Developing a model of Students' Academic Burnout Based on academic Support: The Intermediating Role of Academic Engagement

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One of the serious problems in educational systems around the world is the increase in academic burnout among university students. The aim of the present study was to investigate the relationship between academic support and students' academic burnout through the mediating variable of academic engagement. The research method was descriptive-correlational. The population included all undergraduate students of Islamic Azad University, Qaenat Branch during the academic year of 1998-99, from which 205 (98 females and 107 males) were selected based on stratified random sampling. To collect data, three questionnaires were used, including the Sands and Plankt (2005) Academic Support Scale, the Modified Maslach Academic Burnout Questionnaire (2002) and the Academic Engagement Questionnaire (Reeve, 2013). Data analysis was performed using AMOS software (version 20) and structural equation modeling method. The results of data analysis revealed that the model has a good fit with research data. According to the findings, the direct path of academic support to academic burnout was significant. The indirect path from academic support to academic burnout through the mediating variable of academic engagement was also significant. Overall, the results of the present study show that academic support through influencing students' academic engagement as well as reducing their academic burnout can lead to active involvement of students in academic activities.

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Keywords: Academic Involvement, Academic Support, Academic Burnout, Structural Equation Method

NOVELTY AND RELEVANCE

What is already known about the topic?

Since no research has so far investigated the variables studied in the present study altogether and in the form of a comprehensive model, the research gap and the need for conducting this research becomes clear

What this paper adds?

Identifying this phenomenon and the factors affecting it can help administrates to predict some of the risky behaviors of students such as dropout, etc. so that they can prevent the occurrence of such behaviors by providing optimal conditions and preventive and coping programs.

INTRODUCTION

In recent years, the study of teaching and learning process has attracted the attention of many experts and researchers in the field of education. Accordingly, many researchers have focused on individual, psychological and social factors to study the level of learning and academic achievement of students. Undoubtedly, various factors affect students' academic achievement. Among these, academic burnout is one of the important factors that has a negative impact on students' academic achievement and has been considered by many researchers. People suffer from burnout when they are constantly exposed to psychological pressures and environmental stresses in long-term and are unable to adapt to the above conditions. According to some experts, burnout is a disorder that occurs as a result of long-term exposure to environmental stress and leads to psychological and even physical problems (Saatchi, 1995). Some experts also believe that burnout is not a mental disorder, but rather it progresses gradually over time and can lead to mental disabilities (Schaufeli et al., 2002).

