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Research article

The bright side of personality

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ABSTRACT

The article addresses the question, which personality dimensions mostly contribute to the positive human functioning, especially to wellbeing and prosocial values. As we predicted, the three dimensions from the Big Five factors are mostly opposed to the negative personality characteristics known as Dark Triad (narcissism, Machiavellianism and psychopathy), namely emotional stability (low neuroticism), agreeableness and conscientiousness. The results demonstrated negative relationship between these personality dimensions (labeled Bright Triad) and Dark Triad. Both Dark and Bright Triad dimensions are substantially loaded with one single bipolar latent dimension, the Dark versus Bright Personality. The results also confirmed the substantial connections of the Bright Triad dimensions to the wellbeing and the values. The Bright Triad dimensions are positively associated with general life satisfaction and traditional, social, cognitive and democratic values and tend to be negatively associated with status or power values. On the other side, Dark Triad dimensions are positively related to the status values and tend to be negatively related to the prosocial values.

1. Introduction

In past decades, the psychological research increasingly focused on the positive aspects of human behavior and experience. The emerging positive psychology can be defined as "the scientific study of positive human functioning and flourishing on multiple levels that include the biological, personal, relational, institutional, cultural, and global dimensions of life" (Seligman and Csikszentmihalyi, 2000). The proponents of positive psychology are interested in the positive life events including wellbeing (Diener, 1984; Ryff, 1989; Ryff and Keyes, 1995), happiness (Myers, 1992), wisdom (Baltes and Staudinger, 2000), optimism (Seligman, 1998), flow (Csikszentmihalyi, 1990), hope (Snyder, 2000), self-determination (Ryan et al., 1996), good life (Seligman, 2009; Simonton, 2000) and similar (see Musek, 2010, pp. 283–356; Musek, 2017, pp. 127–135; Musek and Avsec, 2002; Seligman and Csikszentmihalyi, 2000). According to Seligman (2011), the positive aspects of the life can be summarized as the pursuit of positive emotions, engagement, relationship, meaning and achievement or accomplishment (PERMA) in the life of individual person. Positive psychology stresses the importance of character strengths and virtues (Peterson and Seligman, 2004) in producing authentic happiness and good life (Seligman, 2009). Most important, all crucial aspects and components of wellbeing are substantially related to the personality (Musek, 2007, pp. 283–356; 2017, pp. 127–135).

In modern psychology, one of the most favored approach to the personality focuses on basic personality dimensions, e.g. Big Five (Costa and McCrae, 1992; Digman, 1990; Goldberg, 1990; John, 1990). On which grounds, the personality dimensions can be assessed as »positive«? Logically, the "positivity" of personality dimensions depends on properties, which are generally most approved. According to the literature, two aspects of our experience and behavior are generally assessed as most favorable: those contributing to higher wellbeing (Aghababaei and Błachnio, 2015; Egan et al., 2014), and those representing pro-social values, attitudes and behavior (Furnham et al., 2013; Jonason et al., 2012; Paulhus and Williams, 2002). The third aspect can be evidently added, namely an inverse relation to the negative personality characteristics. Thus, wellbeing, pro-social value orientation and opposite relation to negative personality traits can be conceived as major criteria for the bright side of personality.

Since the research introducing the Dark Triad (McHoskey et al., 1998; Paulhus and Williams, 2002), the dimensions of narcissism (egotism, lack of empathy, grandiosity), Machiavellianism (manipulation, lack of morality, self-interest), and psychopathy (antisocial behavior, callousness, impulsivity, remorselessness) have been repeatedly recognized as the representatives of the negative side of personality (Furnham et al., 2013). Dark Tetrad, a psychological construct with the sadism (pleasure from acts inflicting harm, pain or humiliation) added to the Dark Triad dimensions (Međedović and Petrovic, 2015) can also be mentioned here.

