective-taking and empathic concern, although they possessed elevated levels of personal distress. Supporting research has demonstrated that secondary psychopathic individuals have difficulties in regulating their moods and repairing negative emotions (Malterer et al., 2008). On this basis, we can argue that the limited emotional capacities of these individuals may result in hostile reactivity (Del Gaizo & Falkenbach, 2008; Poythress & Skeem, 2005). In other words, they may cause harm to others as a reaction, in response to their negative emotion.

In accordance with previous studies and our predictions, results confirmed the major importance of the primary facet of psychopathy to empathy. Analyses revealed an overall empathy deficit, that is, failures in both cognitive and affective dimensions. It is possible that the lack of empathy facilitates the harmful behavior of primary psychopaths because responding emotionally to the victims would inhibit their successful exploitation (Ali et al., 2009; Jonason & Krause, 2013). Further, our results revealed that those high in primary psychopathy did not exhibit personal distress, as did those high in secondary psychopathy, which is consistent with the idea that primary psychopaths do not experience negative emotions. Research has also demonstrated that primary psychopathic individuals not only failed to show distress, but, unlike secondary psychopaths, they also responded with positive affect to pictures of sad faces (Ali et al., 2009). In short, evidence supports that primary and secondary traits are uniquely related to emotionality.

In our analysis, we failed to find a link between Machiavellianism and the positive/neutral dimensions—positive emotional functioning/perceived emotional competence—of trait EI. The present study extended previous work of O'Connor and Athota (2013) by utilizing their two-factor model, employing the measure to all dark personalities. Although Machiavellianism was unrelated, primary psychopathy showed a deficit in the positive component but not in the neutral component, indicating that primary psychopathic individuals did not have major difficulties in emotion recognition (Ali et al., 2009; Del Gaizo & Falkenbach, 2008). In contrast, secondary psychopathy affected both

components of trait EI negatively, whereas narcissism was affected positively. These findings clearly demonstrate different patterns between the emotionally confused secondary psychopaths and the emotionally (over)confident narcissists. Taken together, the current research provides support for the theory that the various Dark Triad traits manage their interpersonal relations in different socially aversive ways.

We should note the limitations of our study regarding the use of a small, majority female, undergraduate sample. Further, we applied self-report measures that relate to the self-reported frequency of perceived emotional capabilities and willingness to empathize with others or to see situations from others' perspectives, but cannot reveal the actual abilities. We were only able to cover two dimensions of the NPI because of the poor psychometric properties of the third dimension.

Future studies should examine how individuals high in Dark Triad traits differ in their exploitative behavior. Examination of EI in realistic contexts would be necessary to better understand how and in which situations EI and emotional manipulation is deployed. Thus, future research should include tests that provide a measure of performance-based EI or empathy by applying various types of visual stimuli, short videos, silent films, or sound recordings (e.g., Banziger, Grandjean, & Scherer, 2009; Schlegel, Grandjean, & Scherer, 2014). It is also important to examine the relationships between the different traits and subfacets of Dark Triad and ability EI. Also, the role of gender in emotional competences of dark personalities should be further explored.

In conclusion, we have demonstrated that unique emotional shortages of dark personality traits are, even on the facet level, distinguishable. The different ways of how primary and secondary psychopathic individuals or grandiose and leadership-oriented narcissists experience emotions may underlie the various manipulative strategies of the Dark Triad traits.

ACKNOWLEDGMENTS

This work was supported by Grant OTKA (K 112673, 125437) from the Hungarian Scientific Research Fund.

