

## THE PREDICTIVE INFLUENCE OF THE BIG FIVE PERSONALITY TRAITS ON ADOLESCENT SELF-CONCEPT

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### Abstract

In today's dynamic and changing environment, the adolescent's social environment and social inclusion are vital because of the formative influence of experiences with the social environment on the adolescent's self-concept. Self-concept is among the most important predictors of mental health and quality of life in contemporary adolescents. The underlying concept of the present paper is the Piers-Harris model of self-concept, which is viewed following the Big Five concept. The main aim of the present study is to analyse the predictive influence of the Big Five personality traits on adolescents' self-concept. The research population comprised 1 013 Slovak adolescents (73% female, AM age = 17.00, SD age = 1.27). The research instruments used were the ASCSS/Adolescents' Self-concept Short Scale (Veiga & Leite, 2016) and the Slovak version of the NEO FFI personality questionnaire (Ruisel & Halama, 2007). Correlational analysis showed several moderately significant relationships between the Big Five factors and individual dimensions and with adolescents' overall self-concept. Regression analysis subsequently demonstrated a clear predictive effect of personality on adolescent self-acceptance, demonstrating that personality traits are an important source of adolescents' self-definition. Mental health promotion also emphasises the promotion of a favourable self-concept in adolescents, which creates room for the influence of professionals in counselling or school psychology. The paper is part of the project VEGA 1/0765/21 Multidimensional self-concept of the digital adolescent generation in Slovakia and its contexts.

**Keywords:** *Self-concept, Big Five, personality, adolescents.*

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### 1. Introduction

People have been dealing with questions like "Who am I? What shaped me this way?" since time immemorial. The answer is hidden within us - who we are - physically, emotionally, socially, spiritually and in terms of all the other aspects that make us who we are. Each of us has a unique self-concept that differs from others' self-concepts and perceptions of us.

Baumeister (1999) argues that self-concept is a person's beliefs about themselves, including their characteristics and who and what they are. According to Rosenberg (1979), self-concept is the totality of an individual's thoughts and feelings that relate to themselves as an object.

Attention to self-concept has been extensive in recent years. It is currently defined as a hypothetical construct explaining a person's behaviour and experience. Balcar (1983) argues that a conscious formulation of the self is not necessary for ordinary life because the function of self-concept is mainly motivational, often exercised at an unconscious level.

Blatny (2001) distinguishes three aspects that characterise self-concept. These are the cognitive aspect, which refers to the content and its organisation (self-image, self-awareness); the affective aspect, which refers to the emotional relationship to oneself; and the conative aspect, which expresses the fact mentioned above that self-concept has a motivational - self-regulatory application (self-esteem, self-efficacy).

The fundamental change in the view of self-concept compared to the 1960s is that self-concept ceased to be regarded as a global, holistic idea of the self, consistent across time and situations. Its multifaceted, hierarchically ordered structure and the dynamics of its functioning depending on both so-called self-motives and situational context are now being emphasised (e.g. Markus & Wurf, 1987; Harter, 1996; Bandura, 1999).

In general, authors agree that an individual's unique self-concept:

- Is a learned-not innate-multidimensional construct, encompassing our views of the self in terms of many different aspects (e.g. social, religious, spiritual, physical, emotional);
- is influenced by biological, environmental, and social factors;
- is inter-individually dependent on context and time;
- develops most strongly in childhood and early adulthood, when it is more easily changed or updated;
- takes on different valences, ranging from a positive to a very negative pole.

### 1.1. Determinants of self-concept

One of the most important internal factors influencing an individual's self-concept is personality. An analysis of the relationships between the Big Five personality traits and self-concept reveals the following:

- More extraverted individuals tend to perceive themselves as influenced by social interaction. Their self-concept is influenced by how other people perceive them and how they feel in social situations;
- More neurotic individuals may tend to perceive themselves as influenced by emotional instability and anxiety;
- More open individuals have a more variable and complex self-concept influenced by their ability to adapt;
- Self-concept of individuals with higher agreeableness is associated with their ability to affiliate;
- Individuals with higher conscientiousness tend to perceive themselves as responsible, goal-oriented, and well-organised individuals whose self-concept is mainly determined by their tendency to plan and achieve goals (Larsen & Buss, 2009; Pilarska, 2018; McEwan et al., 2019).