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Recently, the bright and the dark side of personality have been straightforwardly addressed in psychological research (Gouveia et al., 2020; Smith et al., 2018; Sobol-Kwapinska, 2016). As the positive counterpart of the Dark Triad, Kaufman, Yaden, Hyde & Tsukayama (2019) proposed the Light Triad: humanism (belief in dignity and worth of each individual), Kantianism (treating people as persons, not as objects or means) and faith in humanity (belief in the basic goodness of humans). Logically, the question arises, how both sides of personality are connected to the basic dimensions of personality.

Obviously, the Dark Triad dimensions are related to some personality dimensions, even to the high-order factors of personality, such as Big Five (Furnham et al., 2013; Jakobowitz and Egan, 2006; Veselka et al., 2012), Big Two and the General Factor of Personality (GFP) (Musek, 2017, pp. 127–159), yet, also to other psychological constructs including subjective emotional wellbeing (Aghababaei and Błachnio, 2015; Egan et al., 2014), self-esteem (Witt et al., 2011), morality and altruism (Furnham et al., 2013; Jonason et al., 2012; Paulhus and Williams, 2002).

The concepts of Dark Triad and Light Triad focused on some negative and positive traits, yet they do not subsume all negative and positive aspects of personality. They certainly cannot be conceived as the basic personality dimensions as, for example, the Big Five. Thus, a clear identification of basic personality dimensions that contribute to the bright, positive aspects of personality would be desired.

The Bright Triad dimensions are basic personality dimensions and not a mere reversal of the Dark Triad. Similarly, the Bright Triad is a much wider personality construct than Light Triad (Kaufman et al., 2019). According to authors, the average correlation between Light Triad and Bright Triad is .47 meaning that the Light Triad can explain again about 22 percent of the Bright Triad variance.

Yet, which basic personality dimensions may be conceived as the core of the bright side of personality, opposed to the Dark Triad? According to the research results, agreeableness, conscientiousness and probably also emotional stability, have substantial negative correlations with the components of Dark Triad (Paulhus and Williams, 2002; Jakobowitz and Egan, 2006; Jonason et al., 2010, 2013; Jonason and Webster, 2010; Douglas et al. 2012; Aghababaei and Błachnio, 2015). Thus, we may hypothesize that within the basic personality dimensions, agreeableness, consciousness and emotional stability constitute the core dimensions of the bright side of personality, the Bright Triad. Finally, we assume that Dark Triad and Bright Triad are connected with wellbeing and values in opposite manner: first being associated with lower wellbeing and pro-individual values and second more with higher wellbeing and prosocial values. Thus, in the study we try to identify the major dimensions of bright personality defined as combination of basic traits that unite both wellbeing aspects of personality as well as prosocial value orientation.

2. Method

2.1. Participants and procedure

The final sample consisted of 495 participants from both sexes (374 female and 121 male subjects) in the age range from 18 to 65 years (mean age = 33.8, SD = 10.54).

The administration of measuring instruments took place electronically. Participants individually fulfilled the questionnaires and scales online, according to online formed program containing the invitation, informed consent, instructions and written items. The participation was free, the data were collected anonymously, and all other participants' rights were guaranteed. Data collection has been performed in the frame of PhD studies program at Department of Psychology (University of Ljubljana, Slovenia), approved by the same institution. The approval procedure considered all professional research criteria including scientific and ethical adequacy (no special ethical research committee existed in the time of approval procedure).

2.2. Research design, variables and data analysis

The initial research model consists of 20 variables including dimensions of personality (Big Five), Dark Triad dimensions, wellbeing (satisfaction with life), and value orientations. All data analyses were performed using algorithms for statistical procedures in R program packages (Revelle, 2019; Rosseel, 2012).

2.3. Measures

2.3.1. Big Five Inventory (BFI; John, 1990; John et al., 1991)

Slovenian version of BFI (adopted by translation-retranslation procedure; Avsec and Sočan, 2006) was applied to obtain scores for the Big Five dimensions. The inventory contains 44 items that are rated on the 5-point scale ranging from not agree at all (1) to absolutely agree (5). The original version of BFI has shown good reliability and convergent as well as discriminant validity (John and Srivastava, 1999).

