Adolescent School-Related Self-Concept in Relation to Adolescent Personality

DOI: 10.15804/tner.2016.43.1.22

Abstract

The aim of our study was to examine adolescent personality in relation to the adolescent school-related self-concept, in particular to its cognitive aspect according to W.U. Meyer's conception. In addition to selected personality dimensions, our paper focuses also on gender relations of the adolescent school-related self-concept. The research sample was made up of grammar school and university students (N = 100). The five-factor model of personality NEO-FFI (P.T. Costa, R.R. McCrae) and SCEA-M questionnaire (U. Engler, W.U. Meyer) were used as research tools. The results show a statistically significant relationship between neuroticism and fear of social consequences. There is also a statistically significant relationship between conscientiousness and the self-concept of ability. Statistically significant gender differences in favour of women appear in the dimension of fear of social consequences.

Keywords: *self-concept, self-concept of ability, fear of social consequences, neuroticism, extraversion, conscientiousness*

Self-concept is “a perception of oneself, thus how an individual sees him/herself. It has an evaluative and a descriptive dimension. It is also referred to as an “integrating gyroscope of personality” (Hartl & Hartlová, 2000, p. 524). P. Macek (2008) states that it is the most frequently used term in the psychology of self. “Self-concept is a hypothetical construct, used in the effort to describe the content of the consciousness related to Self” (ibidem, p. 96). The author explains self-concept as cognitive content or as a structure of self-reflection,

knowledge of self. M. Blatný (2003) interprets self-concept in a more complex way, as a whole comprising various aspects. He distinguishes three aspects of self-concept: cognitive, emotional and conative. The three aspects of self-concept have no clearly defined borders between them. They intertwine and influence one another. P. Říčan (1970, p. 209) specifies self as “a carrier of the identity and unique value of individual personality”. R. Marčič and D. Kobal Grum (2011) understand self-concept as an organized set of characteristics, traits, feelings, images, attitudes, abilities, and other psychological elements that a person attributes to him/herself.

On the basis of our review of professional literature we are of the opinion that self-concept comes to its real and more stable form at the transition from adolescence to young adulthood. Since the place of an adolescent's self-realization is still primarily school, we focus on his/her self-concept in the context of school and school setting. Such an approach can be found in W.U. Meyer's self-concept of ability. W.U. Meyer (as cited in: Steinsmeier-Pelster & Schöne, 2008) considers self-concept of ability exclusively as a description or evaluation of one's own abilities in terms of a descriptive concept. When an individual imagines his/her own abilities, this may be a description as well as evaluation of abilities. Cognitive evaluation is often assigned affective-evaluative representations of the self-concept of ability. Such representations, however, are a consequence of the self-concept of ability. For illustration, the authors give the following example: the statement: “I am a gifted student” is assigned to the self-concept of ability. It is a pure description meaning nothing. The statement “I am proud that I am a gifted student” is attributed to self-esteem, where affective-evaluative components are in the foreground. Thus, the self-concept of ability is generally understood as a summary of cognitive presentations of one's own abilities. This concludes the idea about the level, structure and stability of the self-concept. Descriptive evaluation of one's own abilities (ibidem) applies also to the level - “I am a very gifted student”, structure and differentiation - “I have no problems with math, but I simply have no gift for languages”, as well as to its variability and influenceability - “I simply lack the gift for physics and nothing can change it”. How much a person values him/herself depends mostly on two kinds of information: on one's own experience in problem solving, as well as direct or indirect information from a relevant relational person.

Research aim and hypotheses

Our research problem was defined on the basis of theoretical analysis of the subject, which were publications of personality psychology, developmental psychology, and social psychology (Říčan, 2007; Vágnerová, 2000; Blatný, 2003; Macek, 2003, 2008). It was also based on results of research studies (Ramsdal, 2008; Gašparíková, 2011; Marčíč - Kobal Grum, 2011; Pajares - Schunk, 2001, Ďuricová, 2005) on self-concept, personality traits and gender differences. On the basis of the above sources, our own **research aim** was formulated to verify relationships between personality traits and the adolescent school-related self-concept, and also gender differences, if any, in the studied variable.

In line with our main goal we then defined the following **research objectives**:

1. Investigate whether there is a relationship between the selected personality traits from the Big Five concept (extraversion, neuroticism, conscientiousness) and adolescent school-related self-concept, in particular Meyer's self-concept of ability, or fear of social consequences, as the case may be.
2. Verify the influence of gender on the adolescent school-related self-concept.

