Iranian Journal of Educational Research

TYPE: Original Study
PUBLISHED: 01 March 2022
DOI:

Modeling the relationships between quality of academic life and academic engagement: mediating role of academic self-efficacy

Fatemeh Zare Mahdiabadi[1] and Kourosh Mohammadi[2*]

1. MA in Family Counseling, Department of Psychology, University of Hormozgan, Bandar Abbas, Iran

2. Assistant professor, Department of Psychology, University of Hormozgan, Bandar Abbas, Iran

OPEN ACCESS

***CORRESPONDENCE**
Kourosh Mohammadi

mohammadi.km@gmail.com

RECEIVED 13 January 2022
ACCEPTED 26 February 2022
PUBLISHED 1 March 2022

CITATION

Abstract

Academic life quality of university students and academic self-efficacy are among the important variables that affect the academic engagement in college students. The current study aimed to develop a model to reveal the direct and indirect relationships between academic life quality, academic self-efficacy, and the academic engagement in college students. The research sample comprised 380 male and female students from the Faculty of Humanities at University of Hormozgan. Academic life quality, academic self-efficacy and academic engagement questionnaires were used for data collection. The results indicated that the proposed structural model benefited from a satisfactory goodness-of-fit level with the study data. According the results, the research variables had direct and indirect relationships. The findings also confirmed that self-efficacy mediated the relationship between academic quality of life and academic engagement. Implications and research recommendations are provided for future studies as well.

Keywords
quality of academic life, academic engagement, self-efficacy, college students

Introduction

The higher education time is one of the most important stages that influence a student's quality of life, where they experience many glitches and life stresses that may negatively affect their academic and social lives (McKee & Tew, 2013). Quality of life is a vigorous notion that includes many subjective, social, and academic dimensions. This construct was used as a general umbrella under which all positive mental health dimensions fall and is connected to the effort to monitor how individuals recognize different features of their psychological life, the extent of their ability to control their personal lives, and the degree to which individuals feel that they have mutual positive social relationships with others (Abdellatif, 2022). Felce and Perry (1995) defined quality of life as the good state of an person's life and satisfaction of physical, psychological, and emotional health to an amount of acceptance and fulfillment. Students with a high quality of academic life are greatly self- and socially-efficient, contented with their family, academic, have a community life, fulfill their needs and spirits, self-assured, and have self-esteem that makes them live fortunately and reassures and motivates them to be optimistic about the present and the future (Kaplan & Ries, 2007).

Academic engagement is a multifaceted term that emphasizes students' various arrangements in motivation, cognition, and behavior (Baron & Corbin, 2012; Sharma & Bhaumik, 2013). The concept of Academic engagement showed the positive relationship between time-on-task and learning. Theorists consider academic engagement to include behavioral, cognitive, and motivational dimensions (Alrashidi et al., 2016; Archambault et al., 2009; Sinatra et al., 2015). The behavioral dimension refers to observable educational behaviors, such as effort and persistence when faced with problems while doing homework and asking for help from professors or peers in order to learn and understand course material (Sinatra et al., 2015). Emotional involvement includes internal interest in coursework and assignments, valuing the coursework, presence of positive emotion and lack of negative emotion such as despair, anxiety and anger while doing coursework and learning (Pekrun & Linnenbrink-Garcia, 2012). Cognitive engagement includes all kinds of processing processes that students use for learning and consists of cognitive strategies and metacognitive strategies (Lam et al., 2012).

In the recent years, there has been much interest in higher education works on the concepts of academic engagement and disengagement. Brint et al. (2008) Using data on upper-division students in the University of California system indicated that two distinct cultures of

[DOR: 20.1001.1.2980874.2022.1.1.6.2]
[DOI: 10.52547/ijer.1.1.67]

engagement exist on campus. The culture of engagement in the arts, humanities and social sciences emphases on interaction, participation, and interest in ideas. The culture of engagement in the natural sciences and engineering focuses on enhancement of quantitative skills through cooperative study with a look at rewards in the labor market. The two cultures of engagement are strongly related with post-graduate degree plans. The findings raise queries about normative conceptions of good scholastic practices in so far as they are considered to be equally relevant to students in all higher education institutions. Vizoso et al. (2018) examined the relationships between coping, academic engagement dimensions and academic performance, as well as the mediating role of academic engagement dimensions in the relationship between coping and academic performance. Results indicated that adaptive coping, academic engagement dimensions and academic performance were positively related. Maladaptive coping was negatively associated to performance, but there were no significant correlations between maladaptive coping and any academic engagement dimension. Mediation analysis revealed that engagement dimensions mediated the relationship between adaptive coping and performance. Adaptive coping increased academic vigor, dedication and absorption and these dimensions enhanced performance in turn.

