

THE RELATIONSHIP BETWEEN SELF-ASSESSED INTELLIGENCE AND SELF-ASSESSED PERSONALITY, TOLERANCE OF UNCERTAINTY AND THE DARK TRIAD TRAITS IN MANAGERS

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Abstract

In this study we present the empirical results on the evaluation of relationships between three personality traits – subclinical narcissism, subclinical psychopathy and Machiavellianism, – collaboratively known as the Dark Triad, with tolerance of uncertainty and direct self-assessments of intelligence and personality. A group of Russian adults in managerial positions were tested: we measured levels of personality features via questionnaires and asked participants to estimate their IQ scores using a normal distribution graph, and, in a similar manner, to evaluate the location for their personality on a polar graph of “bad” and “good” in two conditions: (1) at the moment and (2) if circumstances were different. We found that the higher managers rated their intelligence, the “better” they estimated their personalities to be. Also, tolerant to uncertainty managers considered their IQ to be higher and their personalities, both at the moment and if circumstances were to change, to be “better”. Finally, managers with higher levels of narcissism and Machiavellianism rated their intelligence and personality higher, while those with lower levels of subclinical psychopathy tended to assume that their personality could be “better” under different circumstances. Cognitive and personality components of self-regulation and self-awareness may be regarded as a complex and multi-dimensional area for further research, as, among other factors, self-assessment serves as a direct and indirect association between the widely regarded positive personality features (tolerance of uncertainty) and the Dark Triad traits.

Keywords: self-assessment of intelligence; self-assessment of personality; Dark Triad; narcissism; psychopathy; Machiavellianism; tolerance of uncertainty.

Introduction

Self-evaluation, as well as the mastery of norms, values, ways of communication and standards, with its entry into the human culture, represent a level of self-awareness, as part of a

process and internal movement (Leontiev, 1975; Stolin, 1983). At the level of the individual, self-esteem serves as an adaptive representation of the correctness of an individual’s activity «trajectory» in relation to the achievement of one’s motives. The

development and transformation of self-evaluation, first by physical parameters, and later, by the moral and psychological characteristics, up to the essential and integral characteristics of oneself and others, is part of the process of learning about oneself, of self-awareness, to which internal movement is inherent. "Self-awareness, consciousness of the 'I' ... is the result, the product, of the individual's evolution as a Personality" (Leontiev, 1975, p. 158). The difference and the discrepancy between the Real Self (the way a person regards oneself at the moment) and the Ideal Self (the way a person would like to see oneself) reflect the same occurrence of crystal understanding in awareness and self-awareness of standards and reference points in regards to which the person defines oneself. The concepts of the real and ideal self relate to particular notions of oneself represented in personality traits. In the realm of motivation, these notions are analogous to the concept of achievement motivation (Stolin, 1983). Moreover, "self-awareness structures have the capacity to motivate, that is, to urge to undertake a certain activity" (Ibid., p. 46). These motivating functions of self-awareness may stem from the notions of the Ideal Self and are thus linked with moral concepts of conscience, responsibility, and sense of duty. These functions may also serve as a reflection of the discrepancy between the Real and Ideal Self. The sense of self-worth and self-respect possesses a motivating effect via creating the necessity to uphold certain activity.

Self-assessment is an important element of self-awareness, unequal and irreducible to its other components – self-image and self-attitude. Self-

assessment pertains to a high level of personal self-regulation, and is not simply the interaction of cognitive and emotionally mediated sets of information and judgments about oneself, albeit meaningful (and constructive to the self-image), but is the result of a value-oriented critical evaluation. In the process of self-evaluation "the establishment of the subject's self-worth" occurs, via the results of which the subject forms a certain attitude toward oneself (Borozdina, 2011, p. 61).