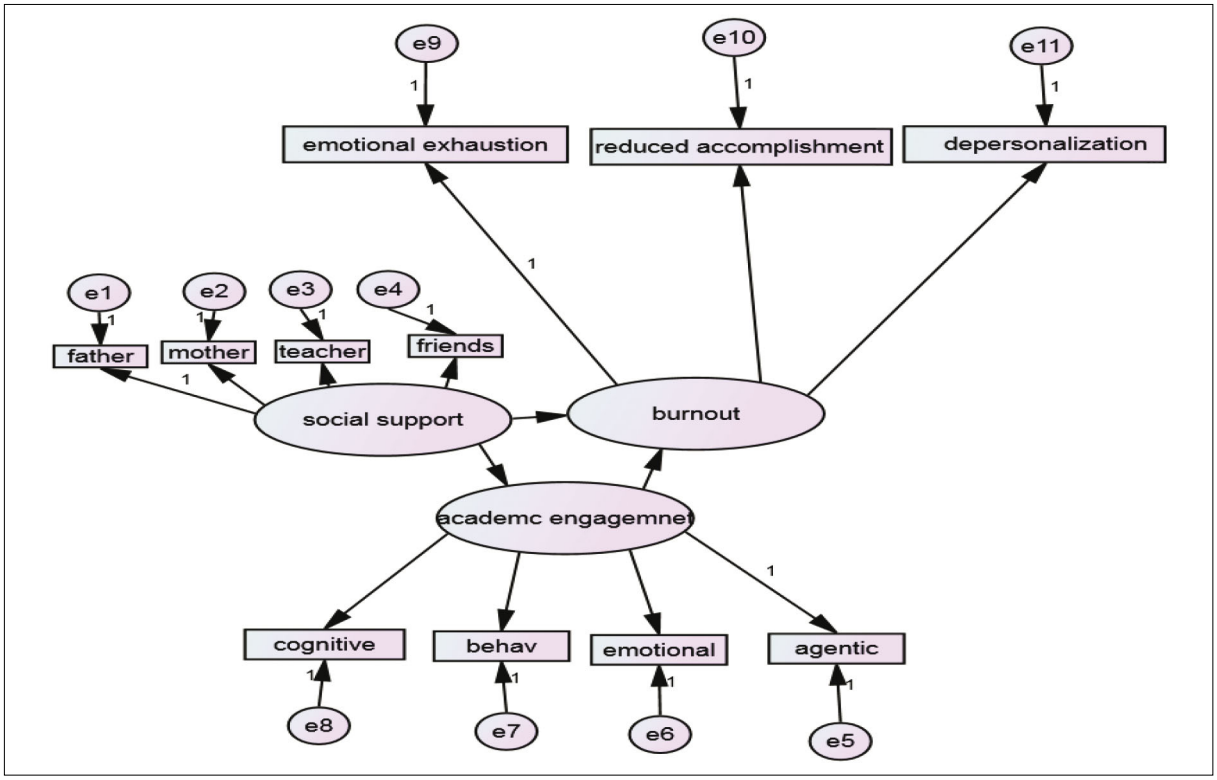
Statement of the problem

Since universities have a key role in training specialized and efficient human resources in the society, it is expected that by monitoring the students' academic performance and mental health, it is possible to provide conditions that students can progress in their career with enthusiasm and motivation, regardless of any psychological or environmental stress. As a result, identifying the factors affecting students' academic performance is of high importance in order to plan, complete and excel educational programs. One of the factors that affect the physical and mental health and ultimately the academic performance of students and has recently attracted the attention of many researchers is academic burnout (Falsafinejad et al., 2013). Burnout at high levels can have negative and harmful consequences, both physically such as insomnia, weakened immune system and psychologically such as stress, severe psychological and emotional problems. In stressful situations, some factors such as personality traits, stress coping skills as well as social support appear in the role of moderating variables (Sarason, 1988). A review of previous research shows that despite the frequency of studies on burnout among different groups such as teachers, nurses and staff (Saatchi, 1995), research on burnout among Iranian students and the recognition of predictor variables is rare. In addition, the results of previous researches indicate an increase in academic burnout among learners, which in turn doubles the importance of investigating the issue of burnout and identifying the variables affecting it. Since no research has so far investigated the variables studied in the present study altogether and in the form of a comprehensive model, the research gap and the need for conducting this research becomes clear. Therefore, the present study was conducted with the aim of predicting academic burnout based on the amount of academic support, taking into account the mediating role of academic engagement.

The significance of the study

Academic burnout is one of the factors that negatively affect students' learning, and consequently affect their academic performance, which in turn hinders the fulfillment of educational missions and goals of universities. Regarding the increasing trend of academic burnout in academic settings, it has attracted the attention of many scholars and researchers as one of the most important topics that can be researched in universities and identifying its predictor variables is of high importance. The scope of this syndrome can continue in the form of work burnout or mental problems in the future working life of this group of educated people. Therefore, conducting research in this field is of great importance and necessity. The results of this study can be of great help to administrators in universities, professors, and families since it will provide insights to reduce the problem of

Figure 1. Conceptual model of research



burnout in universities. Identifying this phenomenon and the factors affecting it can help administrates to predict some of the risky behaviors of students such as dropout, etc. so that they can prevent the occurrence of such behaviors by providing optimal conditions and preventive and coping programs.

Purpose of the study

The purpose of this study was to investigate the relationship between the subcomponents of academic support and the academic burnout among Iranian students, considering the mediating role of academic engagement. In this regard, the present study intended to examine and test the following hypotheses:

H1: There is a significant correlation between the subcomponents of learners' academic support and academic burnout.

H2: There is a significant correlation between the subcomponents of learners' academic engagement and academic burnout.

In this regard, the conceptual model of the present study was drawn in such a way that the direct relationships between the subcomponents of academic support and academic burnout can be investigated. In addition, the variable of academic engagement was considered as a mediating variable in order to test its effect on academic burnout. Figure 1 shows the conceptual model of the present study.

REVIEW OF LITERATURE

The concept of burnout was first introduced by Frieden Berger in 1974 and manifests itself in the form of symptoms such as emotional exhaustion, depersonalization and reduced professional accomplishment (Maslach & Jackson, 1984), decreased motivation, dissatisfaction and social conflicts (Yuludog and Yaratan, 2010). If burnout spreads to educational contexts and situations, it is referred to as academic burnout. Academic burnout refers to a sense of pessimism and lack of interest in doing homework and participation in class activities (depersonalization), feelings of inadequacy as a student (inefficiency), and feelings of extreme emotional exhaustion due to academic demands and requirements (emotional exhaustion) (Schaufeli et al., 2002). Academic burnout, by infiltrating the educational system at all levels of education, causes a waste of potential human resources and costs,

resulting in constant stress, pressure and time constraints, lack of necessary resources and support to perform the assigned tasks and duties (Maslach et al., 2001).