The theoretical analysis of the problem and the existing knowledge from the self-concept study enabled us to formulate the following hypotheses assuming that:

- H1: There is a statistically significant positive correlation trend between extraversion and the self-concept of ability.
- H2: There is a statistically significant positive correlation trend between conscientiousness and the self-concept of ability.
- H3: There is a statistically significant positive correlation trend between neuroticism and the fear of social consequences.
- H4: There is a statistically significant difference in the self-concept of ability between men and women in favour of men.
- H5: There is a statistically significant difference in the fear of social consequences between men and women in favour of women.

Research methods and sample

In order to obtain data from respondents to verify our research hypotheses, two research tools were used. The first method, NEO - FFI inventory, was chosen with the aim to follow up the study by L. Ďuricová (2005), who had examined the

school-related self-concept according to W.U. Meyer in relation to personality and had used Cattell's 16 Personality Factor Questionnaire.

NEO-FFI / Neo Five – Factor Inventory (abbreviated version of the 5-factor personality inventory by Costa and McCrae)

I. Ruisel and P. Halama state that in Slovakia mostly the abbreviated version of the NEO inventory is used, this NEO-FFI (as cited in: Hřebíčková, 2011, p. 200).

SCEA-M / Self-Concept of Ability Questionnaire (Engler - Meyer)

The version of SCEA-M (Self-Concept of Ability Questionnaire) was translated to the Czech language and validated by F. Man and P. Blahuš (1998). This concept concerns awareness of one's own abilities and means to tackle tasks in a school setting. The questionnaire examines two factors: self-concept of ability and fear of social consequences, or social appraisal.

Our research sample was made up of 100 students selected by convenience sampling, in the range from 18 to 22 years of age. The average age of the respondents was 19.8 years. In terms of gender, it consisted of 66 women and 34 men, students of a secondary school and university in the town of Banská Bystrica.

Research Results

Data were processed by means of the statistical program SPSS. They were checked for normality by means of the Kolmogorov-Smirnov test for normality. Since the individual variables in our research sample did not fulfil the condition of normal distribution (Table 1), non-parametric procedures were used to analyze the data. It was Spearman's correlation coefficient in the case of correlations and the Mann-Whitney U-test to test gender differences.

Table 1. Normality of data distribution, variables examined at the significance level of $p=0.2$ ($N=100$)

Kolmogorov - Smirnov	P
Neuroticism	0.162
Extraversion	0.056
Conscientiousness	0.066
Self-concept of ability	0.000
Fear of social consequences	0.003

At the beginning of our research data analysis, we present the descriptive characteristics of all the variables examined (Table 2).

Table 2. Descriptive indicators of the variables examined (N=100).

	AM	Mdn	Min	Max	SD
NE	31.72	31.00	16.00	52.00	8.12
EX	41.05	42.00	16.00	55.00	8.16
CON	42.76	43.50	22.00	60.00	8.76
SCA	29.06	28.00	21.00	42.00	3.81
SCAnx	14.05	14.00	6.00	21.00	3.56

NE – neuroticism, EX – extraversion, CON – conscientiousness, SCA – self-concept of ability, SCAnx – fear of social consequences, AM – arithmetic mean, Mdn – median, Min – minimum, Max – maximum, SD – standard deviation

Also, it is necessary to present the descriptive characteristics of the research sample in terms of gender. The results are presented in the scales of self-concept of ability (SCA, Table 3) and fear of social consequences (SCAnx, Table 4).

Table 3. Descriptive characteristics of the research sample in the scale of self-concept of ability (SCA) by gender

Gender	n	AM	Mdn	SD
Men	34	29.82	29.50	3.37
Women	66	28.67	28.00	3.99
Total	100	29.06	28.00	3.81

N – absolute number, AM – arithmetic mean, Mdn – median, SD – standard deviation

Table 4. Descriptive characteristics of the research sample in the scale of fear of social consequences (SCAnx) by gender

Gender	n	AM	Mdn	SD
Men	34	12.65	13.00	3.81
Women	66	14.77	15.00	3.23
Total	100	14.05	14.00	3.56

N – absolute number, AM – arithmetic mean, Mdn – median, SD – standard deviation

The results are presented by the research hypotheses.

