

## SLOVAK ADOLESCENTS' SELF-CONCEPT AS A PREDICTOR OF THEIR SCHOOL ENGAGEMENT

**Beata Žitniaková Gurgová, & Lenka Ďuricová**  
*Faculty of Education, Matej Bel University (Slovakia)*

### Abstract

A student's school engagement is a significant factor in his/her school success (Appleton et al., 2006; Simons-Morton & Chen, 2009; Wang, 2009). Student self-concept is also associated with school performance according to previous research (e.g., Marsh & Martin, 2011). The present study builds on the results of the investigation of the correlations between the overall self-concept of Slovak adolescents and their school engagement. However, its aim is to confirm the individual dimensions of adolescents' self-concept in the Piers-Harris sense in the role of predictors of their overall school engagement. Thus, the ambition of the research study is to contribute to the explanation of the construct of school engagement. The research sample consists of 1013 adolescents ( $M_{Age} = 17.00$ ,  $SD_{Age} = 1.27$ ) from different regions of the Slovak Republic. ASCSS/Adolescents' Self-Concept Short Scale (Veiga & Leite, 2016) and SES-4DS/Student Engagement in Schools - Four-dimensional Scale (Veiga, 2016) were used as research instruments. Multiple regression analysis deepened the results of the correlational analysis and a statistically significant regression model explained approximately 45% of the adolescent school engagement variable. In the role of significant predictors in relation to school engagement, the model confirms three of the six dimensions of adolescents' self-concept in the Piers-Harris sense: behaviour, popularity, and intellectual status. The discussion focuses on finding parallels with the dimensions of the construct of school engagement (behavioural, affective and cognitive). The results of the research study (despite its limits: self-reports, data collection) can be used in setting up intervention programs oriented towards strengthening students' school engagement and secondarily improving their academic performance.

**Keywords:** *Adolescence, school engagement, self-concept.*

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### 1. Introduction

School engagement and self-enhancement are two main constructs that explain appropriate school adjustment (Veiga et al., 2015). School engagement (SES) is a topical issue that has been the focus of many scholars for the past two decades (Appleton et al., 2008; Fredricks et al., 2004; Reeve & Tseng, 2011). The study of school engagement is currently a topic of great interest in psychoeducational research because it offers new possibilities for developing students (Ramos-Díaz et al., 2016). Students who are highly engaged in school perform well academically, use effective learning strategies, maintain good interpersonal relationships in the classroom, feel a sense of belonging, and behave appropriately toward students and teachers in the classroom (Wentzel, 2003). SES has been previously operationalised as an indicator of students' commitment to school and motivation to learn (Simons-Morton & Chen, 2009; Veiga et al., 2012). In general, there is consensus on its multidimensional nature, and it is often presented as a meta-construct (Fredricks et al., 2004; Jimerson et al., 2003). School engagement refers to "energized, directed, and continued action, or the discernible qualities of students' interactions with learning activities or environments" (Wang & Peck, 2013, p. 1266). In fact, engagement involves a trichotomy of behavioural, cognitive, and emotional dimensions (Reeve & Tseng, 2011). Behavioural engagement in school includes physical presence in the classroom or school and active participation in the learning process (Fredricks et al., 2004; Wang & Peck, 2013). Cognitive engagement in school refers to effective self-management of educational approaches and strategic planning, and monitoring and evaluating short- and long-term learning outcomes (Fredricks et al., 2004; Zimmerman, 1989). Emotional engagement in school involves affective responses to the school environment and activities (Fredricks et al., 2004; Skinner & Belmont, 1993; Voelkl, 1997). This multidimensional concept of school engagement facilitates understanding students' actions, feelings, and thoughts toward school, which can directly and indirectly influence their educational outcomes (Fredricks et al., 2004; Wang & Peck, 2013). Students with higher engagement achieve higher

academic success. Conversely, students who exhibit lower engagement, e.g., truancy, are more likely to fail (Appleton et al., 2006; Simons-Morton, Chen, 2009; Wang, 2009; Wang et al., 2010).

