Research Paper

The Relationship Between Academic Support and Well-being in Students Through Mediation of Resilience

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A B S T R A C T

Background: Resilience is considered as one of the normal structures and concepts in positive psychology to better adjust to stressful situations and achieve well-being.

Objectives: The present study aimed to investigate the mediating role of resilience in the relationship between academic support and academic well-being in students.

Materials & Methods: This was a descriptive cross-sectional study using structural equation modeling (SEM). The statistical population comprised all high school students of Khorramabad city in the school year 2020-21, among which, 353 students were selected through multistage cluster random sampling. The research instruments included Academic Support Scale, Academic Well-Being Questionnaire, and Academic Resilience Inventory. Data were analyzed using the SEM technique.

Results: There was a positive relationship between academic support and academic well-being (β=0.33; P<0.001) in the students. There was a direct relationship between academic resilience and academic well-being in the students (β=0.55; P<0.001). There was also a positive relationship between academic support and academic resilience in the students (β=0.23; P<0.001). Academic resilience had a mediating role in the relationship between academic support and academic well-being in high school students (P<0.001).

Conclusion: Accordingly, the model had a good fit to the data. School principals and teachers should improve students' well-being by increasing academic support and resilience.

Keywords: Health, Resilience, Well-being, Students

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1. Introduction

Adolescence is a period of development, which brings about a wide range of changes in individuals' cognitive, emotional, and behavioral characteristics [1]. Taking into account the importance of education during this period, one of the crucial concepts is academic well-being, which is defined as having positive feelings toward learning, a sense of control over academic tasks, an interest in learning, and a sense of academic self-efficacy. Well-being is a multifaceted structure that is a crucial resource for adolescents [2, 3]. Considering the importance of the role of school and academic achievement in the personal and social lives of adolescents, the well-being of this group can be defined in the context of school [4, 5]. School is one of these systems that plays a vital role in the accomplishment of this goal. A productive educational environment, supportive teachers, sincere peers, as well as extensive and challenging are vitally important in increasing adolescents' motivation to achieve success and development [6, 7]. However, the success or failure of adolescents cannot be merely dependent on the educational environment, another social environment such as family and relationships with friends and peers should be taken into account as well. The majority of teachers and authorities are concerned about investigating and discovering the factors causing educational problems in students and resolving them [8].

Providing any resources, either direct or indirect, to enhance the academic interest and performance of students is regarded as academic support. In addition to its numerous resources, the academic support constituents' different aspects such as emotional, instrumental, and cognitive support [9]. The support of teacher, parents, and peers play a crucial role in the quality and quantity of academic activities of students. These supports perfectly predict happiness and academic output. The results of studies confirm this relationship in various statistical societies such as university students and adolescents [10-13]. Students' perception of social support in the environment of school leads to positive interaction with school authorities [14]. Furthermore, the educational performance of students is predicted using the social support of family and teachers. Peers play a vital role in the psychological development of adolescents [15, 16]. Their peers provide facilities to learn personal, social, and educational skills [17]. Patria and Laili [18] pointed out that perceived social support, either directly or indirectly, predicts academic procrastination. Huang et al.

[19] suggested that the components of perceived social support predict academic well-being in students.

On the other hand, students constantly face psychological pressures, obstacles, and challenges in course education, which are an inseparable part of their academic lives. In cases of academic achievement, the learners are expected to engage in educational activities, learning, and achieving the standards determined for subjective competency. To better adjust to stressful situations and achieve well-being, resilience is regarded as one of the normal structures and concepts studied in positive psychology [20]. Resilience refers to the ability to successfully adjust to threatening situations. Academic resilience is defined as the ability to effectively deal with falling back, pressure, or stress in educational situations [21]. Romano et al. [22] defined academic resilience as the ability to surmount acute or chronic adversities. The adversities that reduce academic engagement, lead to dropping out of school, or reduce academic achievement.