REFERENCES

- Ackerman, R. A., Witt, E. A., Donnellan, M. B., Trzesniewski, K. H., Rogins, R. W., & Kashy, D. A. (2011). What does the Narcissistic Personality Inventory really measure? *Assessment*, *18*, 67–87. doi: 10.1177/1073191110382845
- Ali, F., Amorim, I. S., & Chamorro-Premuzic, T. (2009). Empathy deficits and trait emotional intelligence in psychopathy and Machiavellianism. *Personality and Individual Differences, 47*, 758–762. doi: 10.1016/j.paid.2009.06.016
- Ali, F., & Chamorro-Premuzic, T. (2010). Investigating theory of mind deficits in nonclinical psychopathy and Machiavellianism. *Personality and Individual Differences, 49,* 169–174. doi: 10.1016/j.paid.2010.03.027
- Austin, E. J., Farrelly, D., Black, C., & Moore, H. (2007). Emotional intelligence, Machiavellianism and emotional manipulation: Does El have a dark side? *Personality and Individual Differences*, 43, 179–189. doi: 10.1016/j.paid.2006.11.019

- Austin, E. J., Saklofske, D. H., Smith, M., & Tohver, G. (2014).

 Associations of the managing the emotions of others (MEOS) scale with personality, the Dark Triad and trait El.

 Personality and Individual Differences, 65, 8–13. doi: 10.1016/j. paid.2014.01.060
- Bandi, S. (2014). *Nárcizmus: Struktúra és kötődés* [Narcissism: Structure and attachment] (Master's thesis). Retrieved from https://www.researchgate.net/profile/Szabolcs_Bandi/publication/311486286_NARCIZMUS_STRUKTURA_ES_KOTODES_Narcissism_Structure_and_Attachment doi: 10.13140/RG.2.2.32388.32647
- Banziger, T., Grandjean, D., & Scherer, K. R. (2009). Emotion recognition from expressions in face, voice, and body: The Multimodal Emotion Recognition Test (MERT). *Emotion*, *9*, 691–704. doi: 10.1037/a0017088
- Bereczkei, T. (2015). The manipulative skill: Cognitive devices and their neural correlates underlying Machiavellian decision-making. *Brain and Cognition*, *99*, 24–31. doi: 10.1016/j. bandc.2015.06.007
- 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. doi: 10.1016/j.paid.2014.02.035
- Bereczkei, T., Deak, A., Papp, P., Perlaki, G., & Orsi, G. (2013). Neural correlates of Machiavellian strategies in a social dilemma task. *Brain and Cognition*, *82*, 108–116. doi: 10.1016/j. bandc.2013.02.012
- Bereczkei, T., Papp, P., Kincses, P., Bodrogi, B., Perlaki, G., Orsi, G., & Deak, A. (2015). The neural bases of the Machiavellians' decision making in fair and unfair situations. *Brain and Cognition*, *98*, 53–64. doi: 10.1016/j.bandc.2015.05.006
- Christie, R., & Geis, F. L. (1970). *Studies in Machiavellanism*. New York, NY: Academic Press.
- Czibor, A., & Bereczkei, T. (2012). Machiavellian people's success results from monitoring their partners. *Personality and Individual Differences*, *53*, 202–206. doi: 10.1016/j.paid.2012.03.005
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology*, *10*, 85.
- Davis, S. K., & Nichols, R. (2016). Does emotional intelligence have a "dark" side? A review of the literature. *Frontiers in Psychology,* 7:1316. doi: 10.3389/fpsyg.2016.01316
- Del Gaizo, A. L., & Falkenbach, D. M. (2008). Primary and secondary psychopathic-traits and their relationship to perception and experience of emotion. *Personality and Individual Differences*, 45, 206–212. doi: 10.1016/j.paid.2008.03.019
- Delic, L., Novak, P., Kovacic, J., & Avsec, A. (2011). Self-reported emotional and social intelligence and empathy as distinctive predictors of narcissism. *Psychological Topics*, 20, 477–488.
- Furnham, A., Richards, S. C., & Paulhus, D. L. (2013). The Dark Triad of personality: A 10 year review. *Social and Personality Psychology Compass*, 7, 199–216. doi: 10.1111/spc3.12018