Academic burnout in students can lead to lack of participation in classroom activities, feeling of inability to learn subjects, feeling of inefficiency in classroom activities, and ultimately academic failure or dropout (Balkis, 2013). Negative consequences of burnout include increased feelings of hopelessness, irritability, helplessness and lack of sufficient academic motivation in learners, which will eventually decrease learning achievements and academic performance (Duru, Duru & Balkis, 2014).

Three components of burnout are:

– *Emotional exhaustion:* It refers to the feeling of being busy, physical and mental fatigue and feeling of lack of emotional resources.
– *Depersonalization:* It refers to negative, cold, harsh, or insensitive attitudes and behaviors toward others to the extent that it is characterized by indifference to work and clients. People who suffer from depersonalization have a negative feeling about those who are around them, which eventually leads to distancing themselves from people.
– *Reduced professional accomplishment:* It refers to negative self-assessment that includes general self-dissatisfaction regarding professional abilities and effectiveness in society.

A review of research conducted in the field of burnout shows that the factors affecting students' burnout can be divided into two general categories: 1) intrapersonal factors or personality traits such as age, gender, marital status and level of education (Dashti et al., 2014, Ahookhoush & Ali Beigi, 2017, Azimi et al., 2014) and 2) external factors or environmental factors such as the quality of the educational environment, teacher-student interactions and the general atmosphere of the department were divided (Hemmati & Sadeghi, 1397).

One of the external factors that affect academic burnout and plays an effective role in reducing or preventing academic burnout is social support. According to Bandura (1986) ecological theory, growth is formed as a result of a person's interactions with the environment. Therefore, social support received by learners in various dimensions and forms has a significant role in their academic achievement (Brachett et al., 2012). According to some experts, social support refers to a person's level of love, care, respect, attention, and help received from other individuals or groups, such as family members, friends, and others (Sarafino, 1998).

According to Berra (1986) and Cummins (1988), social support can be examined from two dimensions: a) perception of support and b) reception of support. Perceived social support refers to individuals' mental assessments of supportive behaviors and the adequacy of different types of support (Sarason, Sarason, & Pierce, 1990). Perceived social support is in fact the perception of individuals of different types of social support received from different sources of support such as parents, teachers and professors, friends and classmates, playing an important role in academic support of the student (Sanderson, 2018). The received social support means the amount of objective and obvious social support that people have received in practice, such as receiving help and guidance from teachers, families and peers.

Social support is theoretically a multidimensional concept that is subdivided into four dimensions according to Tardy (1985):

A) Emotional social support: Emotional support is the transmission of feelings, love and concern for others. In fact, this type of support means being able to have access to a trusted person to rely on when needed (Drentea, Clay, Roth, & Mittelman, 2006).
B) Informational social support: Informational support refers to the provision of information, tips and solutions that can be received through social interactions with others and help the recipient when needed (Gachel, Jay et al., 1998).
C) Instrumental social support: Instrumental support refers to the material, concrete and real assistance that one person provides to others (Tardy, 1985).
D) Evaluative social support: Evaluative support is the provision of feedback from others about how a person is performing, which can lead to performance correction.

As mentioned earlier, intrapersonal factors can also affect students' academic burnout, such as student participation or academic engagement. According to Fredericks et al. (2011), academic engagement refers to the amount of time and energy a student spends on educational activities inside and outside the classroom to achieve the desired results. Chapman (2003) introduces academic engagement as a structure that shows the level of interest and participation of individuals in educational activities, doing homework, regular attendance in classrooms and implementation of teacher instructions. Academic engagement can be evaluated from four dimensions: emotional engagement, cognitive engagement, behavioral engagement and agent engagement (Rio and Tsang,

2011). Emotional engagement refers to the interest in doing homework, having positive motivation and emotions towards educational activities, and the lack of negative emotions such as stress, boredom, and despair. Cognitive engagement refers to the mental investment of individuals in learning and includes the use of appropriate learning strategies, interest in facing challenges and the use of self-regulatory strategies (Frederick et al., 2004). Behavioral engagement refers to participation in learning and homework and includes effort, perseverance, focus and attention, answering questions, and participation in class discussions (Skinner and Belmont, 1993). Recently, Rio and Tseng (2011) introduced a fourth dimension to academic engagement, which is agent engagement which refers to the constructive participation of learners in the educational process they are involved in. based on this new concept, learners personalize learning by intervening in the learning process.

