



Investigating the Relationship between Life Satisfaction and Academic Self-Efficacy on College Students' Organizational Identification

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ABSTRACT

This article explores the relationship between life satisfaction, academic self-efficacy, and organizational identification through a full structural equation model. The data was collected from 255 participants enrolled in different colleges within two universities via the scales of Life Satisfaction, Academic Self-Efficacy, and Organizational Identification. The results show that life satisfaction has direct significant effects on academic self-efficacy and organizational identification. In addition, the study also revealed that there is a significant indirect effect from life satisfaction to organizational identification via academic self-efficacy.

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Keywords:

academic self-efficacy; college students; higher education; life satisfaction; organizational identification; structural equation modeling

1. Introduction

Organizational identification, since it is related to both individuals' satisfaction and institutions' efficiency, has been an important concept since its first introduction. Tajfel and Turner (1979) developed the theory of Social Identity Theory and based on this theory, the concept of organizational identification was first developed by Ashforth and Meal (1989). According to this, through drawing social comparisons and identifying himself/herself within groups, an individual creates his/her identity. Organizational identification, in this sense, develops when an individual conceptualizes his/her identity via the organization he/she belongs and establishes a psychological bond between him/her and the organization (Fuchs, 2012). Developing organizational identification has some positive effects both on individuals and organizations. For example, motivating individuals for success, cooperating with other members of the organization, and putting more effort for the benefit of the organization are some positive effects observed (Ashforth, Harrison & Corley, 2008; Bhattacharya & Sen, 2003). In addition, individuals that develop organizational identification are highly tend to accept the decisions made by the organization, act in accordance with the organization's functions, and adopt the values set by the organization (Shamir, 1990). Moreover, those that develop strong psychological bonds with the organization share not only the success but also the failure of the organization (Mael & Ashforth, 1992). Considering the effects of identification on performance and success, therefore, it appears to be important for educational institutions to consider developing organizational identifications on the part of students.

In this regard, one may think of the sense of belonging to school or the concept of school identification. According to Participation-Identification Model, the sense of belonging is an essential component of developing identification with the school (Finn & Zimmer, 2012). For this model, school identification

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develops when a student considers himself/herself belong to the school and values outcomes related to the school (Voelkl, 2012). Such a sense of belonging prevents students from various problematic issues, such as dropping out and academic failure (Finn, 1989). According to some recent research on this topic, students that identify themselves with the school's academic culture are more motivated to success and have higher educational achievement (Finn & Cox, 1992). Also, considering the time spending at the school during the childhood and adolescent, it is regarded that school identification has an important role in healthy personal development. During this entire period, as shown previously, students identify themselves with those that are seen as role models in the school and accordingly they adopt some values, rules, and behaviors (Finn, 1989; Kağıtçıbaşı & Üskül, 2004).

Considering the positive effects of identification on students and institutions, it appears to be important to investigate factors that influence the sense of identification. Studies previously done for this purpose found, for example, that participating in school activities, appreciating the services provided by the school, and having some traits such as loyalty and commitment increase college students' sense of identification (Arnett, German & Hunt, 2003; Ceylan & Özbal, 2008; Harrison, Mitchell & Peterson, 1995). According to Meal and Ashforth (1992), also, organizational prestige has a positive effect on identification and many educational institutions use this fact for their advantages. In addition, Arnett et al. (2003) found that those who attribute higher prestige to their colleges provide higher financial support for their colleges and suggest their institution to others. However, despite all those studies, it still is considered that there may be more and various factors influential on organizational identification. It may not be easy to define all the factors. But, in general, some of those factors that play role in developing organizational identification are related to the organization, while some are related to the person.