In direct self-assessment of intelligence (SAI), according to Furnham, the researcher has "direct access" to the individual representations, or awareness, of individuals regarding their cognitive abilities in the performance of intellectual tasks (Furnham, 2001; Kornilova & Novikova, 2012). The study of self-assessed intelligence is the result of the interaction of international research in the field of self-evaluations, implicit theories of intelligence and cognitive abilities (Kornilova, Chumakov, Kornilova, & Novikova, 2010). Those who are convinced of their exceptional cognitive abilities can behave self-righteously and arrogantly, and vice versa – the underestimation of one's intellectual capacities may prevent effective self-regulation and goal-setting in academic, professional and interpersonal contexts (Beyer, 1999; Furnham, 2001; Pomerantz & Ruble, 1997).

Measuring psychometric intelligence and applying the method of SAI shows that men tend to inflate their scores, and women, on the contrary, to understate theirs (Kornilova & Novikova, 2012). Research demonstrates correlations of psychometric intelligence with SAI, where the former also serves as a significant predictor of

self-assessments of intelligence (Furnham, 2001). With regard to academic performance, the psychometric intelligence is a significant predictor of achievement scores, but SAI may also explain some of the variance (Chamorro-Premuzic & Furnham, 2006).

Self-awareness may be regarded as a conflicting personal meaning that triggers the processes of self-knowledge and self-relation, where self-esteem is linked to the latter (Stolin, 1983). Alternatively, self-knowledge and self-understanding may be differentiated so that the former pertains to understanding the “what” with regards to the subject, while the latter is concerned with the “why”. With respect to SAI, self-knowledge, self-understanding and self-relation all contribute to self-evaluation in general, and to SAI in particular. Most commonly, self-evaluation is interpreted as an assessment of subjective knowledge of one’s personality. Simultaneously, self-evaluation may be viewed as part of self-awareness, based on the dialogical and constructive nature of the latter. The conceptions of oneself are founded upon a constant internal dialogue, where the subject has to somehow relate to what is learnt about oneself from others or as a result of introspection. The self-image remains unfinished and is perpetually constructed. This process of construction goes on in a situation characterized by high levels of uncertainty, as a person is rarely guided by unambiguous criteria for evaluating oneself as positive or negative. As such, self-evaluation that reflects self-relation is contingent upon on how a person is inclined to respond to uncertainty (Novikova & Kornilova, 2013)

With the variety and variability of the modern world, uncertainty is

increasingly gaining the status of the modern life context (Asmolov, 2015; Kornilova, 2010b; Kornilova, 2016). The construct of tolerance of uncertainty (TU) in literature is reflected in two terms – tolerance of ambiguity (presented as the acceptance of the complexity in understanding of equivocality, vagueness, non-obviousness, or the indistinctness of reality) and tolerance of uncertainty (understood as tolerance to doubt in the context of limited information available) (Kornilova, 2015). In recent studies uncertainty is understood as a broader construct within which ambiguity, risk, expected value, variance and asymmetry of the rewards are explored (Burke & Tobler, 2011). The complexity of distinction between uncertainty and ambiguity is partially dictated by two dichotomies in knowledge constructs: subjective-objective knowledge (referring to limitation of knowledge due to time constraints or lack of effort and objective lack of relevant information respectively) and full-partial knowledge (Kornilova, 2016). Thus, tolerance of ambiguity and tolerance of uncertainty (as reflecting the subjective component) are similar, but not equal constructs, where uncertainty includes an outlook towards the future, where the unknown is inherent. Therefore, intolerance of uncertainty assumes a discomfort regarding the future, irrespectively of how unlikely it is for a certain negative event to occur (Ibid.).

In the studies related to the totalitarian regime, the notions of intolerance, ethnocentrism, and dogmatism emerged (Rokeach, 1960). One of the earliest definitions of intolerance of uncertainty (ITU), in association with prejudice and a tendency for authoritarian choices,

describes ITU as intolerance of diversity among people.