Example item:

I see Myself as Someone Who...

___1. Is talkative.

2.3.2. International Personality Item Pool 120 Item Version (IPIP-NEO 120)

Slovenian version of the IPIP-NEO 120 was used in the study. The version was adopted after translation-retranslation procedure (Regovec, 2015). The IPIP-NEO 120 is a shortened version of the 300-item International Personality Item Pool (IPIP-300; Goldberg, 1999). It is a public domain personality inventory with 120 items measuring the Big Five factors and their facets (six for each factor). The participants used a 5-point scale ranging from 1 (very inaccurate) to 5 (very accurate) to obtain the scores for factor dimensions and facets. Both original IPIP-300 and the IPIP-120 version have good metric characteristics (see Goldberg 1999; International Personality Item Pool, 2001).

Example item:

I am the life of the party.

2.3.3. The Satisfaction with Life Scale (SWLS; Diener, 1984)

The Slovenian version of the SWLS (adopted by translation-retranslation procedure; Avsec, 2000) has been used to assess the cognitive component of subjective wellbeing. The SWLS consists of 5-items that are rated on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly

Table 1. Loadings of factors extracted from two-factor and one-factor solution on the Big Five dimensions.

	2 factors		1 factor
Conscientiousness	.73	.10	.64
Extraversion	.34	.75	.72
Emotional Stability	.72	.32	.77
Openness	-.08	.85	.44
Agreeableness	.72	-.06	.54
Eigenvalues	2.01	1.08	
% of variance	34	28	40
Interpreted as	Stability	Plasticity	GFP

Table 2. Means, standard deviations, and correlations between variables in the research model.

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Conscientiousness	0.00	1.00																			
2. Extraversion	-0.00	1.00	.28**																		
3. Emotional stability	-0.00	1.00	.36**	.41**																	
4. Openness	-0.00	1.00	.06	.35**	.14**																
5. Agreeableness	-0.00	1.00	.26**	.13**	.33**	.08															
6. Machiavellianism	11.68	6.83	-.23**	.10*	-.27**	-.07	-.44**														
7. Psychopathy	10.74	5.85	-.22**	.00	-.14**	.03	-.46**	.47**													
8. Narcissism	17.61	8.25	-.19**	.12*	-.25**	.02	-.32**	.55**	.35**												
9. Wellbeing	22.07	6.85	.25**	.33**	.39**	.16**	.10*	-.05	-.09	-.09*											
10. Sensual values	69.71	17.31	.06	.21**	.04	-.05	.09*	.02	.05	-.02	.02										
11. Security values	79.46	17.42	.18**	.03	.02	-.16**	.14**	-.04	-.06	-.03	-.02	.71**									
12. Status values	35.29	19.83	-.01	.22**	-.13**	-.07	-.17**	.33**	.19**	.40**	-.03	.50**	.31**								
13. Patriotic values	33.47	23.86	.06	.14**	.06	-.17**	.06	.03	-.04	-.02	-.00	.40**	.33**	.47**							
14. Democratic values	70.21	21.40	.06	-.02	.00	-.01	.29**	-.15**	-.14**	-.13**	-.06	.52**	.62**	.19**	.35**						
15. Social values	81.34	17.45	.15**	.08	.04	-.14**	.20**	-.09*	-.14**	-.09*	.04	.68**	.72**	.34**	.35**	.52**					
16. Traditional values	73.55	16.67	.22**	.03	.08	-.14**	.23**	-.18**	-.17**	-.15**	.01	.58**	.65**	.28**	.34**	.60**	.71**				
17. Cultural values	56.51	21.01	.06	.12**	.09*	.31**	.09*	-.09*	.00	-.07	.06	.58**	.47**	.43**	.33**	.50**	.46**	.48**			
18. Cognitive values	73.83	19.19	.11*	.01	.09*	.12*	.12**	-.13**	-.03	-.09	.05	.49**	.50**	.27**	.25**	.54**	.53**	.54**	.58**		
19. Actualization values	72.38	16.02	.17**	.10*	.03	.05	.04	-.01	-.00	.03	.05	.64**	.59**	.50**	.33**	.46**	.60**	.66**	.61**	.55**	
20. Religious values	28.97	28.90	.03	.00	.02	-.03	.11*	-.01	-.13**	.03	.00	.10*	.14**	.20**	.33**	.17**	.20**	.13**	.21**	.21**	.14**