Regarding identification with educational institutions, one of the most important personal factors can be defined as academic self-efficacy. A person's belief in the self for completion of academic assignments successfully is defined as academic self-efficacy (Bandura, 1982). According to social learning theory, an individual develops beliefs through his/her social relations as direct or indirect life experiences. In this sense, students' aims, motivation levels, academic achievements, for example, influence their academic self-efficacy beliefs and also strengthen their beliefs about realizing higher academic achievement (Schunk, 2009). In addition, those with higher self-efficacy beliefs are more eager to learn, put more effort, and develop more effective strategies against problems (Eggen & Kauchak, 1997). In other words, academic performance is affected by individuals' self-efficacy beliefs (Luszczynska, Gutiérrez-Doña, and Schwarzer, 2005). Therefore, it appears to be that academic self-efficacy and academic success are reciprocally influential over one another. In a similar way, identification plays a role in individuals' self-perceptions. It was found that in order to strengthen their self-respect, individuals tend to identify themselves with a more successful group, while refraining from less successful groups (Arnett et al., 2003). This, in fact, is related to the finding that individuals with higher identification perceive group success as personal success (Dutton, Dukerich & Harquail, 1994). Regarding college students, it can be assumed that there may be a significant relationship between students' academic self-efficacy beliefs and their tendency to identify themselves with their colleges, since self-efficacy is positively associated with college satisfaction (DeWitz & Walsh, 2002; DeWitz, Woolsey, & Walsh, 2009).

Another important personal factor with relation to identification can be defined as life-satisfaction, which is about how an individual evaluates his/her life in general with positive perceptions, including happiness, meaningfulness, and wellness (Diener, Emmons, Larsen & Griffin, 1985; Veenhoven, 1996). In other words, personal evaluation of an individual about how satisfactory life he/she has defines his/her life-satisfaction. Some previous studies found positive relationships between organizational identification and life-satisfaction (Suhlmann, Sassenberg, Nagengast & Trautwein, 2018; Yılmaz, 2008). For example, individuals with higher self-motivation (Hall, Schneider & Nygren, 1970) and higher work-satisfaction (Akman, 2017) have higher organizational identification. But, individuals with negative psychological traits such as a sense of loneliness (Yılmaz, 2008) or exhaustion (Avanzi, Schuh, Fraccaroli & Van Dick, 2015) have lower organizational identification. However, work-satisfaction, as noted by Polatçı, Ardiç and Koç (2014), is a mediating variable. Similar conclusions have been drawn regarding those who spent most of their times at school, students. For example, students who have higher school satisfaction and think they get enough support from the school develop higher school identification (Grace & Kim, 2008; Lee, 2008). In contrast, students with

less life-satisfaction and having depressive feelings also develop negative school identification (Bugay, Aşkar, Tuna, Örüci & Çok, 2015; Stefanek, Strohmeier & Yanagida, 2017).

Aim of the Study

It is obvious that like many other institutions or organizations that aim for their members to develop strong identifications, colleges would like their students to establish strong bonds with their colleges. Students' satisfaction with the services provided by colleges is an important factor for a college in today's highly competitive league of higher education. Considering Turkish higher education, with the rapid increase in the number of colleges and of college students in recent years (Arslan & Akkas, 2014; Gunay & Gunay, 2017), partly as a result of competition between the colleges, student satisfaction and identification with the college have become more an important issue. Accordingly, there has been a growing literature on this topic. This current study investigates the relations between students' identifications levels, general life-satisfaction levels, and academic self-efficacy beliefs. It aims to contribute to the literature focusing on how to promote student identification with educational institutions in general. Therefore, the purpose of the study was to examine the relationship among Life-Satisfaction (LS), Academic Self-Efficacy (ASE) and Organizational Identification (OI) via a full structural equation modeling (FSEM). Specifically, it was aimed to assess whether academic self-efficacy mediates between life-satisfaction and organizational identification for college students. The hypothesized model was show in Figure 1.