In addition to its direct effect on educational outputs, academic resilience mediates the effects of personal, family, and social resources on educational output as a probable mediating variable. For instance, previous studies found a positive relationship between resilience with academic adjustment, achievement, and factors of academic engagement such as self-efficacy, planning, and diligence [23]. Furthermore, several studies confirmed the mediating role of academic resilience [23, 24]. Therefore, based on the issues outlined above, the main objective of the current study was to investigate the relationship between academic support and the well-being of students through the mediation of resilience using struacatural equation modeling (SEM).

2. Materials and Methods

Study type and population

This cross-sectional study was conducted on all high school students of Khorramabad city in the school year 2020-21. The inclusion criteria consisted of studying at high school and having no records of serious medical and psychiatric diseases. Upon considering the number of variables, a sample size of 400 students was calculated and selected using cluster random sampling. Out of 19 high schools for boys, two all-boys high schools were randomly selected. A total of 12 classes (6 classes per school) were randomly selected. A consent form was obtained from the students to be completed if they wish to participate in the research. The form was filled out online and ensured the participants concerning the confi-

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dentiality of the data. On account of the COVID-19 pandemic and school closure, the link of the questionnaire on Porsline website was sent to the students via Shad's social network and WhatsApp.

Measures

The Academic Well-Being Questionnaire developed by Tuominen-Soini et al. [25] is a self-report questionnaire that measures the success or failure of the respondent via 31 items about their beliefs. Two methods were used to score the questionnaire, i.e. the 7-point Likert scale and the 5-point Likert scale. This questionnaire includes four subscales, i.e. school value (9 items, scoring based on a 7-point Likert scale from 1 to 7), school burnout (9 items, scoring based on a 7-point Likert scale from 1 to 7), academic satisfaction (4 items, scoring based on a 5-point Likert scale from 1 to 5), and integration with school staff (9 items, scoring based on a 7-point Likert scale from 1 to 7). The range of scores for the school value, academic burnout, and the integration with school staff subscales were 9 to 63, and for the integration with school staff subscale was 4 to 20. The overall score in this questionnaire was between 31 and 209. Moradi et al. [26] reported Cronbach's alpha coefficient of 0.87 for this questionnaire.

The Academic Support Scale comprises 24 questions and four dimensions. Each dimension includes 6 questions that assess the academic support from four resources; teacher, peers, father, and mother. The questions score on the basis of a 4-point Likert scale from 1 (totally disagree) to 4 (totally agree). The total score range is from 24 to 96 [27]. Samani and Jafari [28] reported Cronbach's alpha coefficient of 0.85 for the scale.

The Academic Resilience Inventory developed by Samuels [29] contains 40 questions. The participants are asked to rate their resilience based on a 5-point Likert scale from totally disagree (1) to totally agree (5). Having normalized in Iran, the academic resilience questionnaire was decreased from 40 to 29 questions by Soltaninejad et al. [30]. The highest score on this questionnaire is 145 and the lowest score is 29. Obtaining a high score in this questionnaire indicates high academic resilience and a low score indicates poor academic resilience in individuals. Soltaninejad et al. [30] reported Cronbach's alpha coefficient of 0.77 for this scale.

Statistical analyses

Data were analyzed using descriptive and inferential statistics including Mean±SD, and Pearson correlation coefficient. Prior to analyzing the data using the SEM technique, the assumption of linearity, multicollinearity, and independence of errors were tested. To examine the normality of the data, kurtosis and skewness tests were used. Considering that all research variables enjoyed the absolute value of skewness less than 3 and the absolute value of kurtosis less than 10, no violation of the normality of the data was evident and the hypothesis of normality of data is confirmed. To assess the multicollinearity, tolerance, and variance inflation factor (VIF) statistics were used. The VIF was less than 10 and tolerance was greater than 0.1 for all variables. Thus, the hypothesis of the absence of multicollinearity was observed. In addition, to test the independent of errors hypothesis, the Durbin-Watson test was employed. The obtained amount was 1.95 and since it ranged in the spectrum of 1.5-2.5, it indicates that the hypothesis of independence of errors was obtained. To evaluate the fitness of the model, the indices including Incremental Fit Index (IFI) (>0.90), Tucker–Lewis index (TLI) (>0.90), Comparative Fit Index (CFI) (>0.90), Normed Fit Index (NFI) (>0.80), and Root Mean Square Error of Approximation (RMSEA) (<0.08) were used. The analysis was conducted in SPSS software version 23 and AMOS software, version 23.