A review of previous research shows that there is a significant relationship between social support as an interpersonal component and academic engagement as an intrapersonal component with academic burnout. Of course, it should be noted that intrapersonal and interpersonal factors are not separate. According to Bandura (1986) ecological theory, the individual and the social environment are intertwined, meaning that they interact and are affected by each other. The results of research conducted by Falsafinejad et al. (2015) showed that the social support received by peers affects students' academic burnout through affecting their self-efficacy. In addition, according to Sahaqi and Muridi (2015), the support of parents, teachers and peers has an effective role in reducing academic burnout. In addition, research evidence shows that social support received from various support sources can affect both students' academic engagement and indirectly their academic burnout (Tian et al., 2013). In this regard, the results of Marx's (2000) study showed that the feeling of support received from teachers and peers can lead to high levels of student engagement and reduce academic burnout (Skinner & Belmont, 1993).

METHOD

The present study is quantitative in nature using correlational method. The statistical population of the present study included all undergraduate students of Islamic Azad University, Qaenat Branch, who had been studying indifferent majors in 2021 academic year. The total population was estimated to be 448 students, of which 243 were boys and 205 were girls. The statistical sample size of this study was estimated to be 205 participants using Krejcie and Morgan table and the sampling method which was used was relative stratified sampling. The subjects were randomly selected from three faculties of humanities (132, 64%), engineering (34, 17%) and medical (39, 19%) according to the statistical population. Of the total sample, 107 were male and 98 were female. The mean age of participants in this study was 22 years. Structural equation method and AMOS software version 20 were used for data analysis.

Data collection tools

Three instruments were used in the present study to collect data as follows:

A) Perceived Academic Support Questionnaire (Sanders & Planck, 2005): The Multidimensional Perceived Social Support Scale is a 24-item tool developed by Sanders and Planckt (2005) to assess perceived social support from four sources: friends, father, mother, and teachers. This scale measures the amount of perceived social support a person receives based on 4-point Likert scale ranging from strongly disagree to strongly agree. To get the total score of the individuals, the scores of all items are added together and divided by their number (24). The score of each subscale is also obtained from the sum of the scores of the items related to it divided by the number of items in the subscale (6). The validity and reliability of this scale have been reported optimally by Sanders and Planck and Cronbach's alpha coefficient of this questionnaire has been obtained between 0.89 and 0.93. The goodness of fit of the factor analysis model of the Academic Support Questionnaire (X2 / df = 1/03; RMSEA = 0.05; GFI = 0.89; CFI = 0.90) indicates a good fit of the model. To evaluate the reliability of this scale, Cronbach's alpha method was used. Cronbach's alpha was obtained for father, mother, teacher and friends and the whole questionnaire was 0.65, 0.76, 0.75, 0.54 and 0.86, respectively.

B) Burnout questionnaire (Maslach, 2001): A modified burnout questionnaire was used to assess academic burnout, which was modified to be used for student sample by Schaufeli et al (2002). The reason for using this questionnaire was to address all three components of burnout (emotional exhaustion, doubt and academic self-efficacy). The questionnaire has a total of 15 items

Table 1. Descriptive statistics of research variables

variables	mean	Minimum	maximum	SD	skewedness	kurtosis
Emotional exhaustion	2.92	1	7	1.66	1.13	0.32
Depersonalization	2.20	1	7	1.80	0.82	-0.31
Reduced personal accomplishment	2.83	1	7	1.68	1.16	0.54
Father	3.20	1	7	1.58	0.68	0.37
Mother	3.03	1	7	1.56	0.80	0.21
Teacher	5.93	1	7	1.62	-1.10	0.67
Friends	4.89	1	7	1.87	-1.33	1.10
Emotional engagement	4.87	1	7	1.82	-0.65	-0.61
Cognitive engagement	4.78	1	7	1.60	-0.57	-0.65
Behavioral engagement	4.99	1	7	0.67	-0.38	-0.48
Agentic engagement	4.32	1	7	1.02	-0.63	-0.58

and includes three sub-components; Emotional exhaustion (five items), doubt (four items) and academic inefficiency (six items). All items are scored on a seven-point Likert scale from never (0) to always (7). However, due to the positive expressions in the inefficiency component, the scoring is done reversely and shows the feeling of academic inefficiency. Carlotto's (2006) study on the validity and reliability of this questionnaire among Brazilian students showed that the reliability of the components of emotional exhaustion, doubt and academic self-efficacy are 0.81, 0.59 and 0.74, respectively. In Iran, Rostami and Abedi (2011) have translated the Maslach Academic Burnout Questionnaire, and the accuracy of its translation has been confirmed by several experts. To evaluate the validity and reliability of this questionnaire, 238 female students of the University of Isfahan were tested and Cronbach's alpha coefficient for the subscales of emotional exhaustion was 0.88, doubt was 0.90 and academic self-efficacy was 0.84, which was approved. In this study, in order to verify the validity of instrument instruments, confirmatory factor analysis was used through the analysis of torque structures and the three-factor structure of the scale was confirmed. The goodness of fit of the factor analysis model of the burnout questionnaire (X2 / df = 1/05; RMSEA = 0.04; GFI = 0.90; CFI = 0.92) indicates a good fit of the model. To evaluate the reliability of this scale, Cronbach's alpha method was used. Cronbach's alpha for emotional exhaustion, depersonalization and academic inefficiency and the total questionnaire were 0.82, 0.85, 0.78 and 0.89, respectively.