The relationship between personality traits and self-concept is, of course, more complex and influenced by individual experiences, environment, and social context. In addition to family members and close friends, other people can contribute significantly to self-identification. Pesu, Viljaranta and Aunola (2016) found that the more a teacher believes in the abilities of a high-achieving student, the higher the student's self-concept (no such association was found for lower-achieving students). The most significant external determinants of self-concept include:

**The family environment** significantly influences the development of self-concept in children. Interactions with parents and other family members, relationships and expectations formed in the family environment can shape how an individual perceives themselves.

**The school environment** and interactions with peers and teachers can influence self-concept success or failure in school; social relationships and the ability to cope with school challenges can significantly impact how an individual perceives their abilities and worth.

**Culture and society** - cultural norms, values and expectations create the framework within which self-concept is formed. Each culture may emphasise different aspects of identification and value, which influences how an individual perceives themselves concerning their cultural affiliation.

**Individual abilities and performances** manifested in personal accomplishments, skills, and abilities may influence how an individual perceives themselves. Successfully overcoming challenges and achieving goals can reinforce a positive self-concept.

**Social relationships** in the form of interactions with other people, including family, friends, and romantic partners, greatly influence self-concept. Acceptance, rejection, support, or conflict in these relationships can shape self-concept.

**Individual experiences and events** can have a profound effect on self-concept. Experiences such as traumas, successes, or failures can shape how an individual perceives themselves and their place in the world.

**Social comparison**, or comparing oneself to others, can be an important factor in self-concept formation. Comparing one's abilities, appearance, or achievements with others can influence one's perception of self-worth.

**Shared stories** - self-concept can also develop through shared stories. For example, one study found that female readers who were "deeply invested" in a story about a main character with a traditional gender role had a more feminist self-concept than those who were not as moved by the story (Richter, Appel & Calio, 2014).

Whether mass or social media, **media** is one of the most significant formative factors today. According to Vandenbosch and Eggermont (2015), if these media promote certain ideals, an individual is likelier to adopt them. Moreover, the more often these ideals are presented, the more they influence an individual's self-identity and self-concept.

Self-concept development is a dynamic process where these determinants can interact and change over time. Individual differences, life circumstances, and personal experiences contribute to each individual's unique self-concept.

### 1.2. Self-concept in adolescence

Adolescence is a period of complete personality transformation, and identity or self-concept is also subject to dynamic changes. Comparison with other adolescents forms the foundations of a relatively permanent self-concept. During this period, adolescents tend to self-deprecate, have exaggerated self-esteem, and are easily influenced by peers and the chemical changes occurring in their brains (Sebastian, Burnett, & Blakemore, 2008). They enjoy greater freedom and independence, engaging in increasingly competitive and often risky activities (Manning, 2007). According to Manning (2007), two factors are significant in adolescence with formative solid influences:

- Achieving success in the personal engagement zone;
- Approval from persons significant to the individual.

Self-concept development is never complete. Although self-identification is thought to be formed primarily in childhood, experiences in adulthood can alter an individual's current self-concept. For example, a more positive self-concept subsequently occurs in the case of increased self-esteem.

In recent decades, self-concept has been analysed as a multidimensional construct conditioned by intrinsic and contextual variables (Craven & Marsh, 2008; Veiga, 2012), which allows not only delving deeper into the essence of how a person perceives themselves but also explaining or predicting their behaviour. The present study aims to analyse the importance of personality in terms of the Big-Five concept in predicting self-concept.

## 2. Methods

The study population comprised 1 013 adolescents from Slovakia (15 - 20 years), 73% female and 27% male. The research data collection was based on volunteering and conducted online.