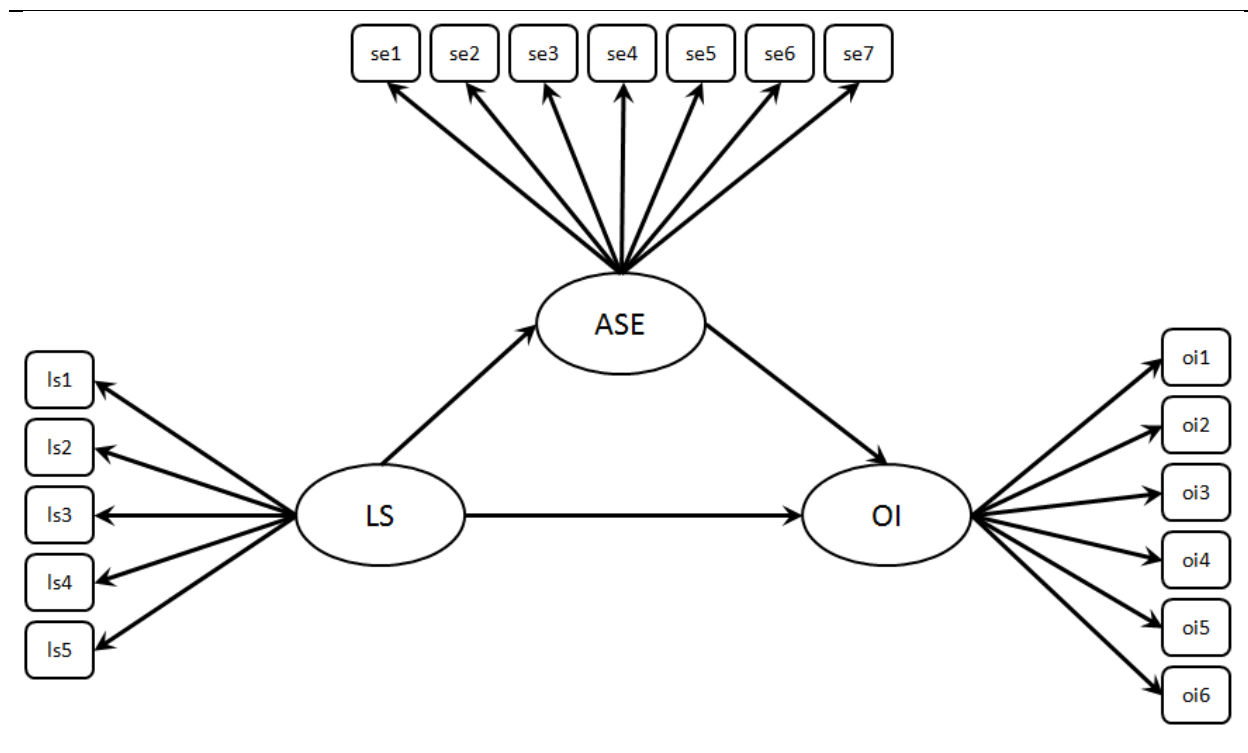


Figure 1. Hypothesized Model

2. Methodology

2.1. Sample

The participant of this study consisted of students from two universities. Convenience sampling procedure was used and the students were voluntarily joined to the study. The data was collected after ethical approval from different colleges (i.e., nursing and education) within the universities. Total number of participants was 255. %22 of the sample was male and the average age of the participants was 19.49 (sd = 1.15). The ages of the participants were ranged between 18 and 26 years.

Life Satisfaction

Life satisfaction scale (LS) was developed by Diener et al. (1985). The scale was translated to Turkish by Dağlı and Baysal (2016). Turkish version of LS consisted of 5 items. The items were using 7-point Likert scale from strongly disagree (1) to strongly agree (7). The construct validity of the Turkish version of scale was analyzed via explanatory and conformity factor analysis and a one-factor-structure was established. The internal consistency of the items (Cronbach alpha) was .84 for the current data set and .88 for adaptation study (Dağlı & Baysal, 2016).

Academic Self Efficacy

Academic self-efficacy (ASE) scale was developed by Jarusalem and Schwarzer (1981, as cited in Yılmaz et al., 2007) and was adapted to Turkish by Yılmaz, Gürçay and Ekici (2007). A total of 7 items were used to measure ASE scale. The items were scored with 4-point Likert scale. One of the items was negatively worded. Therefore the item was inverted before using in the scale. The structure for scale was analyzed by explanatory factor analysis and a one-factor-structure was established. Criterion validity was tested by using Rosenberg's Self-esteem Scale. In order to assess the internal consistency among the items Cronbach alpha was used. The alpha value was .79 for the adaptation study (Yılmaz et al., 2007) and was .71 for the current data.

Organizational Identification

Mael and Ashforth (1992) was introduced the organizational identification scale (OI). The scale was translated to Turkish by Tak and Aydemir (2004, as cited in Polat & Meydan, 2010). OI scale has 6 items. The items were measured with a 5-point Likert scale from strongly disagree (1) to strongly agree (5). The Cronbach alpha value of the scale was .68 for the data collected in this study. However, third item (OI3) in the scale indicated lower alpha value. That is, removing the item from the scale increased the alpha value to .74.

