



## The Dark Triad and the quality of sexual life

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### ARTICLE INFO

#### Keywords:

Dark Triad  
Machiavellianism  
Narcissism  
Psychopathy  
Sexual functioning  
Sexual satisfaction

### ABSTRACT

This study investigated sexual functioning with respect to differences in the Dark Triad traits in a large community sample ( $N = 1116$ ). The participants completed an online survey examining dark traits (Machiavellianism, narcissism, and psychopathy domains: boldness, meanness and disinhibition) and measures of sexual functioning. The Dark Triad traits were positively associated with sexual preoccupation in both sexes. Compared to the participants lower in dark traits, those with higher narcissism and boldness reported higher sexual motivation, sexual self-esteem and sexual assertiveness and lower negative emotions in the sexual context, which can be interpreted as higher quality of their sexual experience. In turn, those higher in Machiavellianism and disinhibition reported higher sexual fear and anxiety; women additionally showed lower sexual self-esteem and/or sexual assertiveness. Boldness was the only dark trait positively related to sexual satisfaction, especially in men.

### 1. Introduction

The Dark Triad (DT; Paulhus & Williams, 2002) describes three distinct but interrelated personality traits: Machiavellianism (characterized by manipulateness and selfishness), narcissism (superiority, vanity and entitlement) and psychopathy (impulsiveness, callousness and interpersonal antagonism) associated with many types of negative psychosocial outcomes. From an evolutionary perspective, the DT may be treated as personality background for a socially aversive, exploitative and aggressive interpersonal strategy, which enables achieving personal goals at the expense of others. This strategy is considered to be evolutionary adaptive, it persists (though it is socially undesirable) because it brings some evolutionary benefits (Jonason, Li, Webster, & Schmitt, 2009). However, this strategy also generates some important costs for individuals who use it (Jonason, Li, & Buss, 2010; Jonason, Li, & Czarna, 2013). In this study we explore these costs and benefits in the sphere of sexuality and in relation to particular DT personality traits.

Within an evolutionary approach, life history (LH) theory constitutes valuable analytical framework to investigate the DT (Jonason, Zeigler-Hill, & Hashmani, 2018). According to this theory, the DT can predispose an individual to “fast” LH strategy, which manifests itself, among others, in short-term mating orientation (Jonason, Luevano, & Adams, 2012; Koladich & Atkinson, 2016). In turn, “slow” LH strategy, associated with long-term mating orientation, seems to be less attractive to individuals with higher levels of the DT, as they are

characterized by low empathy, emotional deficits, manipulateness and egocentrism.

Many studies have investigated the associations between the DT and “fast” LH strategy, including short-term mating orientation. The DT positively correlated with mate seeking, preferring short-term relationships, avoiding entangling commitments (Jonason et al., 2012; Jonason & Buss, 2012), the number of lifetime sexual partners (Jonason et al., 2009) and negatively correlated with the quality of romantic relationships (Jonason et al., 2013). Associations with LH speed may be different for particular DT traits but, as a rule, these relationships are the strongest for psychopathy.

Individuals with the DT traits use various tactics of influence to achieve goals, including exploitative and aggressive sexual strategies. Despite their negative moral perception, negative social assessment and the attempts to eliminate them, they still persist, irrespective of cultural conditions (Schmitt, Alcalay, Allik, et al., 2017), because they can lead to maximizing fitness by increasing the number of sexual contacts. So far, research on sexuality and the DT has focused on such topics as infidelity, sexual aggression, coaxing or coercion (e.g. Jones & Olderbak, 2014; Jones & Weiser, 2014). Little attention has been paid to the characteristics of sexuality of individuals with the DT that are related to the quality of their sexual experience. The strategy attributed to them, developed in the course of evolution to improve fitness by maximizing the number of sexual partners, seems congruent with their predispositions (such as egocentricity, emotional coldness, impulsivity or lack of empathy), which might positively contribute to their sexual

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<https://doi.org/10.1016/j.paid.2019.05.041>

Received 1 December 2018; Received in revised form 5 April 2019; Accepted 24 May 2019

Available online 04 June 2019

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comfort or satisfaction. However, potential problems (e.g. difficulties with finding partners for casual sex and the problem of mate retention; Jonason et al., 2010) can be a source of negative emotions and lead to frustration of sexual needs.