In 1994, A. Furnham combined several of the most well-known scales for measuring TU-ITU: Budner's, Rydell-Rosen's, O'Connor's and Norton's (Furnham, 1994). The questionnaire has been successfully tested by T.V. Kornilova on a Russian sample (Kornilova, 2010a). The paper highlighted three factors: TU, ITU and interpersonal intolerance of uncertainty (IITU). TU is defined as a property that relates to the willingness to choose a new path of action, a penchant for originality, interest in difficult tasks, autonomy and the ability to go beyond the usual frameworks. ITU means the rejection of uncertainty or ambiguity, preference of clarity and order, following rules and regulations, polarized notions of right or wrong opinions, values and actions. IITU means stagnancy, efforts to assume control in interpersonal relationships, the preference of clarity, and discomfort with uncertainty in interactions with others, as well as an inclination to monologues in communications with others, and instability.

Acceptation of uncertainty and risk are indirectly related to intelligence in a structural model through the link of the "intellectual self-concept", including self-assessed intelligence. In current Russian research, based on the idea of a unified functioning of individual intellectual and personal potential, the process of constructing a SAI is considered in the context of overcoming the uncertainty (Kornilova & Novikova, 2012). The authors, using Russian student samples, demonstrated that SAI is significantly correlated with academic self-esteem, which confirms the assumption of international

research of the impact of implicit theories of intelligence on the efforts made by the subject in the learning process. The authors were also the first to highlight a significant association of SAI with tolerance of uncertainty.

Similar studies on integrative self-assessment of personality (we shall call it the SAP) have not yet been conducted, although many works of Russian authors develop research of self-assessment (its strength, stability, adequacy, etc.) (Molchanova, 2010; Zeigarnik, 1986). Latent variables in the formation of the Intellectual self-concept (direct and indirect self-assessment of intelligence, academic self-esteem, self-efficiency) have been considered, as the overall individual's conceptualization of one's own intellectual competencies and their applicability in life (Novikova & Kornilova, 2013). However, there has also been no research on the correlations of negatively valued traits (i.e. the Dark Triad) and subjective attitudes towards uncertainty or ambiguity.

In terms of personality research, international authors traditionally tend to focus on the Big Five personality traits and other positive or neutrally assessed features, such as tolerance of uncertainty as a dynamic function of personality. Lately, the focus has been shifting toward the negatively assessed personality aspect. The study on the trinity of most prominent «aversive» personality traits (Kowalski, 2001), that has gained massive popularity since its publication, includes descriptions of Machiavellianism, subclinical narcissism and subclinical psychopathy, together making up the Dark Triad personality traits (Paulhus & Williams, 2002).

The conceptual construct of Machiavellianism, briefly described as

a tendency to manipulate, emerged from the statements taken from the book by N. Machiavelli. According to some authors, those who expressed a high degree of agreement with the above statements, tended to behave in a cool and manipulative manner, both in the laboratory and field studies (Paulhus & Williams, 2002; Sokolova, 2009; Znakov, 2002).

The description of subclinical narcissism is similar to clinical descriptions in terms of grandeur, dominance, superiority and unconditional right of possession (Chatterjee & Hambrick, 2007; Paulhus & Williams, 2002; Sokolova, 2014).

Typical traits of subclinical psychopathy are expressed in high levels of impulsiveness and the search for exciting pleasures along with low expressions of empathy and anxiety. Research distinguished between primary psychopathy, which is characterized by a high level of selfishness, emotional coldness, low levels of anxiety, courage, the tendency to exploit other people and manipulative behavior, and secondary psychopathy is associated with the overall instability and anti-social behavior (Hare & Vertommen, 1991; Hare, 1999).

Each of the “dark” personality traits is unique and separate from the other components of the triad, but, at the same time, there are features associated with each of the three properties in a more or less pronounced form: a heavy, irascible character, a tendency to self-promotion, emotional coldness, duplicity, aggressiveness and low agreeableness (as measured by the Big Five) (Paulhus & Williams, 2002). All three properties of the Dark Triad are characterized by low levels of the proposed

(in the HEXACO model) factor, “honesty – humility” (Lee & Ashton, 2005).