C) Academic Engagement Questionnaire (Rio,2013): This questionnaire was prepared and compiled by Rio (2013) and has 17 items with four subscales with a 7-point Likert scale (strongly disagree = 1 to strongly agree = 7). The four subscales of this questionnaire are behavioral engagement, cognitive engagement, emotional engagement and agentic engagement. Rio (2013) has calculated the validity of this questionnaire through construct validity, using confirmatory factor analysis, and reported it as desirable. In addition, he obtained the reliability of this questionnaire through internal consistency coefficient, and reported Cronbach's alpha coefficients for behavioral engagement 0.94, cognitive engagement 0.88, emotional engagement 0.78 and agentic engagement 0.82. This questionnaire was reviewed in Iran by Ramezani and Khamesan (2017) and its reliability for the whole questionnaire was reported to be 0.92 and for the subscales of behavioral engagement (0.79), cognitive engagement (0.79), emotional engagement (0.87) and agentic engagement (0.85). In this study, in order to verify the validity of instrument, confirmatory factor analysis was used and the four-factor structure of the scale was confirmed. The goodness-of-fit indices of the factor analysis model of the Academic Engagement Questionnaire (X2 / df = 1/02; RMSEA = 0.05; GFI = 0.92; CFI = 0.94) indicate a good fit of the model. To evaluate the reliability of this scale, Cronbach's alpha method was used. Cronbach's alpha for emotional, cognitive, behavioral and agentic subscales and the whole questionnaire were 0.77, 0.94, 0.91, 0.89 and 0.91, respectively.

Table 2. Correlation matrix of research variables

		1	2	3	4	5	6	7	8	9	10	11
1	Emotional exhaustion	-										
2	Depersonalization	0.34*	-									
3	Reduced personal accomplishment	0.23*	0.22*	-								
4	Father	0.34*	0.29*	0.20*	-							
5	Mother	0.30*	0.23*	0.25*	0.35*	-						
6	Teacher	0.45*	0.23*	0.22*	0.35*	0.32*	-					
7	Friends	0.33*	0.45*	0.34*	0.22*	0.20*	0.18*	-				
8	Emotional engagement	0.38*	0.46*	0.44*	0.28*	0.36*	0.45*	0.44*	-			
9	Cognitive engagement	0.30*	0.41*	0.36*	0.38*	0.35*	0.26*	0.32*	0.36*	-		
10	Behavioral engagement	0.35*	0.35*	0.39*	0.23*	0.28*	0.38*	0.30*	0.48*	0.46*	-	
11	Agentic engagement	0.33*	0.28*	0.23*	0.29*	0.21*	0.25*	0.34*	0.23*	0.31*	0.37*	-

*p<0.05

RESULTS

Before analyzing the data and in order to ensure that the underlying assumptions of the structural equation modeling are met by the data of the present study, several main assumptions of the structural equation model including discarded data, missing data and normal data distribution were examined. Since the range of two statistics related to skewedness and kurtosis was between 2 and -2, it was found that the distribution of data in each variable was normal, hence no violation of the normal distribution of data was observed. Regarding other. In order to evaluate the goodness of the fit, the maximum likelihood method was used. Regarding the management of missed data, the alternative method based on maximum likelihood was used, which is better than classical methods such as methods based on deletion or replacement with means. Multiple regression analysis showed that there was no missed data. Finally, given that the sample size for structural equations was at the desired level of more than 200 people, there was no concern about the adequacy of the sample size of the present study.

Table 1 shows descriptive statistics for the subcomponents of each variable including mean, minimum and maximum scores, standard deviation, skewedness and kurtosis.

As seen in Table 1, among the subcomponents of academic burnout, emotional exhaustion had the highest mean (2.92) and depersonalization had the lowest one (2.20). Among the subcomponents of perceived social support, the subcomponent of academic support by the teacher has the highest average (5.93) and academic support by the mother has the lowest one (3.03). Among the subcomponents of academic engagement, students' assessment of behavioral engagement has the highest average (4.99) and agentic engagement has the lowest one (4.32).