The aim of the current study is to investigate the associations between the DT traits and features of sexual functioning (components of sexual self-concept and generalized sexual satisfaction) to assess the specificity of sexual experience of dark personalities. Based on these assessments we will try to evaluate the quality of sexual life and possible personal benefits and costs incurred by individuals with dark personalities in the sphere of sexual life, which can be related to their preferred mating strategy. Because the study has an exploratory character, no prior hypotheses were formulated.

The triarchic model of psychopathy (Drislane, Patrick, & Arsal, 2014; Patrick, Fowles, & Krueger, 2009) was used in the current study. This model includes three interrelated but distinct phenotypic constructs: boldness, meanness and disinhibition. Boldness is associated with emotional resilience, interpersonal effectiveness, low anxiety, and reflects a relatively adaptive feature of psychopathy. Disinhibition is connected with impulsiveness, negative emotionality, impaired affect regulation, hostility and aggression. Meanness is defined by callousness, low empathy, excitement seeking, exploitativeness and inability to maintain close relationships. The triarchic model includes both adaptive and maladaptive aspects of psychopathy, which is important when sub-clinical groups are investigated.

## 2. Method

### 2.1. Participants and procedure

1292 participants (809 women, 63.1%) from the general population volunteered in an online survey. The sample was ethnically and culturally homogenous (Polish Caucasians; age range 18–71,  $M = 24.3$ ,  $SD = 5.8$ ). The link to the survey was distributed via Facebook groups and online forums. Respondents were informed that participation was anonymous and without compensation. They were asked to give their consent, provided their personal demographic data and answers to additional questions related to sexual orientation, involvement in a relationship, sexual initiation, age of the first sexual intercourse, the number of life sexual partners and having sex with the current partner. Afterwards, they completed the measures of Machiavellianism, narcissism, psychopathy and sexual functioning (some of them were not used in the current analyses). In the analysis we excluded the data of individuals who defined themselves as homosexual ( $n = 30$ ) and asexual ( $n = 10$ ) due to the possible specificity related to their sexual functioning. Individuals who declared that they had not had sexual intercourse ( $n = 136$ ) were also excluded from the analysis. Finally, the sample consisted of 1116 individuals (733 women, 66%), which constituted 86.3% of the initial group. In this final sample, the mean number of life sexual partners was 6.2 for men ( $SD = 15.7$ ) and 4.6 for women ( $SD = 6.5$ ). The mean reported age of the first sexual intercourse was 18.1 for men ( $SD = 2.4$ ) and 18.0 for women ( $SD = 2.4$ ), which is similar to the data previously reported by other groups from Poland (Díaz-Morales, Jankowski, Prokop, et al., 2018; Tomaszewska & Krahé, 2018). The majority of men (79%) and women (84%) declared that they were currently involved in a dating relationship and almost all of them (men 91%, women 97%) declared that this relationship included sexual intercourse.

### 2.2. Measures

#### 2.2.1. Dark Triad measures

The Polish version of the Mach IV (20 items) was used to measure Machiavellianism (1 “fully disagree”, 7 “fully agree”; Pilch, 2008). The items were averaged ( $\alpha = 0.79$ ). The Polish adaptation of the Narcissistic Personality Inventory (34 items) was used to measure narcissism

(1 “it’s not me”, 5 “it’s me”; Bazińska & Drat-Ruszczak, 2000). The items were averaged ( $\alpha = 0.87$ ). A shortened Polish adaptation (TriPM-41) of the Triarchic Psychopathy Measure (Patrick, 2010) was used to assess psychopathy (41 items; 0 “false”, 3 “true”; Pilch, Sanecka, Hyla, & Atlas, 2015). The items were averaged across three sub-scales (boldness, 15 items,  $\alpha = 0.83$ ; meanness, 10 items,  $\alpha = 0.84$ ; disinhibition, 16 items,  $\alpha = 0.80$ ; overall psychopathy  $\alpha = 0.82$ ).