- Grieve, R., & Mahar, D. P. (2010). The emotional manipulationpsychopathy nexus: Relationships with emotional intelligence, alexithymia, and ethical position. *Personality and Individual Differences*, 48, 945–950. doi: 10.1016/j.paid.2010.02.028
- Hartwright, C. E., Hansen, P. C., & Apperly, I. A. (2016). Current knowledge on the role of the Inferior frontal gyrus in theory of mind—A response to Schurz and Tholen (2016). *Cortex, 85*, 133–136. doi: 10.1016/j.cortex.2016.10.005
- Houlcroft, L., Bore, M., & Munro, D. (2012). Three faces of narcissism. *Personality and Individual Differences, 53*, 274–278. doi: 10.1016/j.paid.2012.03.036
- Jakobwitz, S., & Egan, V. (2006). The Dark Triad and normal personality traits. *Personality and Individual Differences, 40,* 331–339. doi: 10.1016/j.paid.2005.07.006
- Jauk, E., Freudenthaler, H. H., & Neubauer, A. C. (2016). The Dark Triad and trait vs. ability emotional intelligence: Emotional darkness differs between women and men. *Journal of Individual Differences*, *37*, 112–118. doi: 10.1027/1614-0001/a000195.
- Jonason, P. K., & Krause, L. (2013). The emotional deficits associated with the Dark Triad traits: Cognitive empathy, affective empathy, and alexithymia. *Personality and Individual Differences*, *55*, 532–537. doi: 10.1016/j.paid.2013.04.027
- Jonason, P. K., & Kroll, C. H. (2015). A multidimensional view of the relationship between empathy and the Dark Triad. *Journal of Individual Differences*, *36*, 150–156. doi: 10.1027/1614-0001/a000166
- Jonason, P. K., Li, N. P., Webster, G. W., & Schmitt, D. P. (2009). The Dark Triad: Facilitating short-term mating in men. *European Journal of Personality*, 23, 5–18. doi: 10.1002/per.698
- Jonason, P. K., Lyons, M., Bethell, E., & Ross, R. (2013). Different routes to limited empathy in the sexes: Examining the links between the Dark Triad and empathy. *Personality and Individual Differences*, *57*, 572–576. doi: 10.1016/j.paid.2012.11.009
- Jones, D. N., & Figueredo, A. J. (2013). The core of darkness: Uncovering the heart of the Dark Triad. *European Journal of Personality*, *27*, 521–531. doi: 10.1002/per.1893
- Jones, D. N., & Paulhus, D. L. (2011). Differentiating the Dark Triad within the interpersonal circumplex. In L. M. Horowitz & S. Strack (Eds.), Handbook of interpersonal psychology: Theory, research, assessment, and therapeutic interventions (pp. 249–267). New York, NY: Wiley.
- Kelemen, G. (2010). A narcizmus leltárai [The facets of narcissism]. Orvoslás és Társadalom, 20, 872–876.
- Kokonyei, G. (2004). Pszichopátia és kriminalitás [Psychopathy and criminality]. *Belügyi Szemle*, *6*, 164–177.
- Kulcsar, Z. (2002). Egészségpszichológia [Health psychology].Budapest, Hungary: ELTE Eötvös.
- Levenson, M. R., Kiehl, K. A., & Fitzpatrick, C. M. (1995). Assessing psychopathic attributes in a noninstitutionalized population. *Journal of Personality and Social Psychology, 68*, 151–158. doi: 10.1037/0022-3514.68.1.151