Note. * indicates $p < .05$; ** indicates $p < .01$. *M* and *SD* are used to represent mean and standard deviation, respectively.

agree). Metric characteristics of SWLS are good (Diener et al., 1985; Pavot and Diener, 1993).

Example item:

I am satisfied with my life.

2.3.4. Musek Value Survey (MVS; Musek, 2000)

MVS was used in order to measure the value orientations of the participants. The survey consists of 54 different values ("Honesty", for example) measuring 11 categories of value orientations. The participants rated the personal importance of each value on 1 to 10 (one to ten) rating scale continuum. All 11 value orientations were entered into our research model:

Sensual values (*joy, entertainment, exciting life, comfortable life*).
Security values (*security, safety*).
Values of reputation or social status (*social power, reputation, money*).
Patriotic values (*patriotism, national pride*).
Democratic or societal values (*equality, peace, justice*).
Social values (*love, family happiness, good partnership*).
Traditional values (*honesty, diligence*).
Cultural values (*appreciating beauty, culture, arts, nature*).
Cognitive values (*truth, wisdom, knowledge*).
Actualization values (*self-actualization, personal growth*).
Religious values (*faith in god*).

The survey has acceptable metric characteristics considering validity and reliability (Musek, 2000, pp. 10–22; Musek, 2000, 2004, 2011). The internal consistency of the entire scale is .95, for the subscales somewhat less (from .72 to .89).

2.3.5. The Dirty Dozen Scale (DDS; Jonason and Webster, 2010)

The DDS measures three dimensions of the Dark Triad: narcissism, Machiavellianism and psychopathy. It is composed of 12 items (4 items per subscale). Good validity and other psychometric characteristics have been reported (Jonason and McCain, 2012). Participants were asked how much they agreed (1 = Strongly Disagree; 7 = Strongly Agree) with the statements in every item. Three indexes were calculated: for narcissism (Cronbach Alpha = .83), Machiavellianism (Cronbach Alpha = .78), and psychopathy (Cronbach Alpha = .80) along with a composite of all 12 items (Cronbach Alpha = .82). The respective values for inner consistency in the current sample were .88, .83 and .62. Below are the examples of items for each dimension:

I tend to want others to admire me. (Narcissism).
I tend to manipulate others to get my way. (Machiavellianism).
I tend to lack remorse. (Psychopathy).

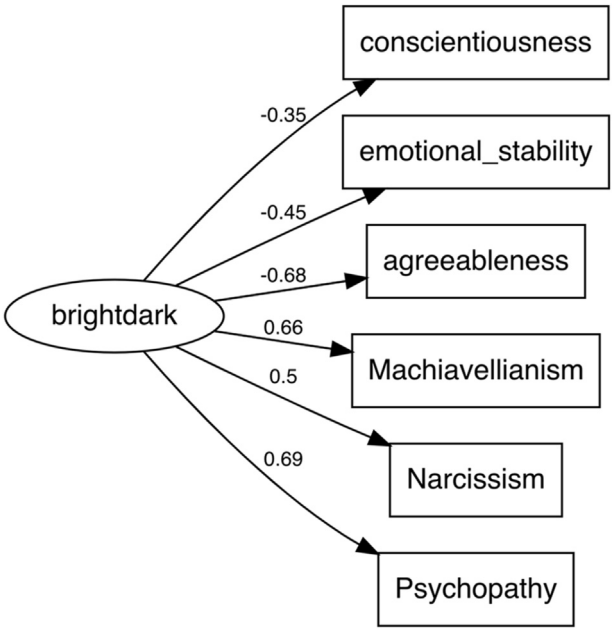


Figure 1. Confirmatory model of 6 Bright and Dark Triad variables. Confirmatory factor analysis clearly confirmed hypothesized bipolar personality dimension (bright versus dark personality) with Bright Triad and Dark Triad variables at the opposite poles.