Other authors propose to consider three independent constructs the “dark side” of personality as different measurements of one latent construct: Machiavellianism, narcissism and psychopathy together are described as short-term, mediating and explosive social strategy that may have evolved to create the possibility of exploitation, when conspecifics could elude or punish the rebellious (Book, Visser, & Volk, 2015). In the paper, common features in all three traits are aggressiveness and enforcement as means to obtain the desired, heavy, irritable and sullen character.

In Russian studies, the results of the first testing of the Dirty Dozen Questionnaire (Kornilova, Kornilov, Chumakova, & Talmach, 2015) demonstrate strongest correlations between psychopathy and Machiavellianism, as in the meta-analysis (Furnham, Richards, & Paulhus, 2013; Kornilova et al., 2015), and minimal correlations for psychopathy and narcissism, but not for narcissism and Machiavellianism. Negative correlations with psychopathy and intolerance of uncertainty and reflexivity are also established. Leaning on previous research, in the present study, we hypothesize that self-assessment of personality for individuals employed in managerial positions is positively related to the attitude towards uncertainty or ambiguity, as are the Dark Triad traits (subclinical narcissism, subclinical psychopathy and Machiavellianism). We also hypothesize that self-assessment of intelligence is significantly positively correlated with tolerance of uncertainty.

Our line of research is based upon the prevailing trends in current personality research: the dynamic functioning of personality features, adverse personality traits, and a shift towards shorter measurement methods. The objectives of this study were as follows. Firstly, we aimed to examine the relationship between self-awareness and personality features, particularly, the links between self-assessment and the Dark Triad traits, whilst considering the difference in etiology. Secondly, we intended to examine the differentiated associations between self-assessed intelligence and self-assessed personality to underscore correlations as well as specificities. Thirdly, we planned to assess aspects of self-awareness and the Dark Triad traits in individuals, who occupy managerial positions, considering that a large number of research is undertaken either on student or clinical samples and that there are specific differences in self-assessments and personality traits in the chosen sample (Krasavtseva & Kornilova, 2016).

Methods

Subjects

A total of 62 middle-level and lower-level managers of various prominence participated in this study (32 women and 30 men) aged 22 to 58 ($M = 37.60$, $SD = 8.84$), all with undergraduate degrees or higher, and all had in direct or indirect subordination five to 150 ($M = 25$, $SD = 22$) people. The managers in charge of certain departments within organizations with 5 direct subordinates were considered lower-level managers. People occupying the positions of directors or deputy

directors of companies were considered middle-level managers in this study.

Tools and procedure

The study was conducted individually or in small groups (of up to 3 people) in quiet rooms, and the following methods were used.

1. Self-Assessment

A) For the direct self-assessment of intelligence (Furnham, 2001; Novikova & Kornilova, 2013) subjects were presented a graph of normal (Gaussian) distribution (where $M = 100$, $SD = 15$) and asked to estimate their intelligence level in accordance with the following instructions (given in Russian):

“This graph shows the average distribution of normal intelligence quotient (IQ) in adults. Plotted along the X-axis are IQ points, and along the Y-axis, the frequency with which the corresponding IQ scores occur in population. Thus, the intelligence quotient of most people (99%) is ranged between 55 and 145 points.

Select the figure in this graph, which you think best reflects your IQ score”.

B) A method to determine the self-assessment of personality (the assessment of self in the orientation on the scale of “good–bad” – at this moment and under different circumstances) was introduced in this paper for the first time, and was presented in the study immediately after the SAI method. The SAP method included a similar graph (to SAI) of the normal distribution with the following instructions:

“This chart shows the average normal distribution, but on another property. Please complete the following statements as accurately as possible. Use the

graph of the normal distribution to determine exactly where you are.

Enter your score (in numbers):

1) It seems to me that, generally, I am a _____ person (please indicate your score on the X scale).

2) If the circumstances turned a certain way, I could be a _____ person (enter your score on the scale X)."