Based on the conceptual model of the present study and the research background, the latent exogenous variable of this research is perceived academic support with four subcomponents ;namely, father, mother, teacher and friends; The latent endogenous variables of the study include academic engagement with four subcomponents of behavioral engagement, emotional engagement, cognitive engagement and agentic engagement and the academic burnout with three subcomponents; i.e. emotional exhaustion, depersonalization, and academic inefficiency. Table 2 shows the correlation between the variables of the study. Based on the correlation coefficients reported in Table 2, there are significant correlations among the variables of the study.

Before analyzing the data, the goodness of fit for the conceptual research model was examined. Table 3 shows the goodness of the pattern fit.

To explain the values of fit indices, it should be mentioned that the closer chi-square index (CMIN / DF) is to zero, the better the fit of the model (Hooman, 2005). Chi-square significance index (P) is one of the absolute fit indices; If this index is greater than 0.05, it confirms the model (Ghasemi, 2010). The other four indicators are GFI, IFI, NFI, CFI, which are between zero and one, and the closer to one, the higher the efficiency of the model. Another indicator is RMSEA, which is about 0.05 for good models (Hooman, 2001).

Table 3. Goodness indicators of model fit

CMIN	df	P	CMIN/DF	CFI	GFI	AGFI	RMSEA
178.34	98	0.06	1.81	0.95	0.93	0.96	0.05

Table 4. Direct, indirect, total and explained effects of variables in the model

Independent variable	Direct effect	Indirect effect	Total effect	variance
Academic support	-0.58	-0.31	-0.89	0.46
Academic engagement	-0.66	----	-0.66	0.54

In addition, each of these indicators alone does not indicate the suitability of the model, but all of them should be interpreted together. Based on information presented in Table 3, it can be concluded that the conceptual model presented in the present study has a good fit. Figure 2 shows the standard estimated coefficients of the model.

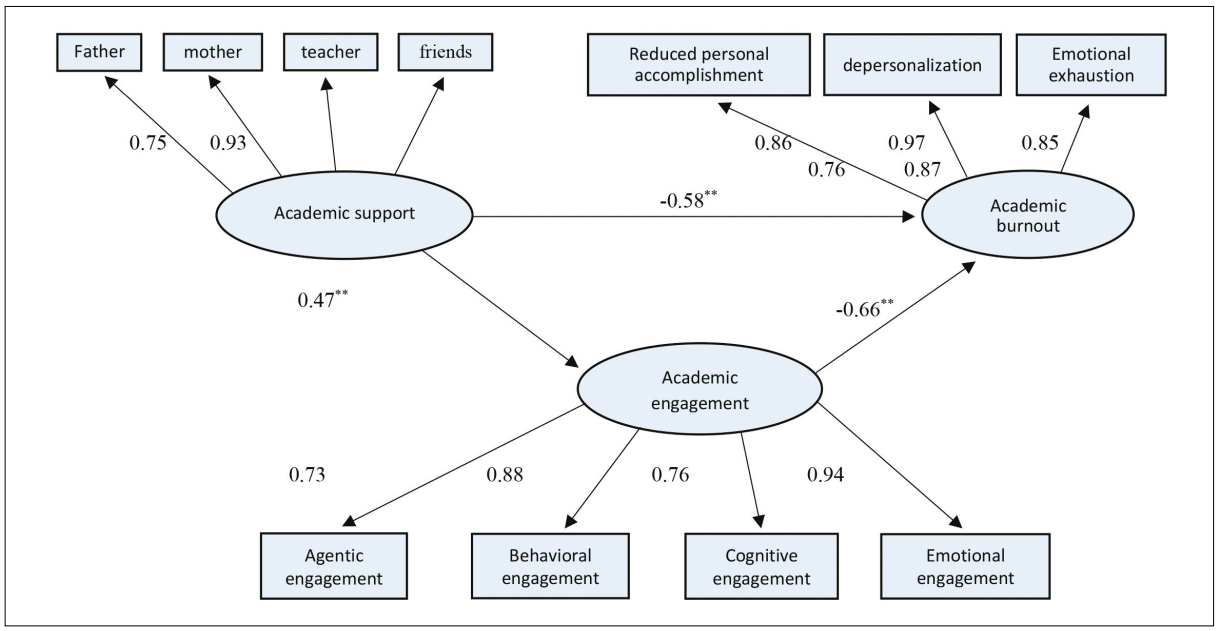
To examine the conceptual model of this research, path coefficients were calculated using AMOS software and maximum likelihood method. Path coefficients (Beta) indicate the intensity and direction of the relationship between the two latent variables. Beta coefficients can be in the range between +1 and -1, and if the beta coefficient is zero, it indicates that there is no linear relationship between the two variables. As shown in Figure 2, all paths in the pattern were significant at the 0.01 level. Based on the latent variables in the model, academic support as an exogenous independent variable had a strong direct relationship with academic burnout (γ = -0.58; P <0.01). In addition, academic support indirectly with academic burnout mediated by academic engagement variable (γ = -0.31; P <0.01) The relationship between academic engagement as an endogenous latent variable or mediating variable in this study with academic burnout was relatively strong and negative relationship (γ = -0.66; P <0.01). The significant path coefficients in the model are shown in Table 4 as direct, indirect and total effects as well as the amount of variance explained.