Self-concept represents the set of ideas that individuals have about themselves based on self-assessment and evaluation by others (Shavelson et al., 1976). In a broader sense, self-concept can best be defined as "the central operationalisation of the perceived competence" (Marsh et al., 2017). Self-concept is very important in terms of adolescents' adjustment (Fuentes et al., 2011; Rodríguez-Fernández, 2012). As with school engagement, self-concept relates to academic motivation and performance (Green et al., 2012). Several research studies have highlighted the links between school engagement and self-enhancement (Karababa, 2020). Veiga et al. (2015) point to the associations of self-concept and school engagement in developmental contexts in research with younger, middle, and older adolescents. The research highlights associations between these constructs but also changes in the associations between their dimensions across adolescence. Some research on the relationship between school engagement and students' self-concept also examines the effects of social factors in students' lives (social support from family and classmates - Ramoz-Diaz et al., 2016; teachers and pupils as motivators - Raufelder et al., 2013; Bakadorova & Raufelder, 2017; social support and resilience - Rodríguez-Fernández et al., 2018; social relationships in school, belonging and powerlessness as mediators - Raufelder et al., 2013).

The present study builds on the results of the investigation of the correlations between the overall self-concept of Slovak adolescents and their school engagement. However, its aim is to confirm the individual dimensions of adolescents' self-concept in the Piers-Harris sense in the role of predictors of their overall school engagement. Thus, the ambition of the research study is to contribute to the explanation of the construct of school engagement.

## 2. Methods

The research file comprised 1,013 Slovak adolescents aged 15 to 20, 73% female. The research involved a combination of cluster sampling (multiple random collection sites) and voluntary sampling (people using these specific sites responded to the online survey). The online questionnaire was distributed via official representatives of different secondary schools across Slovakia. The online form included:

Adolescents' Self-concept Short Scale/ASCSS (Veiga & Leite, 2016). A shortened 30-item version of the original PHCSCS - 2 / Piers-Harris Children's Self-Concept Scale 2 (Piers & Herzberg, 2002) was used. The original factor structure was retained. Each of the six dimensions (Anxiety, Physical Appearance, Behaviour, Popularity, Happiness, Intellectual status) is saturated by five items, and the respondent provides their opinion on the statements using a 6-point Likert scale (1=strongly disagree; 6=strongly agree). In addition to the raw scores in the individual dimensions, this questionnaire allows for the identification of the total self-concept score of the given adolescent. According to Veiga and Leite (2016), the internal consistency of the individual dimensions (Cronbach's alpha) of this questionnaire tested on a sample of 440 Portuguese adolescents varied from .70 to .79. 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 ( $\alpha = .89$ ).

Student Engagement in School – A Four-Dimensional Scale/SES-4DS (Veiga et al., 2015). It is a 20-item self-reporting questionnaire for adolescents that explores the four dimensions of school engagement. The three standard dimensions (cognitive, affective, behavioural) were complemented by agency, which refers to the students' active interest in learning, their level of independence in relation to learning, and knowledge acquisition. Each dimension consists of five items. The respondent provides their opinion on each statement using a 6-point scale (1 = absolutely disagree; 6 = absolutely agree). Besides the raw score for individual dimensions, the total school engagement score can be calculated. The internal consistency of the individual dimensions of the adapted questionnaire was deemed satisfactory ( $\alpha = .67 - .84$ ).

## 3. Results

Tables 1 present the descriptive characteristics of the variables of interest according to the research instruments used. Considering the results of the Shapiro-Wilk normality test, the relationships between the variables were examined through the non-parametric Spearman's coefficient (Table 2). All measured correlations between overall school engagement and self-enhancement dimensions showed statistical significance. Moderate positive significant relationships were confirmed for total school engagement and adolescents' total self-concept, behaviour, popularity and intellectual status. The linear regression (Table 3) results show that the dimensions of self-enhancement explain approximately 45% of adolescents' total school engagement.

Table 1. Descriptive characteristics of the variables ASCSS and SES TOT (N = 1013).