For the SAP measurement, the graph on the horizontal axis included text and numeric values, where $M = 50$ ($SD = 7.5$) had a text designation of "medium", and the extreme values of 5 and 95 – "bad" and "good", respectively. We deliberately changed the middle value from 100 (as was used in SAI) to 50 in SAP in order to avoid analogous responses for the two self-assessment measures.

2. *A New Questionnaire for Tolerance of Uncertainty* (NQTU) (Kornilova, 2010a; Furnham, 1994), which was adapted from Furnham's (1994) questionnaire containing 44 questions and shortened to 33 questions with a scale involving the degree of agreement with the statement from 1 («strongly disagree») to 7 («strongly agree») to measure the subjective attitude to uncertainty. This questionnaire is a reliable Russian-language technique that measures the levels of three constructs: Tolerance of Uncertainty, Intolerance of Uncertainty and Interpersonal Intolerance of Uncertainty. An individual with a high level of TU would score highly on a question like "It is better to try (take a chance) and fail than to walk the same known road for my entire life". A person with higher levels of ITU would agree to questions like: "There are right ways to solve every task" and "Certainty in actions is always better than contemplation". Somebody who

has high levels of interpersonal intolerance would most likely agree to a statement like: "I feel uncomfortable in relationships with people, until I understand their behavior".

3. The Dirty Dozen Questionnaire (Jonason & Webster, 2010) is aimed at measuring levels of the Dark Triad traits: Subclinical Narcissism, Subclinical Psychopathy and Machiavellianism. The questionnaire was adapted for a Russian-language sample (Kornilova et al., 2015) and offers 12 questions (4 per each trait) and a consent scale from 1 («do not agree») to 5 («agree»).

Results

1. The reliability of the Dirty Dozen Questionnaire scales.

Through the program (hereinafter) IBM SPSS Statistics (version 20.0.0 for Mac OS) Cronbach's alpha coefficient was calculated to test the reliability of the Dark Dozen Questionnaire scales. The internal consistency of the three scales of the questionnaire was as follows: for the scale of Machiavellianism $\alpha = .790$, for the scale of Psychopathy $\alpha = .665$, for the Narcissism scale $\alpha = .822$. The result of this analysis can be considered satisfactory, given the magnitude of our sample and the fact that Cronbach's alpha for our sample was even higher than the results obtained from the testing of the questionnaire on the Russian-speaking population (Kornilova et al., 2015) where, for Machiavellianism $\alpha = .75$ for Psychopathy $\alpha = .64$, for Narcissism $\alpha = .73$.

2. Reliability of the A New Questionnaire for Tolerance of Uncertainty (NQTU) scales.

To calculate the internal consistency of the scales of the NQTU questionnaire

Cronbach's alpha coefficient was used. For the three scales of the questionnaire results were as follows: for the scale of Tolerance of Uncertainty $\alpha = .705$, for the scale of Intolerance of Uncertainty $\alpha = .684$, for the scale of Interpersonal intolerance of uncertainty $\alpha = .717$. These figures are similar to the results obtained when testing the NQTU (Kornilova, 2010a), in which for TU $\alpha = .70$, for ITU $\alpha = .72$, for IITU $\alpha = .69$.

3. Analysis of the gender differences in levels of the measured personality traits.

Significant differences were as follows. As evident from Table 1, women are more tolerant to uncertainty ($M = 64.3$, $SD = 7.6$) than men ($M = 56.4$, $SD = 9.7$).

Subclinical psychopathy levels were significantly lower in women ($M = 6.4$, $SD = 3.14$) than in men ($M = 7.6$, $SD = 2.6$), which corresponds to the results obtained when testing the Dirty Dozen Questionnaire (Kornilova et al., 2015) and using 4 different questionnaires to identify the properties of the Dark Triad (Egorova, Sitnikova, & Parshikova, 2015).