#### 2.2.2. Sexual functioning

Sexual self-concept (SSC) was measured using six subscales from the Multidimensional Sexual Self-Concept Questionnaire (Snell, 2001). The MSSCQ measures 20 aspects of the SSC, regarding its cognitive, motivational and affective features. Each scale consists of 5 items with the answers on a 5-point Likert scale (0 “not at all characteristic of me”, 4 “very characteristic of me”). The results on each subscale were averaged to create indexes. Sexual-Preoccupation ( $\alpha = 0.90$ ) measures “the tendency to obsess and to think about sex to an excessive degree”, Sexual-Motivation ( $\alpha = 0.85$ ) regards “the motivation and desire to be involved in a sexual relationship”, Sexual-Anxiety ( $\alpha = 0.86$ ) measures “the tendency to feel tension, discomfort, and anxiety about the sexual aspects of one’s life”, whereas Sexual-Fear ( $\alpha = 0.91$ ) assesses “a fear of and apprehension about engaging in sexual relations with another individual”. Sexual-Self-Esteem ( $\alpha = 0.88$ ) measures “a generalized tendency to positively evaluate one’s own capacity to engage in healthy sexual behaviors and to experience one’s sexuality in a satisfying and enjoyable way” and Sexual-Assertiveness ( $\alpha = 0.86$ ) estimates “the tendency to be highly decisive, self-reliant, and assertive about the sexual aspects of one’s life” (Snell, 2001). Low scores on Sexual-Fear and Sexual-Anxiety scales and high scores on Sexual-Self-Esteem and Sexual-Assertiveness scales indicate better sexual functioning. Sexual-Preoccupation and Sexual-Motivation indicate interest in sexual activity. Overall satisfaction from sexual aspects of one’s life was measured with the use of one item (“Are you satisfied with your sexual life?”) with the answers on a 10-point scale (1 “not at all”, 10 “completely”).

## 3. Results

Means, standard deviations, and comparisons between females’ and males’ scores are presented in Table 1A in the Appendix. In view of an unequal number of men and women the Hedge’s  $g$  was used to compute effect sizes. Significant sex differences were found on the DT dimensions: Machiavellianism (Hedge’s  $g = 0.34$ ), boldness ( $g = 0.43$ ), and meanness ( $g = 0.6$ ) with scores higher for men than for women, which is consistent with the majority of past studies (e.g. Jonason et al., 2009, but see also Carter, Campbell, & Muncer, 2014). Regarding SSC dimensions, men reported higher Sexual-Preoccupation ( $g = 0.49$ ), Sexual-Fear ( $g = 0.2$ ) and more lifetime sexual partners ( $g = 0.16$ ) than women. In turn, women showed higher Sexual-Satisfaction than men ( $g = 0.14$ ). Correlations between all study variables are displayed in Table 2A in the Appendix.

To investigate relationships of each dark trait with SSC dimensions and sexual satisfaction, zero-order correlations were calculated, separately for women and men (see Table 1). Additionally, multiple regression coefficients (controlling for the shared variance in the DT traits) were computed (see Table 3A in the Appendix).

As stated in Table 1, Sexual-Preoccupation was positively correlated with narcissism, disinhibition and overall psychopathy in both sexes, with Machiavellianism and boldness in women and with meanness in men. Sexual-Motivation was positively related to narcissism, boldness and overall psychopathy in both sexes. Sexual-Motivation was also positively associated with disinhibition in men and negatively associated with meanness in women. In both sexes Sexual-Self-Esteem and Sexual-Assertiveness were positively associated with boldness, narcissism and overall psychopathy. These relationships were the strongest for boldness. Additionally, Sexual-Assertiveness correlated negatively

**Table 1**  
Zero-order correlations for the relationships between dark traits and sexuality-related variables.

	Machiavellianism		Narcissism		Disinhibition		Boldness		Meanness		Psychopathy	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Sexual-preoccupation	0.12*	0.07	0.27**	0.13*	0.18**	0.20**	0.11*	0.02	0.01	0.10*	0.17**	0.18**
Sexual-motivation	0.03	0.05	0.27**	0.21**	−0.01	0.12*	0.21**	0.15*	−0.11*	−0.04	0.08*	0.14*
Sexual-self-esteem	−0.07*	−0.06	0.36**	0.32**	−0.05	−0.07	0.45**	0.51**	−0.04	0.05	0.23**	0.28**
Sexual-assertiveness	−0.11*	−0.07	0.27**	0.23**	−0.1*	−0.04	0.36**	0.45**	−0.07	0.05	0.13**	0.26**
Sexual-anxiety	0.13**	0.11*	−0.24**	−0.11*	0.14**	0.14*	−0.38**	−0.41**	0.04	−0.09	−0.14**	−0.19**
Sexual-fear	0.16**	0.15*	−0.09*	−0.06	0.2**	0.18**	−0.24**	−0.36**	0.01	−0.01	−0.03	−0.1*
Number of partners	0.12*	0.09	0.13*	0.15*	0.26**	0.18*	0.2**	0.17*	0.06	0.03	0.29**	0.22**
Sexual-satisfaction	−0.16**	−0.13*	0.06	0.08	−0.16*	−0.06	0.11*	0.24*	−0.07	0.02	−0.05	0.11*