In order to estimate the significance of the indirect path, the bootstrap command was used in AMOS software, which indicated the significance of the role of academic engagement as a mediating variable in the relationship between academic support and academic burnout. According to Table 4, based on the model presented in the present study, academic support as an exogenous independent variable of this study explained 46% of the explained variance of academic burnout. Academic support also explains 54% of the explained variance of academic engagement.

DISCUSSION AND CONCLUSION

The aim of this study was to investigate the relationship between academic support and students' academic burnout considering the mediating role of academic engagement. In this regard, a conceptual model was proposed and examined using AMOS software and confirmatory factor analysis model, and finally it was found that the proposed model has a good fit with the research data. The findings of the present study showed that there is a negative and significant relationship directly between academic support and academic burnout and indirectly through the mediating variable of academic engagement. This finding is consistent with the results of previous research conducted by Sahaqi and Moridi (2015), Hemmati Rad and Sepah Mansour (2009), Watson et al. (2008) and Lavasani et al. (2013). Consistent with this finding, the results of Atadokht's (2016) research indicated that academic burnout has a positive relationship with parental criticism, concern about mistakes and doubts about actions. Therefore, it can be concluded that the supportive role of others will have a great impact on motivating students to study and reduce academic burnout. In explaining this finding of the present study, we can refer to Ausubel's theory of meaningful learning. According to Ausubel theory, the best way to arouse interest in learners is to increase the quality of education and effective teacher-learner communication with the learner, as well as parents to pay more attention to their children's education and provide them with desirable academic support. Perceptions of such support by learners, in turn, reduce emotional exhaustion and can increase their sense of self-efficacy and reduce academic burnout (Lavasani et al., 2012). To explain the relationship between academic support and academic burnout, we can also refer to Vygotsky's scaffolding theory. Scaffolding in the educational process refers to the concept of

Figure 2. The final pattern with the standard coefficients of the routes



zone of proximal development and indicates the supportive role of the teacher or adults in increasing the learner's sense of self-efficacy. According to Goplerud (1980), academic support has an important effect on shaping students' perception of stressful educational activities as well as their emotional and psychological problems. The perception of academic support from various support sources such as friends, parents, and teachers causes the student to feel self-esteem and confidence, which subsequently increases the interest and academic engagement and, of course, reduces academic burnout (Alipour, 1996). To justify this finding, it can be said that reducing the rate of academic burnout in people with high levels of perceived academic support can be due to higher self-esteem of these people, enabling them to face challenges more effectively and achieve the desired results (Ross & Broh, 2000). In fact, academic support protects students against stressful experiences. The findings of the present study also showed that there is a positive and significant relationship between academic support and academic engagement. This finding is consistent with the results of studies done by Sanders and Plankt (2005), Delfino (2019), Groves et al. (2015), Folani et al. (2001) and Shaykh al-Islami. And Karimianpour (1397). To justify this finding, based on Connell and Welborn (1991) and Rio (2012), receiving support from various sources of support such as friends and teachers increases people's sense of worth and security, which in turn increases active participation. In other words, the existence of such encouraging support resources increases the individual's academic engagement, so that the learner pursues educational activities with more effort and perseverance (behavioral engagement), showing more interest in lessons and educational activities, values them and has a positive reaction towards their teachers and peers (emotional engagement), uses cognitive and metacognitive strategies more effectively to understand complex subjects (cognitive engagement) and by proposing his / her suggestions, needs and interests, requesting resources and asking for help plays an active and constructive role in education (agentic engagement). The results of the present study also showed that students evaluated receiving academic support from teachers with the highest average in terms of effectiveness compared to other supportive sources. The supportive role of teachers in the form of providing information, evaluation, etc. to students during their studies causes students to feel more responsible for their learning and educational activities. As a result, they will show behaviors with perseverance, more participation and effort (behavioral engagement) and positive emotions such as passion and interest (emotional engagement) (Ferrer and Skinner, 2003). Delfino (2019) also found in a study that the support of family, teacher and friends is effective in predicting academic engagement.