Self-concept was measured using the Adolescent Self-Concept Short Scale/ASCSS (Veiga & Leite, 2016), which consists of 30 items from the original PHCSCS - 2 / Piers-Harris Children's Self-Concept Scale 2 (Piers & Herzberg, 2002). Each of the six dimensions (Anxiety, Physical Appearance, Behaviour, Popularity, Happiness, Intellectual Status) comprises five items, and the respondent expresses their agreement using a 6-point Likert scale (1 = strongly disagree; 6 = strongly agree). For the study, we worked with the adolescent's total self-concept score. The internal consistency of the individual dimensions in the adapted version of this instrument used in our research was satisfactory ( $\alpha = .70-.84$ ); the reliability of the research instrument as a whole was also satisfactory ( $\alpha = .88$ ).

The Big Five personality traits were identified using the 60-item version of the NEO-FFI (Ruisel & Halama, 2007); each of the five scales (neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness) is made up of 12 items, with the respondent answering using a 5-point scale (ranging from not at all true for me - to entirely true for me). For each factor, Cronbach's alpha ranges from .82 for the Agreeableness factor to .84 for the Neuroticism factor.

We used the JASP statistical program to process all the data collected in our research. Considering the results of the Shapiro-Wilk normality test, the relationships between the variables were examined through the non-parametric Spearman's correlation coefficient.

## 3. Results

Table 1 shows weak to moderately statistically significant associations of personality factors in terms of the Big Five construct, except for agreeableness, with adolescents' total self-concept scores.

*Table 1. Relationship (Spearman correlation) between adolescent self-concept and personal factors Big five (N=1013).*

	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness to experience
<b>Self-concept (PH_TOT)</b>	.427***	.035	.433***	-.684***	.091**

*Note:* \*\*\*  $p < .001$  ; \*\*  $p < .01$

Table 2 confirms the predictive power of personality factors regarding correlations again, except for agreeableness.

Table 2. Predictive influence of the Big Five personality traits on overall self-concept as measured by Piers-Harris ( $N = 1013$ ).

Model	R	R <sup>2</sup>	adj. R <sup>2</sup>	F	p
H <sub>1</sub>	.789	.623	.621	332.801	<.001
H <sub>1</sub>	B	Beta	t	p	
(intercept)	3.882		28.810	<.001	
Extraversion	.216	.288	13.871	<.001	
Agreeableness	-.019	-.021	-1.025	.306	
Conscientiousness	.234	.235	11.352	<.001	
Neuroticism	-.477	-.556	-26.302	<.001	
Openness to experience	.058	.059	3.018	<.01	

Note: R = multiple correlation coefficient, R<sup>2</sup> = determination index, adj. R<sup>2</sup> = adjusted determination index, F = F-test result, p = F-test significance, B = unstandardised coefficient, Beta = standardised coefficient, t = T-test result, p = T-test significance

#### 4. Discussion and conclusion

Adolescents' self-perception is crucial as it influences their motivation, attitudes and behaviour. It also affects how we feel about ourselves as the person we think we are, including whether we are competent or have self-esteem. Self-esteem is more plastic when we are younger and still going through self-discovery and identity formation. As we get older and learn more about who we are and what is important to us, these self-assessments become much more detailed and structured, which is why we focus on adolescents' self-concept. Our findings clearly confirmed the Big Five personality factor relationships. We found that extraversion and conscientiousness were moderately related to overall self-concept in a positive direction. Neuroticism was most strongly though negatively related to self-concept, suggesting that a neurotic adolescent full of worry and anxiety will have a more negative self-concept than a more emotionally balanced individual. These findings are consistent with other authors (Pilarska, 2018; Larsen & Buss, 2009; McEwan et al., 2019). In the case of linear regression, these associations were again statistically significantly confirmed. According to our findings, the only personality factor with no predictive influence on adolescent self-concept is agreeableness.

#### Acknowledgments

The paper is part of the project VEGA 1/0765/21 Multidimensional self-concept of the digital adolescent generation in Slovakia and its contexts.

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