Women ($M = 74.5$, $SD = 12.9$) estimate their personalities to be "better"

than men do ($M = 58.6$, $SD = 12.5$). Although men, on average, believe that in other circumstances their personality would be "good" ($M = 66.2$, $SD = 19.6$), women in this case also rate the "quality" of their personality significantly higher on the scale "bad—good" ($M = 80.6$, $SD = 21$).

4. According to bivariate correlational analysis (Spearman coefficient), tolerance of uncertainty is lower in older managers ($\rho = .61$, $p < .01$). If the gender factor is controlled, then the method of bivariate correlations also shows an increase in intolerance of uncertainty with age ($r = .30$, $p < .05$).

5. Self-Assessments significantly correlated with personality characteristics measured by questionnaires as shown in Table 2. Individuals with high levels of TU have higher estimates of their levels of intelligence (SAI $r = .67$) and personal qualities, both at the moment (for SAP $r = .66$) and in other circumstances ($r = .30$). Positive correlations between TU and SAI have been established in other research (Kornilova & Novikova, 2012), and thus are not specific to the manager sample.

Relationships between self-assessments and the Dark Triad traits were as follows. Managers distinguished by a

Table 1

Gender differences in self-assessed personality, tolerance of uncertainty and subclinical psychopathy

Feature	Women (n = 32)	Men (N = 30)
Self-assessed personality	74.53** (SD = 12.912)	58.67 (SD = 12.452)
Self-assessed personality (under different circumstances)	80.63** (SD = 21.013)	66.17 (SD = 19.638)
Tolerance of uncertainty	64.28** (SD = 7.604)	56.43 (SD = 9.676)
Subclinical psychopathy	6.41* (SD = 3.140)	7.57 (SD = 2.635)

* $p < .05$, ** $p < .01$.

Table 2

**Correlations of self-assessments with tolerance of uncertainty and the Dark Triad traits
(controlling for age and gender)**

	1	2	3	4	5	6	7
1. SAI	1						
2. SAP	0.513**	1					
3. SAP (Circumstances)	0.159	0.377**	1				
4. TU	0.665**	0.651**	0.31*	1			
5. IITU	0.139	0.016	-0.194	0.032	1		
6. Machiavellianism	0.273*	0.315*	-0.015	0.204	0.175	1	
7. Narcissism	0.549**	0.319*	0.057	0.296*	0.265*	0.597**	1
8. Psychopathy	-0.132	-0.233	-0.706**	-0.138	-0.03	0.195	-0.03

* $p < .05$, ** $p < .01$.

Note. Without controlling for gender: ρ (Machiavellianism and narcissism) = .61, $p < .001$; ρ (Machiavellianism and psychopathy) = .27, $p < .05$.

high level of Machiavellianism are more likely to evaluate themselves higher, for SAP as a «good» person ($r = .32$) and for SAI in terms of their intelligence ($r = .27$). It should be noted that correlations of around .3 between personality and intelligence measures are typical. A similar correlation is established for SAP with increasing levels of narcissism ($r = .32$); managers with higher levels of narcissism also tend to evaluate their intelligence as higher (for SAI $r = .55$). In the research on Russian-speaking student samples (Kornilova et al., 2015) the same correlations between TU and IITU with narcissism have not been found, which indicates a specificity of the managerial sample. Leaders with lower subclinical psychopathy tend to estimate that their personality would “improve” under different circumstances (for SAP(C) $r = -.71$).

In managers, Machiavellianism is correlated with both narcissism ($\rho = .61$)

and subclinical psychopathy ($\rho = .27$). Leaders, characterized by high levels of narcissism, are more tolerant of uncertainty ($r = .30$), but tend to strive for clarity in interpersonal relationships ($r = .27$).

Discussion

We proposed the hypothesis that the self-assessment of personality for individuals employed in managerial professions will be positively correlated with the subject’s attitude towards uncertainty as well as with the Dark Triad traits (subclinical narcissism, subclinical psychopathy and Machiavellianism). Previous work on the personality and behavioral profiles of leaders highlights not only features linked with effectiveness, such as intelligence (Cavazotte, Moreno, & Hickmann, 2012; Judge, Colbert, & Ilies, 2004; Reichard et al., 2011; and others), but also negative personality traits, such as

narcissism and Machiavellianism (Den Hartog & Belschak, 2012; Khoo & Burch, 2008; Resick, Whitman, Weingarden, & Hiller, 2009).