Adams et al. (2020) aimed to examine the degree to which academic self-efficacy mediates associations between students' perceptions of feedback and their academic accomplishment. According to the results, positive relations were observed between academic accomplishment and students' confidence that they could achieve their desired grades and adopt suitable study behaviors. A negative association was recognized between accomplishment and confidence to talk about their studies. Achievement was not related to the perceived quantity or quality of feedback, but did bear a significant relationship with the reported use to which feedback was put. Positive associations were generally identified between academic self-efficacy and perceptions of feedback. Path models exposed that inter-relationships were best represented by a model wherein academic self-efficacy mediated links between students' perceptions of feedback and academic achievement. In another study, Dogan (2015) examined the extent to which academic performance is affected by student engagement (students' participation in school activities and commitment to the school's mission and rules), academic self-efficacy (the students' sense of their own capabilities), and academic motivation (the students' desire to improve their academic performance). The results of the study, which was conducted with the participation of 578

[DOR: 20.1001.1.2980874.2022.1.1.6.2]
[DOI: 10.52547/ijer.1.1.67]

middle and high school students, suggest that cognitive engagement, one of the sub-dimensions of school engagement, predicts academic performance; however, emotional and behavioral engagement does not predict academic performance. A sense of academic self-efficacy and academic motivation, however, do predict academic performance. Moreover, the sense of self-capability and related motivations of students, as well as the sense of the purpose for their learning are significant variables affecting their academic success.

Some studies indicated a positive relationship between academic quality of life and academic engagement. García-Martínez et al. (2021) investigated the mediating role of engagement on the achievement and quality of life of university students. The results indicated that emotional intelligence and resilience directly predicted students' life satisfaction, but this direct relationship did not result in academic performance. In addition, and assuming a finding not found so far, engagement was shown to utilize an indirect mediational role for both life satisfaction and academic performance of students. Likewise, Lewis et al. (2011) explored associations between adolescent students' positive subjective well-being and their levels of engagement in schooling. According to the results, a statistically significant bidirectional association between life satisfaction and cognitive engagement was found; however, non-significant relationships were found between life satisfaction and emotional and behavioral student engagement. The findings provide significant evidence of the role of early adolescents' life satisfaction in their engagement in schooling during the important transition grades between elementary and high school.

Based on the results of previous studies, in the present study, the relationship between quality of academic life and academic engagement has been studied. Also, study of the mediating role of academic self-efficacy was an aim of present study.

Material and Methods

The current study is a correlational type that was conducted among male and female students of University of Hormozgan in 2022. From the entire research population, 380 people were selected using the accessible sampling method. The data collection tool was academic self-efficacy, quality of academic life and academic engagement questionnaires. Structural equation modeling with the maximum likelihood estimation method was used to investigate the mediating effect of self-efficacy on the relationship between quality of academic life and academic engagement. All analyses were done in SPSS-24 and AMOS 24.

[DOR: 20.1001.1.2980874.2022.1.1.6.2]
[DOI: 10.52547/ijer.1.1.67]

[DOR: 20.1001.1.2980874.2022.1.1.6.2]

[DOI: 10.52547/ijer.1.1.67]

Tools

Quality of academic life scale: Abdellatif (2022) developed the scale for the quality of academic life for university students after reviewing related previous studies and measures. The scale included 20 items divided into the following 4 dimensions: good social relationship, fun academic engagement, meaning perception, and effective time management, with five alternatives in front of each item. The scale is a 5-point Likert-type scale. The items are scored as "strongly agree-1,""agree-2,""neutral-3,""disagree-4," and "strongly disagree-5." The total score was attained by summing the scores for the four dimensions. High scores indicated a high quality of academic life and low scores indicated a low quality of academic life. The scale's psychometric properties were verified (Abdellatif, 2022).

Academic Self-Efficacy Scale: The General Academic Self-Efficacy scale (Nielsen et al., 2018) was used to assess academic self-efficacy. This five-item self-report scale measures academic self-efficacy on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Akanni and Oduaran (2018) reported acceptable levels of internal consistency with a Cronbach's alpha of 0.81.