3. Results

After eliminating the incomplete and distorted questionnaires, the remaining 353 questionnaires were analyzed. The mean age of participants was 15.06 (SD=2.4) years old. Table 1 shows descriptive statistics of study variables and Pearson correlation coefficient of the study scales. There was a significant moderate correlation between academic support and academic well-being (r=0.40) and weak correlation between academic support and resilience (r=0.18). Moreover, there was a significant moderate correlation between academic well-being and resilience (r=0.49). Figure 1 shows that the proposed model enjoyed a desirable fitting in all indices.

Table 2 demonstrates the paths and their standardized coefficients in the proposed model. According to the standardized coefficients, the strongest path was related to the direct path from resilience to well-being (β=0.55, P<0.001) followed by academic support to well-being (β=0.33, P<0.001). The bootstrapping technique was used to determine the significance of the indirect relationship of variables and examine the mediation of academic resilience. The overall effect of the predictor variable on the criterion variable was examined without the mediating variable. The results suggested that

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Table 1. Descriptive statistics of the research variables

Scales	Subscales	Mean±SD	Min.	Max.	(1)	(2)	(3)
Academic support (1)		58.23±16.11	32	85	1		
	Father's support	15.40±3.79	8	22			
	Mother's support	16.14±4.45	9	24			
	Peer support	14.29±4.09	8	20			
	Teacher support	13.53±3.74	7	19			
Academic well-being (2)		106.40±32.16	46	184	0.40**	1	
	Integration with school staff	30.66±8.94	13	54			
	School burnout	34.27±9.86	15	60			
	School value	28.89±8.51	12	51			
	Academic satisfaction	12.57±4.72	6	19			
Resilience (3)		90.19±20.24	41	103	0.18*	0.49**	1

** $P<0.01$; *$P<0.05$

Table 2. Direct and indirect path in the proposed model

Paths	Proposed Model				Total Effect
	B	SE	β	P	
Academic support→Well-being	0.42	0.07	0.33	0.001	-
Academic support→Resilience	0.39	0.06	0.23	0.001	-
Resilience→Well-being	0.68	0.10	0.55	0.001	-
Academic support to well-being through resilience	0.59	0.08	0.40	0.001	0.49
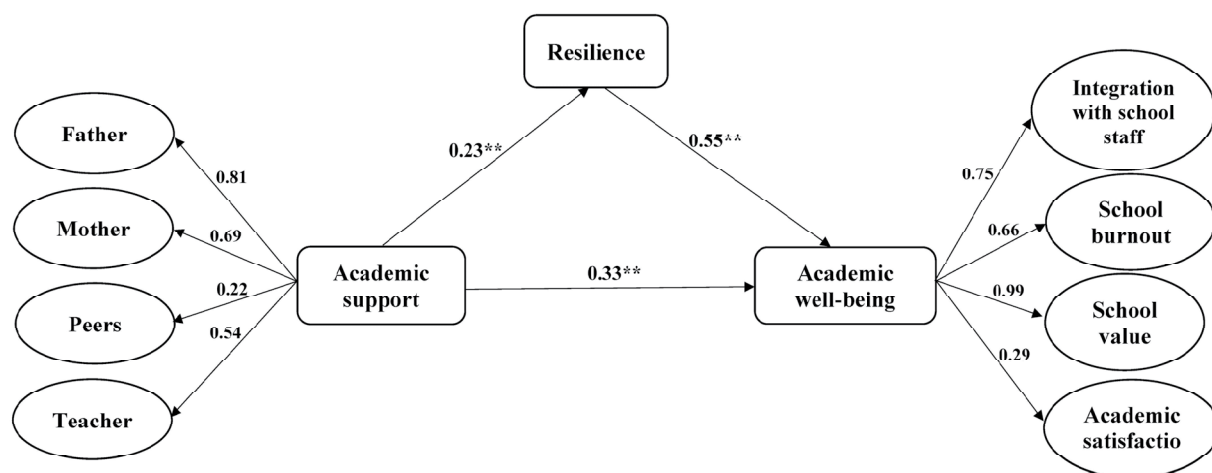
Figure 1. Proposed model of mediating role of resilience in the relationship between academic support and academic well-being (IFI=0.97; TLI=0.96; CFI=0.97; NFI=0.95; RMSEA=0.050)