The method of direct self-assessment of personality in terms of «bad-good» scale was employed in this study for the first time. The test procedure asked subjects to evaluate themselves on the scale in general, and taking into account other circumstances.

Differences in age and gender factors in the measured properties were as follows. In the sample of managers, women have significantly more positive self-assessment of their personality at the moment and under other circumstances, as well as higher rates of tolerance of uncertainty than men. The gender differences in the levels of TU turned out to be specific to managers. It was established that tolerance of uncertainty is lower in older managers, and intolerance of uncertainty is higher (when the gender factor is controlled for): more senior managers are less tolerant of uncertainty in the surrounding environment.

The levels of subclinical psychopathy were higher in men, as was established in other studies of the Dark Triad on the Russian-speaking population (Egorova et al., 2015; Kornilova et al., 2015). In this study, we also found no significant gender differences in the levels of narcissism, as was the case in the approbation of the questionnaire. However, other authors obtained gender differences in levels of narcissism depending on the questionnaires used (Egorova et al., 2015).

The relationships of the measured properties with SAP, in accordance with the hypothesis put forward, were as follows. Managers with a high toler-

ance of uncertainty reported higher scores on all the procedures of self-assessment, including the SAP, which confirms our first hypothesis. Questions in the SAP method were purposely constructed in a fairly abstract manner: we did not set any specific criteria, nor did we specify what sort of “other” circumstances the subjects were proposed to imagine. That is, overcoming a certain predetermined level of uncertainty, managers with stronger toleration of uncertainty evaluated their capabilities more positively.

Individuals with high levels of psychopathy were inclined to assess their personality lower, based on other circumstances, which does not support our first hypothesis in this study in terms of positive correlations of psychopathy with SAP. At the same time, managers with high levels of narcissism and Machiavellianism higher rated their personalities (SAP) and intelligence (SAI) higher, which allows us to partially accept our first hypothesis regarding a positive association of SAP with such properties of the Dark Triad as Machiavellianism and narcissism. Thus, our first hypothesis is almost completely proven, except for the negative connection of SAP (C) and psychopathy.

With regards to our second hypothesis: more tolerant to uncertainty managers had higher estimates of intelligence (SAI). The positive correlation between SAI and TU is confirmed in other studies (Kornilova & Novikova, 2012) and is not specific to this sample of managers. Thus, we can accept our second hypothesis.

It was also established that the higher the SAP at the moment, the higher

the SAP in different circumstances (C) tends to be. Moreover, SAP and SAI in this study are positively correlated: managers, who estimate their personality to be more positive (with orientation towards the “bad–good” scale), also tend to approximate their intelligence to be higher.

Finally, individuals with high levels of narcissism are characterized by high tolerance of uncertainty, but are more intolerant to uncertainty in interpersonal relationships. In the research on Russian-speaking samples (Kornilova et al., 2015) similar correlations of TU and IITU with narcissism have not been established, and another relationship was found significant – between psychopathy and TU. The relationships established in our study may indicate that the leaders accept the situational uncertainty, but demand clarity in interpersonal relationships.

Conclusion

In the present study, we found evidence that managers more tolerant of uncertainty have higher self-assessments (of personality, as well as of intelligence), which supports our first hypothesis in part and our second hypothesis fully. As expected, the Dark Triad traits, manifesting negatively assessed personality features or an instable emotional core of personality, were linked with self-esteem: Russian managers with high levels of Machiavellianism and narcissism tend to rate themselves higher both on SAP and SAI, while managers with lower psychopathy assume their SAP to be higher under “other circumstances”. Thus, the findings partially confirm our first hypothesis. Finally, we established

that self-assessment of managers is congruent: individuals, who estimate their intelligence to be higher, tend to also assume they have a “better” personality (on the scale of “bad–good”) at the moment, as well as in other circumstances.