Utrech Work Engagement Scale for Students: The instrument has 9 items measuring the dimensions of vigor (i.e., My tasks as a student make me feel energized), dedication (i.e., I am excited about my studies) and absorption (i.e., I am immersed in my studies) to studies. The response alternatives are presented in a 6-point Likert format (0 = not at all, 6 = every day) (Carmona-Halty et al., 2019). The reliability of the instrument is good in its adaptation to the Spanish context (García-Martínez et al., 2021). The Cronbach alpha was 0.82 for vigor, 0.87 for decision making and 0.79 for absorption in current study.

Results

Before examining the research hypothesis, the assumption of normality of variables was tested and established. In Table 1, the mean and standard deviation of the quality of academic life, self-efficacy and academic engagement are presented. The results of model fitness was presented in Table 2 and in the table 3, the direct relationship coefficients are presented.

Table 1

The mean and standard deviation of quality of academic life, self-efficacy and academic engagement

	Mean	SD
Academic engagement	37.54	3.44
Quality of academic life	56.64	3.67
Self-efficacy	17.45	2.14

Table 2. Model fit summary

Indices	Value	Accepted value
χ^2	191.54	p < .05
p	0.001	
DF	46	
DF/χ^2	4.16	<5
GFI	0.91	≥0.90
AGFI	0.90	≥0.90
NFI	0.91	≥0.90
CFI	0.93	≥0.90
IFI	0.91	≥0.90
TLI	0.92	≥0.90
RMSEA	0.07	≤0.08

Table 3. The direct relationship coefficients

Path	Beta	B	Std. Error	C.R	p
Quality of academic life to academic self-efficacy	0.35	0.83	0.087	3.65	0.001
Quality of academic life to academic engagement	0.71	0.73	0.082	4.16	0.001
Academic self-efficacy to academic engagement	0.43	0.63	0.081	4.31	0.001

According to Table 3, quality of academic life was associated to academic self-efficacy (beta = 0.35, p < 0.001) quality of academic life was associated to academic engagement (beta = 0.71, p < 0.001) and academic self-efficacy associated with academic engagement (beta = 0.43, p < 0.001). In this research, the indirect relationships of the variables were tested through the bootstrap method. The value of the coefficient of the indirect path is equal to 0.15, which is significant at the level of 0.05.

[DOR: 20.1001.1.2980874.2022.1.1.6.2]
[DOI: 10.52547/ijer.1.1.67]

Discussion

The present study was conducted with the aim of developing a model to reveal the direct and indirect relationships between academic life quality, academic self-efficacy, and the academic engagement in college students. The findings showed that the model benefited from good fit indices. Based on the findings, quality of academic life was associated to academic self-efficacy, quality of academic life was associated to academic engagement and academic self-efficacy associated with academic engagement and the value of the coefficient of the indirect path is significant. Our findings are consistent with earlier studies (Dogan, 2015; García-Martínez et al., 2021; Pekrun et al., 2009).

Academic engagement is a type of psychological investment and direct effort to learn, understand and master the knowledge, skills and arts that educational activities are carried out to promote, as well as academic engagement in the academic process of a student's life and among the most important components in creating success (Lewis et al., 2011). It is considered to be related to the educational, occupational, family, and social challenges that every young person faces on the way to achieving their dreams and goals, enthusiasm and conflict and related factors should be considered as part of the elements that affect success.

Academic engagement is an important variable that is critical to learning (Pekrun & Linnenbrink-Garcia, 2012). This variable is considered as the crucial point of most theories related to academic failure. The knowledge of the college includes the value of the university as a social institution and a means to facilitate personal success. In other words, students feel that learning in university is necessary and that education in it is a means to achieve personal goals, including learning. Academic engagement has a positive effect on students' adaptation in the academic environment (Brint et al., 2008). Increased enthusiasm for academic activities indicates increased attention to positive psychology, which focuses on human strengths and optimality.

The results of this study were limited to the population of students from the University of Hormozgan. Additional research is recommended to explore the differences between students' academic engagement and quality of academic life levels according to gender, discipline, and academic average in other countries and under several educational stages. This study also does not address the effect of some mediating variables, such as the family socioeconomic level of students. Therefore, further studies are suggested to demonstrate the factors that may affect the levels of academic engagement.

[DOR: 20.1001.1.2980874.2022.1.1.6.2]
[DOI: 10.52547/ijer.1.1.67]

[DOR: 20.1001.1.2980874.2022.1.1.6.2]

[DOI: 10.52547/ijer.1.1.67]

Data availability statement

The original contributions presented in the study are included in the article/supplementary material; further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving human participants were reviewed and approved by ethics committee of University of Hormozgan.