- H1:** There is a statistically significant positive correlation trend between extraversion and the self-concept of ability.
- H2:** There is a statistically significant positive correlation trend between conscientiousness and the self-concept of ability.
- H3:** There is a statistically significant positive correlation trend between neuroticism and the fear of social consequences.

Within the first hypothesis, we attempted to verify the relationship between the self-concept of ability and the personality dimension of extraversion. Based on the results of Spearman's correlation analysis, we can state that there is *no statistically significant relationship* between extraversion and the self-concept of ability in our research sample (Table 5). The next selected personality trait studied in relation to the school-related self-concept was conscientiousness. Based on the results (Table 5), we can state that there is a *moderate positive statistically significant relationship* (at the level of 0.01) between conscientiousness and the self-concept of ability. In accordance with our research aim we also examined the connection between the personality trait of neuroticism and the dimension of the fear of social consequences, or social appraisal. Results of the Spearman correlation analysis as a non-parametric method (Table 5) show that there is a *moderate positive statistically significant relationship* (at the level of 0.01) between neuroticism and the fear of social consequences.

Table 5. Correlation analysis (Spearman) of relationships between selected personality traits and adolescent school-related self-concept (N=100)

		SCA	SCAnx
EX	r	0.080	
	p	0.428	
CON	r	0.262**	
	p	0.009	
NE	r		0.281**
	p		0.005

EX – extraversion, CON – conscientiousness, NE – neuroticism,
SCA – self-concept of ability, SCAnx – fear of social consequences, ** $p \leq 0.01$

- H4:** There is a statistically significant difference in the self-concept of ability between men and women in favour of men.

H5: There is a statistically significant difference in the fear of social consequences between men and women in favour of women.

Based on the result of the Mann-Whitney U test, we can state that *there is no statistically significant difference* in the medians of the self-concept of ability between men and women. On the contrary, the result of the same test confirms that *there is a statistically significant difference* in the fear of social consequences between men and women in favour of women (Table 6).

Table 6. Gender differences in adolescent school-related self-concept

		Mdn	U-test	p-value
SCA	Men	29.50	913.50	0.127
	Women	28.00		
SCAnx	Men	13.00	757.00	0.008
	Women	15.00		

SCA – self-concept of ability, SCAnx – fear of social consequences, Mdn – median, U-test – Mann-Whitney U test

Discussion

The aim of our research was to examine the connection between the adolescent self-concept and specific personality traits from the Big Five personality model. We chose three personality variables that could have, with regard to previous research results, some connection with self-concept. We focused on the adolescent school-related self-concept, since at that age mostly the school setting is a basic reference frame for an individual. That is why we used the SCEA-M inventory mapping especially the cognitive aspect of a respondent's school-related self-concept. The method examines two dimensions of the school-related (academic) self-concept: self-concept of ability (positive self-image) and fear of social consequences (fear of social appraisal).

The H1 hypothesis assumed a **statistically significant positive correlation trend between extraversion and the self-concept of ability**. According to M. Hřebíčková (2011), extraverted individuals are usually social, self-assured, active, energetic, cheerful and optimistic. They are often perceived as full of energy by people around them. In a group, they like to talk and to attract attention. Correlation analysis *did not confirm a statistically significant relationship* between the two

variables. On the basis of this result, it can be inferred that extraversion as a personality trait is not a prerequisite for a positive adolescent self-image in the school context. This result does not correspond with the result of L. Ďuricová (2005), who found Cattell's factors H (spontaneity, social boldness even light-mindedness) and O (complacency, self-assurance, optimism), two of three factors that significantly fed favourable school-related self-concept of adolescents. The discrepancy in the research results may be a result, among other things, of the different personality inventory used and should be verified in further research.

The H2 hypothesis assumed a **statistically significant positive correlation trend between conscientiousness and the self-concept of ability**. Correlation analysis showed a *moderate positive statistically significant relationship* between the variables. Thus, it can be assumed that conscientiousness, interpreted as responsibility, planned behaviour, self-discipline on the track to reaching goals; persistent resistance to disturbance (Říčan, 2007) is positively related to the self-concept of ability, thus the awareness of one's own abilities (Man-Blahuš, 1998). The result corresponds with the study by Ďuricová (2005), whose research results concerning the connections between self-control, willpower, self-discipline (Factor Q3), being a dimension close to conscientiousness, and the self-concept of ability reached a statistically significant value. The positive relationship between conscientiousness and self-efficacy (conative aspect of self-concept) was confirmed also in the research by I. Wang et al. (2014) on the relationships between the Big Five concept, self-efficacy and depressive symptoms. The study by E. Nábělková and N. Ledajová (2013) showed, for a change, a negative relationship between self-esteem of university students and their tendency to procrastination that may be perceived as a certain type of anti-motivation connected also, among other things, with a low subjectively perceived academic capability.