Based on the idea of the unity of intelligence and affect (L.S. Vygotsky, O.K. Tikhomirov) and the concepts of self-regulation and Dynamic Regulatory Systems (DRS) (Kornilova, 2011), we considered the intellectual and personal potential of people in connection with the self-assessment of intelligence and personality as reflective of cognitive and personal identity components. The context of the DRS assumes the inclusion of different processes, thus the processes of self-assessment, including self-assessed personality and intelligence, can be connected in various ways. At the level of self-awareness, self-assessments are linked to latent variables. Previous research highlighted the relationships between self-assessed intelligence and tolerance of uncertainty, but the relation of self-assessed personality to TU has not yet been established. Based on international research, we put forward hypotheses regarding higher self-assessments of managers tolerant to uncertainty and with higher levels of the “dark” personality traits.

We attempted to verify the links between cognitive and personal components of self-awareness, as reflected in the direct self-assessments of intelligence and personality, with measured personality characteristics. We established a direct positive relationship between self-assessment of personality derived for the provisional scale of the “bad–good person”, with tolerance of

uncertainty. In the sample of those employed in managerial work we identified a positive association of self-assessed intelligence (SAI) with tolerance of uncertainty, previously established on student samples. The self-assessments were related to each other as follows. People evaluating their intelligence as high tend to assume they are a more “positive” person (on SAP). Those managers, who see themselves higher on the scale of “bad—good” at the moment, tend to evaluate their personality as “good” under other circumstances as well.

Indirectly, the relationship of self-assessments and the Dark Triad traits reinforces existing data regarding the increase of these features in individuals with leader characteristics. At the same time, “negatively” (the Dark Triad) and “positively” (tolerance of uncertainty) viewed personality features were interconnected directly and indirectly through self-assessment. Thus, it could be said that the study of cognitive and personality components of the self-regulation and self-awareness is a complex and multi-dimensional area for further research.

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Связи самооценок интеллекта и личности с толерантностью к неопределенности и свойствами Темной триады у руководителей

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Резюме

В данном исследовании мы представляем эмпирические результаты связей трех личностных свойств Темной триады – субклинического нарциссизма, субклинической психопатии и макиавеллизма, с толерантностью к неопределенности и прямыми самооценками интеллекта и личности. Связи оценивались на группе взрослых респондентов, занимающих руководящие должности. Выраженность измеряемых личностных свойств определялась посредством опросников. В методиках самооценки участников просили оценить свой коэффициент интеллекта (IQ), используя график нормального распределения, и аналогичным образом – определить, где располагается их личность на графике с полюсами «плохой» и «хороший» при двух условиях: (1) на данный момент и (2) при иных обстоятельствах. Обнаружилось, что чем выше руководители оценивали свой интеллект, тем «лучше» они определяли себя как личность. Кроме того, менеджеры с высокой толерантностью к неопределенности выше оценивали свой интеллект и себя как личность как в настоящий момент, так и в случае изменения обстоятельств. Наконец, менеджеры с более высоким уровнем нарциссизма и макиавеллизма выше оценивали свой интеллект и личность. Руководители с низким уровнем субклинической психопатии склонны предполагать, что их личность будет «лучше» в других обстоятельствах. Когнитивные и личностные компоненты саморегуляции и самосознания могут рассматриваться как сложная и многомерная область для дальнейших исследований, так как, помимо прочих факторов, самооценка является прямой и косвенной связью между такими рассматриваемыми личностными свойствами, как толерантность к неопределенности, и свойствами Темной триады.

Ключевые слова: самооценка интеллекта, самооценка личности, Темная триада, нарциссизм, психопатия, макиавеллизм, толерантность к неопределенности.

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Сфера научных интересов: принятие решений, самооценка, интеллект, толерантность к неопределенности, свойства Темной триады.

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