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Research Paper

The Effect of Personal Best Goals and Social-Emotional Learning on Academic Engagement through the Mediation of Academic Buoyancy

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Abstract

This study explored the potential relationship between personal best goals and social-emotional learning with academic engagement. Furthermore, the mediating role of academic buoyancy was tested in these relationships. The participants were 350 high school students in Ahvaz who were selected by multi-stage cluster sampling method and completed the instruments of the best personal goals, socio-emotional competencies, academic buoyancy and academic engagement. The validity and reliability of the instruments were confirmed by confirmatory factor analysis and Cronbach's alpha coefficient. The results of structural equation modeling showed that the best personal goals and socio-emotional learning to have a direct and significant effect on academic engagement. Moreover, the findings indicate that academic buoyancy has a direct and positive relationship with academic engagement. In addition, academic buoyancy played a significant mediating role in the relationship of the best personal goals and socio-emotional learning with students' academic engagement. In general, the results indicate that the best personal goals and socio-emotional learning both directly and indirectly

through the mediation of academic buoyancy can help increase the academic engagement of adolescent students.

Keywords: *Personal best goals, Social-emotional learning, Academic buoyancy, Academic engagement*

Introduction

Adolescence is a unique and challenging developmental stage in which adolescents, in addition to the biological, cognitive, and psychological changes associated with puberty due to the mismatch between developmental needs and the learning environment during the transition from elementary to junior and senior high school, they experience significant changes in their work and academic life, including academic engagement (Wang, et al., 2020). Although the importance of academic engagement has been emphasized, recent studies show that not all adolescents exhibit high levels of academic engagement (Zhen, et al., 2019). Therefore, successful completion of high school is one of the most important tasks and concerns during adolescence.

Empirical evidence shows that one of the most prominent mechanisms that play an important role in determining students' academic engagement is personal best goals (Burns, et al, 2019). In addition, it has recently been reported that students' academic engagement is significantly affected by social-emotional learning (Yang, et al., 2018). There is also emerging evidence that academic buoyancy may mediate the effects of personal best goals and social-emotional learning on students' academic engagement (Tarbetsky, et al., 2017).

In general, based on the above, the experimental evidence to date has been obtained exclusively from Western examples and the generalization of the results to the population of Iranian adolescent students is unknown. Therefore, in order to address the above-mentioned research gaps, this study examines a model in Iranian adolescent students to evaluate the effect of personal best goals and socio-emotional learning on academic engagement through the mediation of academic buoyancy. In general, it is assumed that the causal model fits the personal best goals and socio-emotional learning with academic engagement through the mediation of academic buoyancy with data.

Methodology

This study was of descriptive correlation type. The statistical population of the study comprised all high school students in Ahvaz during the academic year 2019-2020. Multi-stage cluster random sampling method was used to select 350 students as the research sample. In order to collect the data, the following tools were used:

Academic engagement scale: Students' academic engagement was assessed using the student engagement scale of the motivation and engagement scale-high school (Martin, 2011). This subscale contains 12 items. In the present study, the validity of the scale was obtained by confirmatory factor analysis, and its reliability was obtained by Cronbach's alpha (.88).

Personal best goals scale: The 4-item personal best goals scale (Martin, et al., 2010) is used to assess the students' personal best goals. In this study, the validity of the scale was confirmed by confirmatory factor analysis and its reliability by Cronbach's alpha (.83).

Social-emotional competence questionnaire: In order to measure how adolescents are aware of their social-emotional learning, the social-emotional competence questionnaire (Zhou, et al., 2012) was used. In the present study, the validity of the questionnaire was obtained by confirmatory factor analysis, and its reliability fell within the acceptable range of .91 by Cronbach's alpha method.

Academic buoyancy scale: To measure the buoyancy of students when faced with everyday academic problems, the academic buoyancy scale with 4 items was used (Martin, et al., 2009). In this study, the validity of the scale was obtained by confirmatory factor analysis, and its reliability was obtained by Cronbach's alpha (.77). After data collection, SPSS software version 26 was used to calculate descriptive and inferential statistics. Also, structural equation modeling was evaluated with AMOS software version 24.

Results

The findings showed that boys and girls accounted for 43.70% (152 n) and 56.30% (196 n) of the participants, respectively. Participants ranged in age from 15 to 19 years, with a mean of 16.29 years and a standard deviation of .94. Descriptive statistics and correlation matrix of research variables can be seen in Table 1.

Table 1: Correlation, mean, standard deviation, skewness and kurtosis of research variables.