Table 3. Regression results using wellbeing as the criterion.

	b	*SE*	*beta*	sr^2	*r*	Fit	Change in Fit
Model 1							
(Intercept)	22.07**	0.29					
Conscientiousness	0.89**	0.32	0.13	.01	.25**		
Emotional stability	2.51**	0.33	0.37	.11	.39**		
Agreeableness	-0.39	0.31	-0.06	.00	.10*		
						$R^2 = .171$	
						F (3, 450) = 30.97	
Model 2							
(Intercept)	22.09**	0.88					
Conscientiousness	0.88**	0.32	0.13	.01	.25**		
Emotional stability	2.58**	0.33	0.38	.11	.39**		
Agreeableness	-0.38	0.36	-0.05	.00	.10*		
Machiavellianism	0.10	0.06	0.10	.01	-.05		
Narcissism	-0.02	0.04	-0.02	.00	-.09*		
Psychopathy	-0.08	0.06	-0.07	.00	-.09		
						$R^2 = .178$	$\Delta R^2 = .007$
						F (6, 447) = 16.12	F (3, 447) = 1.22

Note. * indicates $p < .05$; ** indicates $p < .01$. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights; *SE* represents the standard error of the unstandardized regression weights; *beta* indicates the beta-weights or standardized regression weights; sr^2 represents the semi-partial correlation squared; *r* represents the zero-order correlation.

3. Results and discussion

The values for the personality dimensions were calculated on the basis of factor and component analyses of the BFI and IPIP-NEO 120 data. We used FA and PRINCIPAL algorithm in R package *psych* (Revelle, 2019), yet, for the sake of sparing place, only the results of component analyses were retained for final data processing. The resulting latent dimensions for the component analyses were interpreted as the representatives of the Big Five dimensions (five-factor solution), the Big Two (two-factor solution), and the General Factor of Personality or GFP (one-factor solution) (see Table 1). The main reason for the inclusion of higher-order factors of personality (Big Two and GFP) is the expectation that they will be substantially related to the tentative Bright Triad. The respective component scores were entered as final measures of the single Big Five dimensions (extraversion, agreeableness, conscientiousness, neuroticism and openness), the Big Two (stability and plasticity, see DeYoung et al., 2001) and GFP (see Musek, 2007, 2017).

Table 2 shows the correlations between the variables in the research model obtained in this study. Among the Big Five, agreeableness, consciousness and emotional stability have highest positive correlations with wellbeing and prosocial values (social, traditional, cognitive and democratic) and also highest negative correlations with the Dark Triad dimensions and pro-individual values (status). Thus, these three dimensions can be labeled the Bright Triad. It is worth of mention that the most general dimension of personality, the General Factor of Personality (GFP) strongly positively correlates with Bright Triad (.65 with conscientiousness, .77 with emotional stability and .51 with agreeableness) and also significantly negatively correlates with Dark Triad (-.26 with Macchiavellianism, -.23 with narcissism, and -.19 with psychopathy).