Within the H3 hypothesis, a *statistically significant positive correlation trend between neuroticism and the fear of social consequences* was assumed. Correlation analysis showed a *moderate positive statistically significant relationship* between the variables. The result indicates that there is a relationship between the dimension of neuroticism and fear of social appraisal. Similar results were obtained also by L. Ďuricová (2005), examining the personality profile of university students with a positive self-concept. Her results showed a moderate statistically significant relationship between emotional stability and the fear of social consequences: particularly a negative correlation trend between emotional stability (Factor C) and the fear of social consequences. In connection with these results, a study by B. Žitniaková Gurgová (2012) confirmed a relationship between neuroticism and perfectionist cognitions including also social comparison in university students.

The H4 hypothesis was formulated on the assumption that there is a **statistically significant difference in the self-concept of ability between men and women in favour of men**. The *absence of a statistically significant difference* in the self-concept of ability in terms of gender could be explained by the current social situation, where there are high demands on an individual regardless of his/her gender, due to which differences in the perception of oneself and one's abilities and possibilities are somehow blurred. A study by G.H. Ramsdal (2008) also found no statistically significant gender differences in independent self-concept. G.H. Ramsdal stated that women could be at a similar level as men in abilities and achievement of their goals. M. Vágnerová (2000) mentions that a professional role is for women in particular a kind of confirmation of their abilities and competences. Thus, we can infer that for male and female adolescents study and preparation for their future profession is such confirmation, and they no longer show any differences in this area at present.

Within the H5 hypothesis, a **statistically significant difference in the fear of social consequences between men and women in favour of women** was assumed. The result in our research sample showed a *statistically significant value*. Research by L. Ďuricová (2005) also found a statistically highly significant difference in the fear of social consequences between men and women in favour of women. Women are more anxious and probably more sensitive to appraisal by others and attribute a higher value to it. In their study of self-concept, R. Marčič and D. Kobal Grum (2011) proved that women were more critical in their self-assessment when their physical appearance was concerned and they scored higher also in the social dimension of self-assessment, however, there were no significant differences. The authors explained the similarity in self-assessment between the genders also by contemporary equal opportunities for men and women.

Conclusion

The results of our research analysis suggest that personality variables could be a source of an individual's self-concept. Out of the assumed three dimensions of the Big Five concept, two show a statistically significant relation to the adolescent school-related self-concept. The personality dimension of neuroticism is characterized (Říčan, 2007) as a fear of the new, proneness to excessive worrying, susceptibility to panic. Adolescents scoring higher in the personality dimension of neuroticism scored higher also in the fear of social consequences representing the fear or apprehension of social appraisal, comparison in a school setting in Meyer's

conception. Increased neuroticism is not conducive to the adolescent positive self-concept, since it correlates with the factor opposite to the self-concept of ability. The self-concept of ability appears to be in relation with conscientiousness, responsibility, self-discipline, which are desirable personality traits appreciated by people around the individual during his/her ontogenesis. In accordance with the Mirror Self theory by Ch.H. Cooley, they later project also to his/her self-evaluation or self-concept, as the case may be.

Although we are aware of the limits concerning our research sample, our results do suggest that there are certain connections and maybe an incentive for further exploration of self-concept. Naturally, we are aware that there are a number of other variables participating in self-concept formation also entering this relation, such as intelligence, school achievement, dispositional affectivity of respondents, etc. Self-concept is formed also through the social contacts and cognitive development of an individual, as well as by the influence of family setting, parenting style in family, influence of social groups which the adolescent is a member of.

Research results indicate also significant gender differences in the dimension of the fear of social consequences (social appraisal) manifested in favour of women, which is not so surprising due to the proved higher anxiety and sensibility of women. It can be assumed that girls, even in adolescence, respond much more sensitively to social appraisal and criticism of their persons and derive their self-concept to a greater extent from the assessment of people around them. Thus, gender can also moderate the adolescent self-concept (at least the academic one).