- Liakakis, G., Nickel, J., & Seitz, R. J. (2011). Diversity of the inferior frontal gyrus—A meta-analysis of neuroimaging studies. *Behavioral Brain Research*, *225*, 341–347. doi: 10.1016/j. bbr.2011.06.022
- Malterer, M. B., Glass, S. J., & Newman, J. P. (2008). Psychopathy and trait emotional intelligence. *Personality and Individual Differences*, 44, 735–745. doi: 10.1016/j.paid.2007.10.007
- Nagler, U. K. J., Reiter, K. J., Furtner, M. R., & Rauthmann, J. F. (2014). Is there a "dark intelligence"? Emotional intelligence is used by dark personalities to emotionally manipulate others. Personality and Individual Differences, 65, 47–52. doi: 10.1016/j. paid.2014.01.025
- Nagy, H. (2010). A képesség-alapú érzelmi intelligencia modell érvényességének empirikus elemzése [An empirical analysis of the validity of the ability-based model of emotional intelligence] (Doctoral dissertation). Retrieved from http://pszichologia.phd.elte.hu/vedesek/2010/Nagyhenriett.pdf
- O'Connor, P. J., & Athota, V. S. (2013). The intervening role of Agreeableness in the relationship between Trait Emotional Intelligence and Machiavellianism: Reassessing the potential dark side of El. *Personality and Individual Differences*, 7, 750–754. doi: 10.1016/j.paid.2013.06.006
- Paal, T., & Bereczkei, T. (2007). Adult theory of mind, cooperation, Machiavellianism: The effect of mindreading on social relations. *Personality and Individual Differences, 43*, 541–551. doi: 10.1016/j.paid.2006.12.021
- 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). San Diego, CA: Academic Press. doi: 10.1016/B978-0-12-386915-9.00020-6
- Paulhus, D. L., & Williams, K. M. (2002). The Dark Triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality, 36*, 556–563. doi: 10.1016/S0092-6566(02)00505-6
- Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British Journal of Psychology*, *98*, 273–289. doi: 10.1348/000712606X120618
- Petrides, K. V., Vernon, P. A., Schermer, J., & Veselka, L. (2011). Trait emotional intelligence and the dark triad traits of personality. *Twin Research and Human Genetics, 14,* 35–41. doi: 10.1375/twin.14.1.35
- Poythress, N. G., & Skeem, J. L. (2005). Disaggregating psychopathy: Where and how to look for subtypes. In C. J. Patrick (Ed.), *Handbook of psychopathy* (pp. 172–192). New York, NY: Guilford Press.
- Raskin, R. N., & Hall, C. S. (1979). A Narcissistic Personality Inventory. *Psychological Reports, 45*, 590. doi: 10.2466/ pr0.1979.45.2.590
- Raskin, R., & Terry, H. (1988). A principal-components analysis of the narcissistic personality inventory and further evidence of its

- construct validity. *Journal of Personality and Social Psychology, 54*, 890–902. doi: 10.1037/0022-3514.54.5.890
- Schlegel, K., Grandjean, D., & Scherer, K. R. (2014). Introducing the Geneva Emotion Recognition Test: An example of Rasch-based test development. *Psychological Assessment*, *26*, 666–672. doi: 10.1037/a0035246
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, *25*, 167–177. doi: 10.1016/S0191-8869(98)00001-4
- Szijjarto, L., & Bereczkei, T. (2015). The Machiavellians' "cool syndrome": They experience intensive feelings but have difficulties in expressing their emotions. *Current Psychology, 34*, 363–375. doi: 10.1007/s12144-014-9262-1
- Veselka, L., Schermer, J. A., & Vernon, P. A. (2012). The Dark Triad and an expanded framework of personality. *Personality and Individual Differences*, *53*, 417–425. doi: 10.1016/j. paid.2012.01.002

- Vonk, J., Zeigler-Hill, V., Mayhew, P., & Mercer, S. (2013). Mirror, mirror on the wall, which form of narcissist knows self and others best of all? *Personality and Individual Differences*, 54, 396–401. doi: 10.1016/j.paid.2012.10.010
- Wai, M., & Tiliopoulos, N. (2012). The affective and cognitive empathic nature of the Dark Triad of personality. *Personality and Individual Differences*, *52*, 794–799. doi: 10.1016/j. paid.2012.01.008
- Zeigler-Hill, V., Clark, C. B., & Pickard, J. D. (2008). Narcissistic subtypes and contingent self-esteem: Do all narcissists base their self-esteem on the same domains? *Journal of Personality, 76,* 753–774. doi: 10.1111/j.1467-6494.2008.00503.x
- Zhang, W., Zou, H., Wang, M., & Finy, M. S. (2015). The role of the Dark Triad traits and two constructs of emotional intelligence on loneliness in adolescents. *Personality and Individual Differences*, 75, 74–79. doi: 10.1016/j.paid.2014.10.025

RECEIVED 25.01.2017 | ACCEPTED 23.09.2017