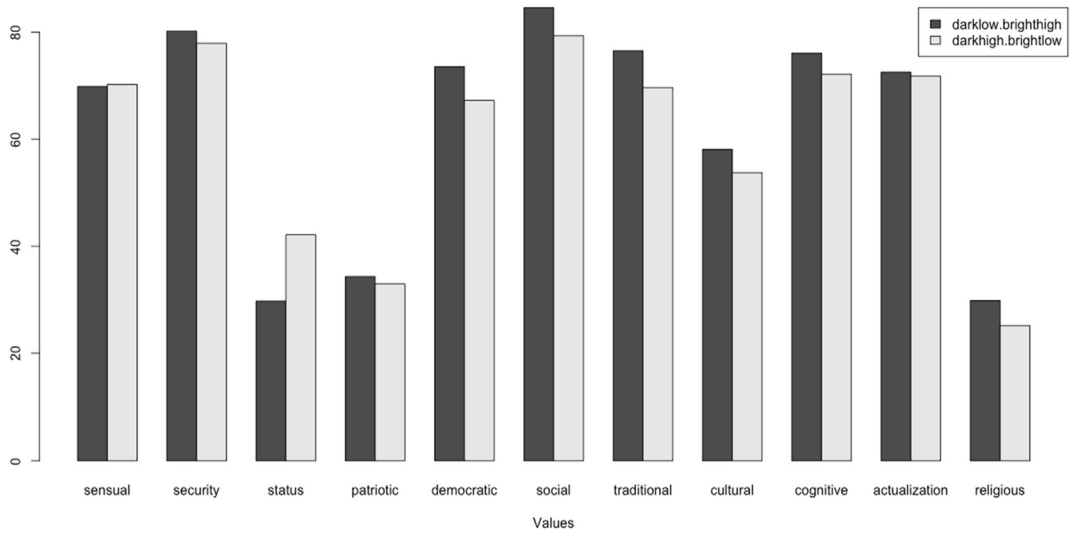


Figure 2. The means of estimated importance of 11 value orientations for the groups of Bright Triad persons (darklow.brighthigh) and Dark Triad persons (darkhigh.brightlow).

The exact amount of the shared variance between both sets of the variables, Bright Triad and Dark Triad, can be estimated by the set correlation analysis (Cohen, 1982; Cohen et al., 2003) using *setCor* algorithm in R package *psych* (Revelle, 2019). The unweighted matrix correlation between the representative variables of Bright and Dark Triad is clearly negative and quite substantial (-.47). According to these results, the percent of the shared variance between both sets is also considerable (Cohen's Set Correlation = .32). Thus, it is clear that the Bright Triad dimensions are not a mere reversal of the Dark Triad. The Dark Triad can explain only about 22 percent of the Bright Triad variance.

We can assume that both Dark Triad and Bright Triad should be substantially loaded with one single bipolar latent dimension, the Dark versus Bright Personality. According to this hypothesis, we performed a confirmatory factor analysis (cfa) in order to test the validity of one-factor solution of the 6 variables from both Bright and Dark Triad. The analysis was carried out by means of *cfa* algorithm in R package *lavaan* (Rosseel, 2012). Figure 1 shows the loadings of the variables on the extracted latent dimension that can be obviously interpreted as bright versus dark personality dimension (coded as *brightdark* in the cfa procedure). The model became very acceptable with slight modifications due to the theoretically expected social desirability influence on covariances between emotional stability and consciousness (consc and emstab in Figure 1), Machiavellianism and Narcissism (Mach and Narciss) and emotional stability and psychopathy (emstab and Psychop). The fit indices of the modified model strongly confirmed the hypothesis of unidimensional bright - dark personality construct (RMSEA = 0; SRMS = .014; GFI = 1; CFI = 1; TLI = 1).

Now to the connections with the wellbeing. We see in Table 2 that the crucial component of wellbeing (Satisfaction with life, measured by SWLS) has low but significant negative correlation with narcissism (Narciss), namely -.09, while other two Dark Triad dimensions are not significantly related to wellbeing. Obviously, the Dark Triad is not substantially related to wellbeing. This result is in concordance of previous findings in psychological research for Machiavellianism and Psychopathy (Egan et al., 2014; Regovec, 2015), yet not for Narcissism, which may be even positively associated with wellbeing (see Aghababaei and Błachnio, 2015). The connections of Bright Triad with the wellbeing are much stronger. Wellbeing is significantly related to low neuroticism or emotional stability (.39), conscientiousness (.25) and agreeableness (.10). Regression analyses demonstrated that Bright Triad dimensions predict about 18 percent of variance in wellbeing (mostly emotional stability and conscientiousness), while Dark Triad dimensions have practically no additional or incremental effect on wellbeing (see Table 3). Thus, the wellbeing is considerably related to the Bright Triad and practically unrelated to the Dark Triad. It is worth of mention that the multicollinearity between independent variables in the regression analysis is not problematic (the tolerance is much greater than 0.2 for any of the variables).