Table 1. Descriptive statistics and correlation coefficients at item level

	#	Mean	SD	Correlations																				
				LS					ASE							OI								
				1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	5				
LS	1	4.96	1.65	1																				
	2	4.37	1.65	.67	1																			
	3	5.13	1.71	.60	.62	1																		
	4	5.22	1.54	.48	.51	.58	1																	
	5	3.95	1.93	.41	.47	.47	.47	1																
ASE	1	3.04	.67	.07	.04	.08	.15	.04	1															
	2	3.15	.72	.02	.02	.12	.13	.03	.32	1														
	3	3.09	.75	.16	.12	.11	.13	.11	.37	.38	1													
	4	2.67	.83	.08	.15	.19	.15	.07	.31	.38	.39	1												
	5	2.06	.89	.06	.14	.15	.14	.19	.22	.27	.34	.47	1											
	6	2.67	.88	.09	.18	.14	.13	.06	.15	.22	.20	.29	.38	1										
	7	3.00	.89	.04	.01	-.00	-.0	.09	.11	.23	.27	.10	.06	.1	1									
OI	1	3.21	1.23	.16	.04	.14	.09	.05	.20	.06	.18	.18	.15	.02	.08	1								
	2	3.03	1.42	.00	.00	.03	.06	-.1	.20	.03	.13	.04	.05	-.10	.02	.39	1							
	3	2.65	1.43	.05	.02	-.00	-.1	.04	.00	.01	.05	.15	.06	-.00	-.00	.06	.04	1						
	4	3.52	1.26	.18	.15	.20	.14	.11	.32	.12	.20	.19	.16	.15	.06	.39	.33	.09	1					
	5	4.06	1.06	.18	.11	.20	.20	.04	.24	.09	.15	.12	.08	.07	.06	.37	.38	.11	.61	1				
	6	2.96	1.44	.12	.04	.11	.09	.04	.10	-.10	.02	.02	-.00	-.10	-.00	.25	.29	.12	.39	.33	1			

2.2. Data Analysis

Item level descriptive statistics and correlation coefficients were optioned via SPSS and reported in Table 1. In order to test the SEM model showed in Figure 1, Mplus 5.1 was used (Muthen and Muthen 1998–2010). The

estimation method used for the model was Robust Maximum Likelihood (MLR). The hypothesized model was tested in two steps. At the first step, the measurement model was tested. The measurement model is shown in Figure 2. After having a good model data fit for the measurement model the structural model was tested at the second step. Model-data fit was evaluated based on Hu and Bentler's (1999) recommendations. Chi-square, CFI (comparative fit index), RMSEA (root mean square error of approximation) and SRMR (standardized root mean square residual) values were used for the model-data fit. RMSEA shows a good fit for lower than .06, CFI value is greater than .95 and SRMR is lower than .08 (Hu & Bentler, 1999).

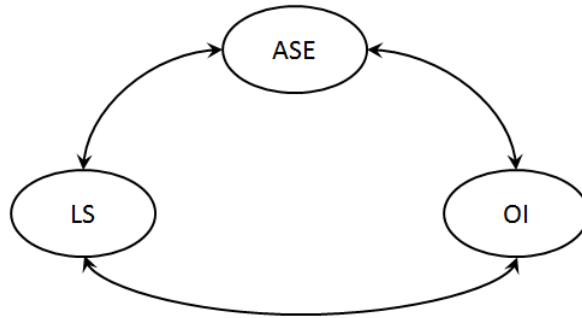


Figure 2. The measurement model

3. Results

3.1. Correlations

Table 1 shows descriptive statistics for each item. For example the average agreement for the first item under LS (ls1) is 4.96 and its standard deviation is 1.65. Besides, Table 1 also shows inter-item correlations. It was expected that the inter-item correlation coefficients within the factors (i.e., LS) were higher than across the factors. However, item 3 under OI (oi3) indicated low correlation values with other items under the factor. For example the correlation between item 1 (oi1) and 3 (oi3) was .06 and not significant. Except item oi1 all other items were significantly related other items under corresponding factors.