The results of Groves et al. (2015) study showed that the quality of students' relationships with teachers is one of the important factors that affect students' involvement. Research by Fulani, Eccles, Barber, and Clementes (2001) showed that peer support plays an important role in predicting students' involvement, participation, and interaction with curriculum and syllabi. Consistent with the results of the present study, Shaykh al-Islami and Karimianpour (2015) found that receiving the support of parents, friends and teachers has a positive and significant effect on active participation of students with subjects and effort in the learning process. Bordbar and Yousefi (2016) also showed that supportive and favorable environments directly and indirectly predict academic engagement. The present study also showed that there is a negative and significant relationship between academic engagement and academic burnout. This finding is consistent with the results of research done by Ugwa, Onyishi and Tyoyima (2013) and Cazan (2015). According to Lenin Brink and Pintrich (2003), academic engagement is in fact a psychological investment that learners spend on educational activities to achieve the desired and expected goals. According to many researchers, this structure can play an important role in predicting students' academic success. Based on this, it can be argued that academic engagement and academic burnout, as two key indicators affecting performance are at opposite poles. This means that more academic engagement causes the elimination or reduction of academic burnout among students (Seif, 1396). On the other hand, learners with lower levels of academic engagement experience feelings of meaninglessness in educational activities, feelings of inability to learn subjects, frequent absenteeism, and even dropouts (Bask and Salmela-Arrow, 2013). These individuals, especially in the final years of education, are less prepared to enter the workplace, show less mastery in performing job duties, and are more prone to quit their jobs (Rudman and Gustavsen, 2012).

Generalization of the results of the present study should be done with caution due to its limitations. In the present study, all questionnaires were provided to students simultaneously and at the same time. Therefore, it is possible that students have not completed the questionnaires with sufficient accuracy and concentration due to fatigue and high volume of questions. In addition, students' self-expression is a criterion for completing questionnaires, so their answers to some questions may not be based on facts. Therefore, it is suggested that further studies in this field be done using other data collection tools such as interviews. In addition, due to the nature of the present research design, it is not possible to deduce causal relationships between research variables. Therefore, it is suggested that future studies use the experimental research model to investigate the effect of academic support and academic engagement on the rate of student burnout. Based on the findings of this study, it is also suggested that decision-making institutions and counseling centers provide plans to provide solutions and training to improve academic support from its four sources, as well as more effective and more communication with students. Undoubtedly, identifying the phenomenon of burnout and its effective factors among students will increase the awareness of decision-making institutions and families and will pave the way for reducing burnout among students.

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Data Availability Statement
The raw data supporting the conclusions of this manuscript will be made available by the authors, without undue reservation, to any qualified researcher.

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A hallgatók tanulmányi kiégésének modellje a tanulmányok során kapott támogatás alapján: az akadémiai elkötelezettség közvetítő szerepe

Az oktatási rendszerek egyik komoly problémája világszerte a hallgatók tanulmányi kiégésének növekedése. Jelen tanulmány célja az tanulmányok során kapott támogatás és a hallgatók tanulmányi kiégése közötti kapcsolat vizsgálata az akadémiai elkötelezettség közvetítő változóján keresztül. A kutatási módszer leíró-korrelációs volt. A populációt az Iszlám Azad Egyetem Qaenat-i tagozatának összes hallgatója alkotta a 1998-99-es tanévben, akik közül 205-öt (98 nőt és 107 férfit) választottunk ki rétegzett véletlenszerű mintavétellel. Az adatok gyűjtéséhez három kérdőívet használtunk, köztük a Sands és Plankt (2005) Akadémiai Támogatási Skálát, a Módosított Maslach Akadémiai Kiégés Kérdőívet (2002) és az Akadémiai Elkötelezettség Kérdőívet (Reeve, 2013). Az adatok elemzését AMOS szoftver (20. verzió) és strukturális egyenletmodellezési módszer segítségével végeztük. Az adatelemzés eredményei azt mutatták, hogy a modell jól illeszkedik a kutatási adatokhoz. Az eredmények szerint az tanulmányok során kapott támogatás és az tanulmányi kiégés közötti közvetlen kapcsolat szignifikáns volt. A tanulmányok során kapott támogatás és az tanulmányi kiégés közötti közvetett kapcsolat, amely az akadémiai elkötelezettség közvetítő változóján keresztül valósult meg, szintén szignifikáns volt. Összességében a jelen tanulmány eredményei azt mutatják, hogy a tanulmányok során kapott támogatás, amely befolyásolja a hallgatók akadémiai elkötelezettségét és csökkenti tanulmányi kiégésüket, a hallgatók aktív részvételéhez vezethet a felsőoktatási tanulmányi tevékenységekben.

Kulcsszavak: tanulmányi elkötelezettség, tanulmányi támogatás, tanulmányi kiégés, Strukturális egyenlet módszer