\*  $p < .05$ .

\*\*  $p < .001$  (two-tailed).

with Machiavellianism and disinhibition whereas Sexual-Self-Esteem correlated negatively with Machiavellianism, but only in women. Sexual-Fear and Sexual-Anxiety were associated with Machiavellianism and disinhibition and inversely associated with boldness. Minor sex differences in the patterns of correlations were observed only in the case of narcissism, which generally correlated negatively with experiencing negative sexual emotions, but the relationship between Sexual-Fear and narcissism was significant only in women. Overall psychopathy correlated negatively with Sexual-Anxiety in both sexes and with Sexual-Fear in men. Sexual-Satisfaction was positively correlated with boldness and negatively with Machiavellianism in both sexes. Weak correlations between Sexual-Satisfaction and disinhibition (negative, only in women) and overall psychopathy (positive, only in men) were also observed. The test of difference between two independent correlation coefficients revealed sex differences ( $z = 2.04$ ,  $p < .05$ ): the relationship between Sexual-Satisfaction and boldness was significantly stronger in men ( $r = 0.24$ ) than in women ( $r = 0.11$ ).

After controlling for the shared variance in the DT traits, the unique relationships between each trait and SSC (for both sexes; Table 3A) were as follows: Narcissism was positively linked to motivational and cognitive dimensions of SSC. Disinhibition was positively associated with motivational and emotional dimensions. Boldness predicted cognitive (positively) and emotional (negatively) dimensions of SSC and was positively related to Sexual-Satisfaction. Machiavellianism was positively associated with emotional dimensions and negatively with Sexual-Satisfaction, whereas meanness predicted (negatively) Sexual-Motivation.

#### 4. Discussion

In the current study, we attempted to investigate how each of the DT traits was linked to the dimensions of SSC and sexual satisfaction. Firstly, motivational dimensions of SSC (i.e. Sexual-Preoccupation and Sexual-Motivation) were analyzed. Sexual-Preoccupation, which is defined as a persistent and obsessive tendency to think about sex to an excessive degree, was positively associated with all the DT traits, but especially with narcissism and disinhibition. Being preoccupied with sexual matters may be treated as problematic as it was found to be associated with externalized dysfunction and many other psychopathological symptoms (Lee & Forbey, 2010), however, it can be also associated with an increased number of sexual partners (Snell, 2001). Thus, the relationships between the DT traits and being preoccupied with sex are congruent with the belief that the DT can facilitate short-term mating orientation (Jonason et al., 2009). In turn, Sexual-Motivation, which characterizes one's need or desire for sexual interaction, regardless of the nature of this relationship (short- or long-term), was positively associated with the majority of dark traits. Interestingly, meanness was negatively related to Sexual-Motivation, but only in women. This may suggest that in women meanness (which is characterized by cold-heartedness and lack of close attachment to others;

Patrick et al., 2009) can even lower their interests in having sex, which can limit their sexual activity. Considered together, the above findings are consistent with other studies which showed positive associations between the DT and sexual motivation in both sexes (Carter et al., 2014; Kastner & Sellbom, 2012; Lee, Ashton, et al., 2013).