Variable	1	2	3	4	5	6	7	8	9	10
1. Personal best goals	-									
2. Self-awareness	.44**	-								

Variable	1	2	3	4	5	6	7	8	9	10
3. Social-awareness	.26**	.46**	-							
4. Self-management	.24**	.31**	.37**	-						
5. Relationship management	.43**	.55**	.42**	.48**	-					
6. Responsible decision making	.46**	.56**	.49**	.44**	.62**	-				
7. Academic buoyancy	.40**	.31**	.32**	.50**	.41**	.38**	-			
8. Planning	.52**	.25**	.29**	.33**	.31**	.41**	.41**	-		
9. Task management	.51**	.36**	.23**	.19**	.39**	.39**	.37**	.63**	-	
10. Persistence	.54**	.34**	.28**	.26**	.36**	.41**	.40**	.69**	.61**	-
Mean	25.10	26.48	21.73	22.01	24.93	25.11	22.23	22.55	24.06	23.50
SD	3.23	3.45	5.47	6.03	4.28	4.17	4.97	4.37	3.66	4.08
Skewness	-1.63	-1.77	-.56	-.64	-1.05	-1.08	-1.02	-.80	-1.15	-.95
Kurtosis	3.06	5.38	-.14	-.20	1.26	1.88	.56	.06	1.16	.37

**p < .01

The results of Table 1 show that there were positive and significant relationships between research variables. After examining the hypotheses, the proposed model was tested. The findings showed that the data fit well with the proposed model (χ^2/df = 3.45, GFI = .94, CFI, .95, NFI, .93, IFI = .95, RMSEA = .08); therefore, the proposed model was selected as the final model for this study. According to the fit of the data with the proposed model, Figure 1 show the path coefficients of the final model. According to Figure 1, all measured variables had a relatively strong correlation with their factors.

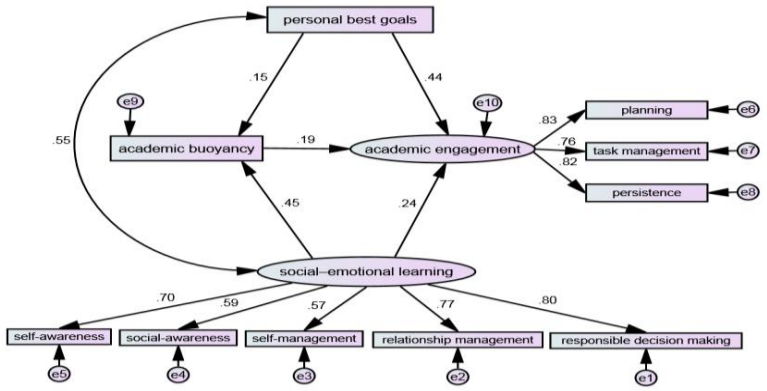

Figure 1: Structural model of relationships of personal best goals and social-emotional learning with academic engagement through mediation of academic buoyancy in adolescent students.

Examination of standardized beta coefficients shows that the personal best goals had a positive and significant effect on academic buoyancy ($p = .01$, $\beta = .15$) and academic engagement ($p = .01$, $\beta = .44$). In addition, socio-emotional learning had a positive and significant relationship with academic buoyancy ($p = .01$, $\beta = .45$) and academic engagement ($p = .01$, $\beta = .24$). Finally, academic buoyancy played a positive and significant role in predicting academic engagement ($p = .01$, $\beta = .24$). It is noteworthy that the proposed model explained a significant ratio of the variance of academic buoyancy (.30) and academic engagement (.51).

Moreover, the results showed that academic buoyancy played a significant mediating role in the relationship of personal best goals ($p = .05$, $\beta = .03$) and socio-emotional learning ($p = .05$, $\beta = .09$) with academic engagement.

Discussion and conclusion

The results show that the personal best goals positively and significantly predict academic engagement. In addition, the findings indicate the positive and significant role of the personal best goals in predicting academic buoyancy. Furthermore, the results indicate that socio-emotional learning had a direct and positive effect on academic engagement. One of the key findings of this study is the positive and significant relationship between socio-emotional learning and academic buoyancy. Furthermore, academic buoyancy had a positive and significant effect on academic engagement. In addition, one of the outstanding results of this study is the significant relationship between personal best goals and academic engagement through the mediation of academic buoyancy. Similarly, the analysis of indirect effects shows that

academic buoyancy played an important role in the relationship between socio-emotional learning and academic engagement of adolescent students.

This research had potential limitations. First, data were collected using self-report tools. Second, it was a quantitative study in which the level of understanding was somewhat limited.

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