Author contributions

FZ and KM contributed to the study conception and design, material preparation, data collection and analysis. All authors contributed to the article and approved the submitted version.

Funding

The authors did not receive support from any organization for the submitted work.

References

Abdellatif, M. S. (2022). Modeling the Relationships Between Academic Boredom, Self-Compassion, and Quality of Academic Life Among University Students. *SAGE Open*, *12*(4), 21582440221141703.

Adams, A.-M., Wilson, H., Money, J., Palmer-Conn, S., & Fearn, J. (2020). Student engagement with feedback and attainment: the role of academic self-efficacy. *Assessment & Evaluation in Higher Education*, *45*(2), 317-329.

Akanni, A. A., & Oduaran, C. A. (2018). Perceived social support and life satisfaction among freshmen: Mediating roles of academic self-efficacy and academic adjustment. *Journal of Psychology in Africa*, *28*(2), 89-93.

Alrashidi, O., Phan, H. P., & Ngu, B. H. (2016). Academic Engagement: An Overview of Its Definitions, Dimensions, and Major Conceptualisations. *International Education Studies*, *9*(12), 41-52.

Archambault, I., Janosz, M., Fallu, J.-S., & Pagani, L. S. (2009). Student engagement and its relationship with early high school dropout. *Journal of Adolescence*, *32*(3), 651-670.

Baron, P., & Corbin, L. (2012). Student engagement: Rhetoric and reality. *Higher Education Research & Development*, *31*(6), 759-772.

Brint, S., Cantwell, A. M., & Hanneman, R. A. (2008). The two cultures of undergraduate academic engagement. *Research in higher education*, *49*(5), 383-402.

Carmona-Halty, M. A., Schaufeli, W. B., & Salanova, M. (2019). The Utrecht Work Engagement Scale for Students (UWES–9S): Factorial validity, reliability, and measurement invariance in a Chilean sample of undergraduate university students. *Frontiers in psychology*, *10*, 1017.

Dogan, U. (2015). Student engagement, academic self-efficacy, and academic motivation as predictors of academic performance. *The Anthropologist*, *20*(3), 553-561.

Felce, D., & Perry, J. (1995). Quality of life: Its definition and measurement. *Research in developmental disabilities*, *16*(1), 51-74.

García-Martínez, I., Landa, J. M. A., & León, S. P. (2021). The mediating role of engagement on the achievement and quality of life of university students. *International journal of environmental research and public health*, *18*(12), 6586.

Kaplan, R. M., & Ries, A. L. (2007). Quality of life: concept and definition. *COPD: Journal of Chronic Obstructive Pulmonary Disease*, *4*(3), 263-271.

Lam, S.-f., Wong, B. P., Yang, H., & Liu, Y. (2012). Understanding student engagement with a contextual model. In *Handbook of research on student engagement* (pp. 403-419). Springer.

Lewis, A. D., Huebner, E. S., Malone, P. S., & Valois, R. F. (2011). Life satisfaction and student engagement in adolescents. *Journal of youth and adolescence*, *40*(3), 249-262.

McKee, C. W., & Tew, W. M. (2013). Setting the stage for teaching and learning in American higher education: Making the case for faculty development. *New Directions for Teaching and Learning*, *133*, 3-14.

Nielsen, T., Dammeyer, J., Vang, M. L., & Makransky, G. (2018). Gender fairness in self-efficacy? A Rasch-based validity study of the General Academic Self-efficacy scale (GASE). *Scandinavian Journal of Educational Research*, *62*(5), 664-681.

Pekrun, R., Elliot, A. J., & Maier, M. A. (2009). Achievement goals and achievement emotions: Testing a model of their joint relations with academic performance. *Journal of Educational Psychology*, *101*(1), 115.

Pekrun, R., & Linnenbrink-Garcia, L. (2012). Academic emotions and student engagement. In *Handbook of research on student engagement* (pp. 259-282). Springer.

Sharma, B. R., & Bhaumik, P. K. (2013). Student engagement and its predictors: An exploratory study in an Indian business school. *Global business review*, *14*(1), 25-42.

[Record #1575 is using a reference type undefined in this output style.]

Vizoso, C., Rodríguez, C., & Arias-Gundín, O. (2018). Coping, academic engagement and performance in university students. *Higher Education Research & Development*, *37*(7), 1515-1529.