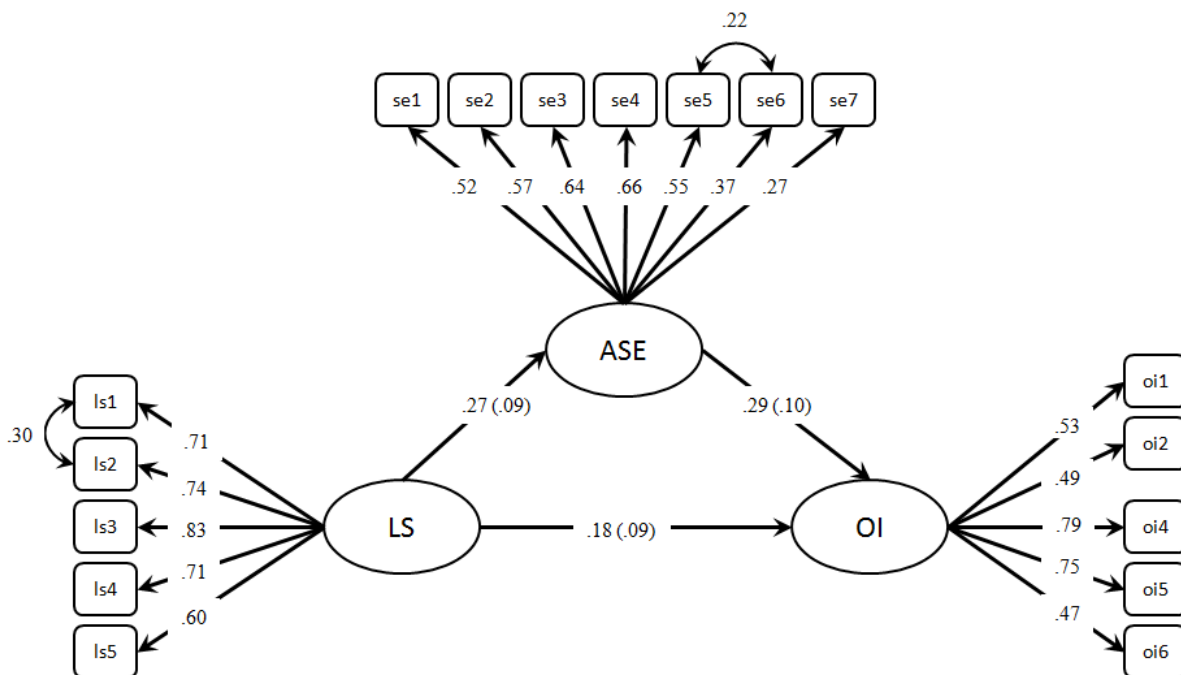


Figure 3. The final model with standardized parameter estimates

3.2. Modeling Strategy

Data analysis was conducted via Mplus 5.1. The measurement part of the hypothesized model was first run. Except chi-square value, the fit indices pointed good model-data fit. However, item oi3 was not significant. Based on the evidence collated from the correlation and Cronbach alpha values it was decided to remove item 3 from the analysis. After removing the item the measurement model was re-run. Model modifications indices indicated adding few error correlations. For example correlation between ase1 and ase2 was added to model in order to increase the chi-square value of the model. Finally, structural model was tested by using the final measurement model. The final model with standardized parameter estimates were shown in Figure 3.

3.3. Measurement Model

In order to test the hypothesized model first a measurement model was tested (Measurement 1). The measurement model replaces all the direct effect between factors on the hypothesized model with correlations as in shown in Figure 2. The first model indicated item oi3 was not significantly loading on the factor. Therefore it was removed from the model and a new measurement model was run. All the factor loadings were significant at the second model. However, modification indices (Lagrange Multiplier Test) indicated adding two error correlations in order to increase the chi-square fit of the model. These error correlations were added to the model and final measurement model (Measurement 2) was obtained. Table 2 shows the fit indices for the models tested. Based on the critical values (Hu & Bentler, 1999) final measurement model indicated good model-data fit. Therefore, it was preceded with the second step (structural model).

Table 2. Model-Data fit indices

Model	χ^2	<i>df</i>	<i>Sig.</i>	<i>Scaling</i>	<i>CFI</i>	<i>RMSEA</i>	<i>SRMR</i>
Measurement 1	168.96	132	.02	1.175	.959	.033	.054
Measurement 2	135.80	114	.08	1.177	.975	.027	.053

3.4. Structural Model

By replacing the correlation among the factors with direct effect as in the hypothesized model structural model was established. Since the final measurement model and structural model had the same parameters to estimate, the model fit indices were the same for both models. Therefore, chi-square value for the structural model was 135.80 with 114 degrees of freedom (p -value >.05). Other fit indices were also indicated good model fit based on Hu and Bentler (1999) criteria (see table 2). Under the structural model all the direct effects were significant between the factors. The standardized parameter estimates were reported in figure 3. For example, the direct effect from life satisfaction to organizational identification was significant and the standardized estimated was .18 with standard error of .09. This means that life satisfaction was positively affecting organizational identification. That is, one standard deviation increase on life satisfaction will incase organizational identification by .18 standard deviation.