Although the adolescent self-concept is, to some extent, conditioned by personality, it can still be shaped, it has no final form. In addition to family (e.g. parenting style applied) it is school that plays a considerable role in the self-concept development of pupils and therefore necessarily assumes great responsibility. Since one of the main goals of education should be to help uncover one's own individuality, thus self-knowledge, we consider it important for school to focus not only on the area of knowledge but also on the non-cognitive parts of pupil personality. It is necessary to use all possibilities of the education programme and institutions (at the level of teachers, educational counsellors, school psychologists, etc.) to encourage the development of self, thus the factor that decides whether children will mature into constructive and socially adapted beings.

References

- Blatný, M. (2003). Sebepojetí z pohledu sociálně-kognitivní psychologie. In M. Blatný & A. Plháková, *Temperament, inteligence, sebepojetí: nové pohledy na tradiční témata psychologického výzkumu*. (pp. 87–130). Brno: Psychologický ústav Akademie věd ČR.
- Đuricová, L. (2005). Sebaopojatie budúcich učiteľov ako súčasť ich psychologickéj prípravy na povolanie. In *História, súčasnosť a perspektívy učiteľského vzdelávania* (pp. 386–389). Banská Bystrica: Pedagogická fakulta UMB.
- Gašparíková, M. (2011). Možnosti mapovania self-conceptu vo vzťahu k osobnostným charakteristikám u vysokoškolských študentov (pilotná sonda). In *Sociální procesy a osobnost. Člověk na cestě životem: Křižovatky a mosty* (pp. 79–83). Brno: Tribun EU.
- Hartl, P. & Hartlová, H. (2000). *Psychologický slovník*. Praha: Portál.
- Hřebíčková, M. (2011). *Pětifaktorový model v psychologii osobnosti. Přístupy, diagnostika, uplatnění*. Praha: Grada.
- Man, F. & Blahuš, P. (1998). A Czech form of Engler and Meyer's Self Concept of Ability Questionnaire. *Acta Universitatis Carolinae – Kineanthropologica*, 34 (2), 39–51.
- Macek, P. (2003). *Adolescence*. Praha: Portál.
- Macek, P. (2008). Sebesystém, vztah k vlastnímu Já. In J. Výrost & I. Slaměník, *Sociální psychologie*. (s. 87–107). Praha: Grada.
- Marčíč, R. & Kopal Grum, D. (2011). Gender differences in self-concept and self-esteem components. *Studia psychologica*, 53 (4), 373–384.
- Nábělková, E. & Ledajová, N. (2013). Prokrastinácia v súvislosti s vybranými aspektmi sebaregulácie. In 30. *Psychologické dny 2012: Prostor v nás a medzi námi - respekt, vzájemnosť, sdieľanie*. Olomouc: Univerzita Palackého, pp. 309–318.
- Pajares, F. & Schunk, D.H. (2001). Self-beliefs and school success: Self-efficacy, self-concept, and school achievement. *Perception*, 30(12), 239–266. Dostupné na: <<http://www.uky.edu/~eushe2/Pajares/PajaresSchunk2001.html>>
- Ramsdal, G.H. (2008). Differential relations between two dimensions of self-esteem and the Big Five. *Scandinavian Journal of Psychology*, 49 (4), 333–338.
- Říčan, P. (1970). Pojmy Já v psychologii osobnosti. *Československá psychologie*, 14 (3), 209–229.
- Říčan, P. (2007). *Psychologie osobnosti. Obor v pohybu*. Praha: Grada.
- Steinsmeier-Pelster, J. & Schöne, C. (2008). Fähigkeitsselbstkonzept. In W. Schneider, & M. Hasselhorn, *Handbuch der pädagogischen Psychologie*, (p. 62–73). Göttingen: Hogrefe Verlag GmbH & Co. Available on: <http://www.hsu-hh.de/download-1.4.1.php?brick_id=zE5wi9MKywPmMKmT>
- Vágnerová, M. (2000). *Vývojová psychologie. Dětství, dospělost, stáří*. Praha: Portál.
- Wang, I. et. al. (2014). The mediating role of self-efficacy in the relationship between Big five personality and depressive symptoms among Chinese unemployed population: a cross-sectional study. *BMC Psychiatry*, 14. Available on: <<http://www.biomedcentral.com/1471-244X/14/61>>
- Žitniaková Gurgová, B. (2012). Perfectionism and personality. In *Grant journal: peer-reviewed scientific journal*. Hradec Králové: Magnanimitas, 1(1), 44–46.