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there was a significant relationship between academic support and academic well-being without mediation (β=0.33, P<0.001). The indirect relationship between academic support and academic well-being through resilience remained significant (β=0.40, P<0.001) (Table 2). It signifies that academic resilience create a part of the impact of academic support on academic well-being and partially mediates this relationship.

4. Discussion

The present study aimed to investigate the relationship between academic support and well-being in students through the mediation of resilience. According to the results, in addition to its direct relationship with academic well-being, academic support had an indirect relationship with academic well-being through academic resilience. This finding is consistent with the research results of previous studies [11, 12]. Taking into account that academic support includes the positive experiences of students with family, school, and peers during education, these experiences can affect their academic well-being. When children achieve proper growth in the family, it lays the foundation for healthy physical and psychological growth, especially during adolescence. The communication models in a family, as well as factors such as parents' attitude to education, can be influential on the achievement, self-efficacy, and academic well-being of students. The role of school, as one of the dimensions of academic support in explaining the academic well-being of students, is also evident. Various studies found that students' interaction in school has a significant relationship with the integration and active participation of students in education. In other words, as resources of students' support grow larger and more efficient, it can lead to the formation of academic outputs such as success and academic well-being [12].

To describe the consistent relationship between academic support and academic resilience, it can be argued that students with extensive academic support in school are studying in a supportive school context. They have teachers and authorities who encourage their good performance. They feel secure and peaceful conditions at school and take on beneficial roles in school. Receive clear and precise rules and regulations from their school [31]. The direct and significant relationship of support at school with resilience suggested that providing a safe and supportive school environment, encouraging and attentive teachers, and ample extracurricular facilities in school enhances students' resilience when facing academic problems. The quality of the support from friends and peers leads to the flexibility and resilience of stu-

dents in stressful situations. One of the factors affecting students' academic resilience in school [10, 32]. A school that provides emotional and financial support for students and offers an appropriate resilience role model for them to follow enhances students' resilience when dealing with academic problems. Furthermore, adolescents who have the support of their families, cope better and are more successful with problems, and exhibit higher levels of resilience in school.

Academic resilience refers to the ability to maintain high levels of motivation to progress and perform optimally despite of stressful events and conditions, during which the students probably deliver poor performance or failure [23]. To explain this relationship, it can also be said that by increasing the level of motivation for progress and resilience, the degree of student involvement in educational tasks and activities increases, and as a result, the student's academic performance improves [21]. Consequently, it improves their educational performance. Considering the literature of the research, adjustment to the academic problems increases the possibility of their engagement with educational activities and as a result, it leads to their academic achievement and higher accomplishments such as academic well-being in school. Taking into account these two relationships simultaneously, it can be stated that in the proposed model of this research, academic support had a relationship with academic well-being through its impact on the student's academic resilience. Moreover, academic resilience partially mediated this relationship.

5. Conclusion

The results suggested that academic support has a direct and indirect effect on academic well-being. School authorities and parents are recommended to take into account four resources of academic support and increase them as the factors influencing students' academic resilience and take effective measures to elevate students' academic well-being.

This research has a few limitations which must be taken into consideration when interpreting the results. This was a cross-sectional study and the research variables were measured at the same time so prohibit us from deciding on temporal association between variables. This research was conducted during the COVID-19 pandemic; thus, the relationships might change over time. The research sample merely comprised high school students of Khorramabad city, therefore, the local and cultural considerations might influence the results. In light

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of that, generalizing the results of this research to other communities should be carried out with caution.

Ethical Considerations

Compliance with ethical guidelines

Funding

Authors' contributions

All authors equally contributed to preparing this article.

Conflict of interest

There are no conflicts of interest regarding the publication of the current research.

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