Secondly, cognitive dimensions of SSC (i.e. Sexual-Self-Esteem and Sexual-Assertiveness), on which participants expressed their opinions reflecting sexual self-confidence, were investigated. Men and women higher in boldness and narcissism declared higher sexual self-confidence and no fear of telling their sexual partners what they want from them, which can indicate better sexual functioning (Snell, 2001). Narcissism and boldness share similar features, such as high self-esteem, extraversion, positive emotionality, and a dominant interpersonal style (Krizan & Herlache, 2018) and these features are consistent with our findings. In turn, Machiavellian and disinhibited women, but not men, described themselves as less sexually self-confident and less assertive, which may result in unpleasant feelings of disappointment and a sense of vulnerability. These sex differences are congruent with Czibor, Szabo, Jones, and Bereczkei (2017), who found differences in male and female Machiavellianism with regard to self-confidence and vulnerability. In contrast, meanness was the only dark trait which was related neither to Sexual-Self-Esteem nor to Sexual-Assertiveness.

Thirdly, we analyzed emotional aspects of SSC (i.e. Sexual-Anxiety and Sexual-Fear), which reflect how often participants experience negative emotions related to sexual activity. According to the above findings, a spectrum of negative emotions (such as fear, anxiety, nervousness, sense of insecurity), which can accompany sexual activity, may be more characteristic of persons higher in Machiavellianism and disinhibition. It can be interpreted as lower quality of their sexual experience (Snell, 2001). This result is consistent with other studies which found positive relationships between Machiavellianism and both perceived stress (Richardson & Boag, 2016) and a tendency to evaluate situations as potentially harmful (Birkás, Pátkai, & Csathó, 2018). On the other hand, narcissists and bold individuals may experience less unwanted, negative feelings in the sexual domain.

Finally, associations between generalized sexual satisfaction and the DT were investigated. Individuals higher in boldness tended to report higher sexual satisfaction than those lower in boldness. Thus, boldness (fearless dominance) was the only dark trait which can contribute to higher levels of sexual satisfaction in both sexes. The relationships between the remaining dark traits and sexual satisfaction were non-existent (for narcissism and meanness) or negative (for Machiavellianism and disinhibition). The differences between men and women in the pattern of correlations were also observed – disinhibition was associated with a decrease in sexual satisfaction only in women.

Summarizing, in the current study the DT traits showed similar relationships with motivational dimensions of SSC, which corroborates the notion that for dark personalities sexuality is an important aspect of functioning (Lee et al., 2013). All dark personalities seem to share a tendency to concentrate excessively on the sexual sphere of their lives.

However, the relationships between the DT traits and cognitive and emotional dimensions of SSC were more diverse and allowed distinguishing two groups of traits.

The first group contained narcissism and boldness – a relatively “adaptive” dimension of triarchic psychopathy, which is connected with fearless temperament (Patrick et al., 2009). Both narcissistic and bold individuals described themselves as sexually self-assured and assertive as well as less fearful and less prone to various negative emotions occurring in the sexual context. Thus, for these individuals sexual activity seems to be rewarding, they feel comfortable and secure in sexual situations, therefore they probably enjoy personal benefits from their sexual strategy. So far, boldness as a facet of psychopathy has rarely been included in the DT research. However, our findings are congruent with theory and previous studies indicating that boldness is associated with some desirable outcomes (Patrick et al., 2009). The current study findings also corroborate previous reports showing that (grandiose) narcissism is associated with lower vulnerability to stress (Lyons, Evans, & Helle, 2019) and higher well-being (Aghababaei & Błachnio, 2015). Moreover, boldness (fearless dominance) and the two facets of narcissism (leadership/authority and grandiose exhibitionism) were previously found to be associated with slow life strategy (McDonald, Donnellan, & Navarrete, 2012) which distinguishes them from the other dark traits. The second group of dark traits contained Machiavellianism and disinhibition. Persons higher in these traits declared more sexual fear and other negative emotions and felt insecure and unconfident in the sexual domain. Given their interest in sexual activity, sexuality could be a source of stress rather than a source of satisfaction for these individuals. In other words, for them the sexual sphere of life may generate more costs compared to the first group described above. The associations between the DT traits constituting these groups and levels of sexual satisfaction are congruent with this interpretation. However, the relationship of narcissism with Sexual-Satisfaction was weak and reached significance only in the entire sample, which encourages further studies on exploring differences in sources of sexual satisfaction in narcissistic and bold individuals.