The relations of both Triads to the values or value orientations are also remarkable. The Dark Triad dimensions have significant positive correlations with status value orientation (status in Table 2) and significant negative correlations with prosocial value orientations (democratic, social and traditional values in Table 2). However, the Bright Triad dimensions (conscientiousness, agreeableness and emotional stability) show the opposite connections to the value orientations, namely positive relations to the prosocial values and negative relation to status values.

Further salient insight into the differences between Bright and Dark personality structures can be obtained by comparing the individuals with opposite inclination toward Bright and Dark Triad variables. For this purpose, we can define a new variable, which includes two group of persons: the individuals with low Dark Triad and high Bright Triad scores (darklow.brighthigh) and the individuals with high Dark Triad and low Bright Triad scores (darkhigh.brightlow). The groups of Bright Triad and Dark Triad persons significantly differ in pro-individual and prosocial value orientations. According to the Multivariate Analysis of Variance (MANOVA), both groups significantly differ in regard of their value orientations (Wilks Multivariate Test: $F = 7.65$, $p < .001$; Pillai Multivariate Test: $F = 7.65$, $p < .001$). Figure 2 displays the means of both groups for 11 value orientations. The Dark Triad individuals are essentially more than Bright Triad individuals oriented toward status values ($F = 28.01$; $p < .001$) and essentially less oriented toward traditional ($F = 12.05$; $p < .001$), social ($F = 6.75$; $p < .01$) and democratic values ($F = 6.13$; $p < .05$).

4. Conclusions

The study answers the question, which are the basic dimensions that constitute the core of the positively assessed personality. Agreeableness, conscientiousness and emotional stability, labeled Bright Triad, are in clear opposition to the Dark Triad dimensions including the aspects of wellbeing and prosocial value orientation. Yet, the Bright Triad includes significantly more information than is covered by plain opposite of the Dark Triad. The main theoretical contribution of the study is thus the identification of the major dimensions of bright personality defined as a combination of basic traits maximizing both wellbeing aspects of personality as well as prosocial value orientation. Evidently, a high predictive value of the Bright Triad for the wellbeing and prosocial attitudes is also of considerable practical importance. Thus, speaking of the bright side of personality in the future, the role of the Bright Triad is indispensable. It encompasses a spectrum of the most important aspects of a positive, bright personality, including wellbeing, prosocial morality and absence of dark personality traits. These aspects should be regarded as a core of socially approved, acceptable and effective personality. Someone high on Bright Triad, will have more chance to be accepted in his/her social environment and to be regarded as a happy, fair, stable, reliable, trustworthy and responsible person.

No prior study has explicitly tested the convergence of wellbeing and moral aspects of personality as criteria for the bright side of personality. According to the current study, the Dark Triad and Bright Triad dimensions are connected with wellbeing and values in opposite manner: first are associated with lower wellbeing and pro-individual values and second are associated with higher wellbeing and prosocial values. Note that our general assessments of personality traits are based on moral or ethical assumptions (represented by values) and socially acceptable contribution to wellbeing.

In the future, the research of relations between bright and dark sides of personality should be extended to other personality traits including those beyond the scope of the Big Five. Some personality traits are especially closely connected with values, moral and ethical standards and some other traits can be also closely connected to the aspects of wellbeing and happiness. Further clarifications are also desirable in the research, how much the judgments of positivity and negativity are connected with the personal and social effectiveness. Correlations between both Triads and GFP suggest that our commonsense assessments of personality can be generalized on the basis of overall impressions of social efficiency, the impressions that may have deep cultural and even evolutionary roots.

Declarations

Author contribution statement

Janek Musek: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Darja Kobal Grum: Analyzed and interpreted the data; Wrote the paper.

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Data availability statement

Data will be made available on request.

Declaration of interests statement

The authors declare no conflict of interest.

Additional information

No additional information is available for this paper.

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