Besides the direct effect, indirect effect was also estimated under the model. The results indicated that there was a significant indirect effect from life satisfaction to organizational identification via academic self-efficacy. The standardized parameter estimate for the indirect effect was .08 and standard error of it was .036.

4. Discussion and Conclusion

This study aimed at providing an understanding of relations among general life satisfaction, academic self-efficacy beliefs, and identification levels of college students. As the results suggest, all the direct effects shown in the structural model are significant between the factors. For example, this current study revealed that life satisfaction positively affects academic self-efficacy. This result shows some similarities with the findings of previous studies. However, the result provided in this current study highlights a different aspect of this

relationship. For example, Leganger, Kraft, and Røysamb (2000) and Diseth, Danielsen and Samdal (2012) found a positive relationship between self-efficacy and life satisfaction. Luszczynska, Gutiérrez-Doña, and Schwarzer (2005) reported that general self-efficacy positively affects individuals' life satisfaction. In addition, Burger and Samuel (2017) found that levels of stress in education and self-efficacy beliefs affect adolescents' life satisfaction levels in transition to young adulthood. Moreover, a study conducted on college students by O'Sullivan (2011) found that self-efficacy is positively associated with life-satisfaction. Although the positive relationship between the two factors has been highlighted by various studies generally revealing the impact of self-efficacy on life satisfaction, this current study contributes to the literature by placing more stress on the direct effect from life satisfaction to self-efficacy.

Another direct effect indicated by the results of this study is that academic self-efficacy positively affects organizational identification. Previous studies also found a similar relationship between the two and the result of this study appears to be in line with the findings of previous studies. For example, students that identify themselves with the educational institution put more effort to gain more academic achievements (Finn & Cox, 1992). In turn, students develop higher self-efficacy beliefs and become more effective in problem solving and academic achievements (Eggen & Kauchak, 1997; Schunk, 2009). This current study, moreover, found another positive relation between life satisfaction and organizational identification. This finding is too in accordance with the results of previous studies. For example, while having negative feelings reduce organizational identification levels of individuals as in the case of loneliness and exhaustion (Avanzi et al., 2015; Yılmaz, 2008), having lower life satisfaction levels also lowers students' organizational identification levels (Bugay et al., 2015; Stefanek et al., 2017). In this regard, as provided by Arslan and Akkas (2014), life satisfaction and university identification positively affects college students' college life satisfaction. All these findings appear to be important because college students tend to identify themselves with the image of their colleges when they have higher college life satisfaction levels (Hennig-Thurau et al., 2001; Bhattacharya & Sen, 2003), meaning that they develop higher organizational identification as their life satisfaction levels improve and college experiences broaden positively.

This study also revealed the role of academic self-efficacy as a mediator between life satisfaction and organizational identification. As supported by the structural model used in this study, it appears to be that there is a significant indirect effect between life satisfaction and organizational identification via academic self-efficacy. In other words, the results show that increase in life satisfaction promotes increase in organizational identification over its effect on academic self-efficacy. In this regard, this current study also contributes to the literature by highlighting the indirect effect from life satisfaction to organizational identification through self-efficacy as a mediator.

Before concluding, it may be helpful to consider some limitations and further research suggestions. For example, although this study was conducted with the participants that show culturally diverse characteristics, a further research would consist of various sets of participants from different colleges across the country and perhaps from some other countries. In this regard, a comparative analysis would make an important contribution to the literature. Another important thing may be related to the variables examines in this study. A further research would focus on wider relations between these and some other variables so that a broader perspective on this issue would be provided. To conclude, despite these limitations, the current study appears to have considerable significance to understand the relations among these concepts and draws attention to the importance and role of these factors in providing a better-quality college life and academic achievements. In this regard, it may be insightful to highlight the importance of offering services and activities – starting from even the orientation throughout the entire college life – that help college students increase their life-satisfaction and self-efficacy beliefs so that they develop stronger organizational identifications and gain higher academic achievements. Providing more academic studies on this issue may also be an important suggestion that can be offered by this study.

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