	SES_TOT	PH_TOT	PH_ANX	PH_APP	PH_BEH	PH_POP	PH_HAP	PH_INT
Mode	3.739 <sup>a</sup>	3.890 <sup>a</sup>	3.293	4.208	4.830	4.671	3.895 <sup>a</sup>	3.470
Median	3.700	3.933	3.400	3.800	4.600	4.600	4.000	3.600
Mean	3.738	3.935	3.384	3.805	4.381	4.444	3.997	3.600
Std. Deviation	0.643	0.760	1.158	1.167	0.995	1.067	1.171	0.985
Shapiro-Wilk	0.996	0.997	0.987	0.985	0.959	0.959	0.973	0.993
P-value of Shapiro-Wilk	0.007	0.033	< .001	< .001	< .001	< .001	< .001	< .001
Minimum	1.850	1.100	1.000	1.000	1.000	1.000	1.000	1.000
Maximum	5.600	5.900	6.000	6.000	6.000	6.000	6.000	6.000

Note: ASCSS = Adolescents' Self-concept Short Scale, SES TOT=total school engagement, PH TOT= total self-concept score, PH ANX=anxiety, PH APP=physical appearance, PH BEH=behaviour, PH POP=popularity, PH HAP=happiness, PH INT=intellectual status

Table 2. Relationship (Spearman's correlation) between school engagement and adolescent self-concept (N=1013).

	PH_TOT	PH_ANX	PH_APP	PH_BEH	PH_POP	PH_HAP	PH_INT
<b>SES TOT</b>	.542***	.243***	.289***	.340***	.401***	.403***	.624***

Note: ASCSS = Adolescents' Self-concept Short Scale, SES TOT=total school engagement, PH TOT= total self-concept score, PH ANX=anxiety, PH APP=physical appearance, PH BEH=behaviour, PH POP=popularity, PH HAP=happiness, PH INT=intellectual status, \*\*\*p<.001

Table 3. Regression model and estimation of regression coefficients for total school engagement as explanatory variable (N = 1013).

Model	R	R <sup>2</sup>	adj. R <sup>2</sup>	F	p
<b>H4</b>	.672	.451	.449	276.221	<.001
H4	B	Beta	t	p	
(intercept)	1.674	-	19.923	<.001	
<b>PH BEH</b>	.073	.112	4.439	<.001	
<b>PH POP</b>	.112	.185	7.185	<.001	
<b>PH INT</b>	.347	.532	20.819	<.001	

Note: PH BEH=behaviour, PH POP=popularity, PH INT=intellectual status, 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

Our research aimed to contribute to explaining the construct of school engagement. The study aimed to validate the different dimensions of adolescents' self-concept in the Piers-Harris sense as predictors of their overall school engagement. Correlation and regression analysis results showed a positive association between these variables. The statistically significant moderately positive correlation coefficient between overall school engagement and the dimension of anxiety (not being anxious) is confirmed by the longitudinal research of Morales et al. (2022), which confirmed that children aged 8-12 years with lower academic self-concept had higher anxiety. Non-anxiety relates to the affective dimension of school engagement. Regulating and managing emotions appropriately is an important skill not only in the school setting. The statistically significant moderately positive correlation coefficient between overall school engagement and the physical appearance dimension represents a factor that facilitates adolescents' social interaction at school. Moderate positive significant relationships were confirmed for overall school engagement and adolescents' overall self-concept, behaviour, popularity and intellectual status. Overall school engagement was positively related to students' self-concept, as well as their ability to adapt to school situations, their perceived popularity in the group, and their perceived intellectual status. The behavioural and cognitive levels of school engagement are more prominent in these relationships. These results are supported by the research of Veiga et al. (2015), Ramos-Díaz et al. (2016), Bakadorova & Raufelder (2017), and Karababa (2020). The linear regression results show that the dimensions of self-enhancement explain approximately 45% of adolescents' total school engagement. Thus, it can be concluded that self-concept significantly predicts school engagement. Positive self-concept in adolescents encourages the development

of student self-regulation and academic achievement and automatically increases student engagement in the educational process (Galugu & Samsinar, 2019). Despite some limitations of our study, such as the online mode of collection and methodologies based on respondents' self-reporting, we can note its originality concerning national data collection. We find inspiration for further research precisely in searching and validating the social-psychological determinants that act on school engagement and self-enhancement. Our study highlights the need to design and apply intervention programs in young people to enhance self-enhancement with implications for school engagement. Especially during adolescence, self-esteem is easily vulnerable, and its reduced level also negatively affects school engagement. Improving adolescents' self-esteem can improve the students' standing in school and their academic performance, thus increasing their satisfaction in school.

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