Meanness, a callous-unemotional aspect of psychopathy, was the only dark trait showing weak or no relationship with SSC dimensions and sexual satisfaction. It may be due to the fact that the average score for meanness was rather low in our community sample. Alternatively, meanness, analyzed in isolation from the impulsive and bold aspects of psychopathy, may manifest itself in the field of sexuality differently than the remaining psychopathy dimensions. In a study by LeBreton, Baysinger, Abbey, and Jacques-Tiura (2013) relationships of sexual-related variables with the callous-unemotional aspect of psychopathy were also weaker compared to the remaining psychopathy facets. On the other hand, in the current study overall psychopathy was positively associated with motivational and cognitive SSC dimensions and was negatively associated with sexual anxiety, which is in line with the idea of emotionally deficient and impulsive psychopaths who “take what they want” without getting caught up in feelings.

## 5. Conclusions and limitations

Sexual functioning of people with dark personalities was of interest in this study. Evolutionary theory and research allow treating the DT as an adaptation that predisposes individuals to short-term mating. Such a strategy is evolutionary adaptive, but also entails some costs, which can be different for particular dark traits and for sexes (Jonason, Baughman, Carter, & Parker, 2015). We found significant associations between all the DT traits and sexual functioning. The relationships with sexual preoccupation were positive for each trait and both sexes, but patterns of relationships with the other dimensions of sexual functioning were more complex. Generally, two groups of dark traits can be distinguished. The first group included narcissism and boldness, which were (in both sexes) associated with higher sexual motivation, sexual self-esteem, sexual assertiveness and lower negative emotions in the

sexual context. Thus, interest in sexual activity is accompanied in narcissistic and bold individuals by positive outcome, but only boldness was related to higher sexual satisfaction. The second group contained Machiavellianism and disinhibition, which were connected with negative outcomes, such as lower sexual self-esteem, sexual assertiveness, sexual satisfaction and higher negative sexual emotions, but to a greater extent in women than in men. Hence, Machiavellianism and disinhibition can lead to some costs that individuals have to incur in the sphere of sexuality. Meanness had almost no relation to sexuality-related variables. The lack of associations of the callous-unemotional aspect of psychopathy with sexual self-assurance, negative emotions and sexual satisfaction encourages further studies to clarify the possible factors behind this result.

The present study was carried out on the ethnically and culturally homogenous sample from Poland. The Polish culture is characterized by conformity to traditional values, high religiosity and a strong position of the Catholic Church (Greeley, 2003), which promotes traditional sex roles and sexual restrictiveness. Past research showed that personal religiosity reduces permissive sexual behaviors and attitudes (Schmitt & Fuller, 2015). Religiosity was also negatively related to the DT traits, especially psychopathy and Machiavellianism (e.g. Kämmerle, Unterrainer, Dahmen-Wassenberg, Fink, & Kapfhammer, 2014). These results suggest that the cultural specificity of the present sample could affect the results of our study. On the other hand, there is evidence from cross-cultural research that the levels of both sociosexuality and the DT for sub-samples from Poland did not tend to be lower than the average for the entire sample (Schmitt, 2005; Díaz-Morales et al., 2018).

The current study was conducted on a large sample, with the use of well-validated measures, but it has several limitations, such as the unequal number of male and female participants, cross-sectional design and the exclusive reliance on self-report measures. Our convenience sample could be subject to sample-selection bias, hence, the generalizability of findings is limited. In the present study some constructs concern internal states (such as sexual satisfaction), thus self-reports can be seen as an adequate source of information. Also the DT is traditionally measured via self-report. On the other hand, in psychological research, self-report data should be complemented by behavioral observation (Baumeister, Vohs, & Funder, 2007) and other assessment methods (such as informant ratings or life data; Paulhus & Vazire, 2007). It can be of crucial importance when narcissism is investigated because narcissists present unrealistically positive self-views, which can bias their self-reports (Dufner, Rauthmann, Czarna, & Denissen, 2013). In the domain of sexuality, valuable information may be obtained from sexual partners of individuals. Additionally, the use of dyadic approach instead of individual-level analysis would be desirable because this enables controlling for the interdependence of partners (Cook & Kenny, 2005). The other possibility is to apply methods of naturalistic observation in everyday life, such as the use of digital audio recorders (Holtzman, Vazire, & Mehl, 2010).

Overall, we showed differences between the particular DT traits in the area of sexual functioning in a large community sample, using longer measures of the DT and considering the dimensions of psychopathy. Nevertheless, further research is needed using additional data sources and a more balanced and culturally diverse sample.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.paid.2019.05.041>.

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