

The level of pedagogical formation students' academic locus of control

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ABSTRACT

Academic locus of control has an important place in explaining students' behaviors in educational settings. The purpose of the current study is to determine the level of the pedagogical formation students' academic locus of control and to investigate whether this level varies depending on some variables. The study employed the survey model, one of the quantitative research methods. The universe of the study is comprised of the students enrolled at the pedagogical formation program initiated in the fall term of 2015-2016 academic year in Muğla Sıtkı Koçman University and the sampling consists of 397 pedagogical formation students. As the data collection tool, the academic locus of control scale was used in the current study. It was concluded that the pedagogical formation students' level of academic locus of control is medium. It was also found that the students' academic locus of control, internal locus of control and external locus of control do not vary significantly depending on gender and department; yet, vary significantly depending on age. Furthermore, the pedagogical formation students' level of satisfaction was found to be significantly correlated with the external locus of control but not with the internal locus of control and academic locus of control.

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1. INTRODUCTION

The basic conditions of creating effective learning environments within the educational and instructional process include determining the individual differences of students. Individual differences affect the success and course-oriented motivation of individuals during educational and instructional activities. Constructs such as intelligences, abilities, self-confidence, motivation, learning and thinking styles possessed by individuals lead to emergence of individual differences. The construct of locus of control is also conducive to the formation of individual differences.

Locus of control based on Rotter's social learning theory depends on the degree to which individuals perceive their personal responsibility for events [1]. Locus of control is made up of two dimensions being internal locus of control and external locus of control. The individuals having external locus of control believe that external forces (luck, destiny or others' behaviors) are the main determinants and thus they believe that they can change very little with their abilities and behaviors; therefore, they do invest either no or very little effort [2]. The individuals with internal locus of control are of the opinion that that what is important is their own behaviors [3] and thus, they put forth the effort needed [4]. The individuals with external locus of control are claimed to be less eager to demonstrate their abilities, to experience the feeling of helplessness more and to have lower expectation of success [5]. The individuals with internal locus of

control on the other hand have been claimed to be more successful in coping with stress [6], to be more active in interpersonal relationships and to be more likely to fulfill their responsibilities [7], to be more successful in solving problems [8], [9], to be more effective in making decisions [10], to have higher self-efficacy [11], to be academically more successful [12, 13] and to be socially more active [14].

In the academic setting, locus of control corresponds to the evaluation of students' individual success and failures at school [12]. The academic locus of control offers insights about an individual's generalized expectations in an academic environment.

Academic external locus of control refers to students' belief that the positive or negative outcomes or successes or failures they have attained at school have been brought about by factors other than their own control, such as chance, difficulty of the task or the behavior of other individuals. Academic internal locus of control on the other hand refers to students' belief that any academic success or failure is due to their own behaviors or personality traits [15]. The existence of internal and external academic locus of control in an academic environment is influential on carrying out assignments, duties and responsibilities, academic achievement, decision making skills and career selection [16]. Given the delineations above, it can be said that locus of control has an important place in explaining students' behaviors in educational environments. Thus, it seems to be important to determine pre-service teachers' internal and external locus of control together making up academic locus of control. It is also believed to be important to determine the factors affecting their locus of control. In this regard, the purpose of the current study was set to be to determine pedagogical formation students' level of academic locus of control and to reveal the relationships between their academic locus of control and some variables.

2. RESEARCH METHOD

The current study is a qualitative study employing the survey model. The survey model refers to an investigation made on a group taken from a universe made up of many elements to reach a general conclusion on the universe [17].

The universe of the current study is made up of the pedagogical formation students enrolled in Muğla Sıtkı Koçman University in 2015-2016 academic year. The sampling of the study is comprised of 397 students randomly selected from among the universe as shown in Table 1.

Table 1. Demographic features of the sampling

	Variables	N	%
Age	20 and under	111	28
	21 – 25	119	30
	26 -30	61	15.4
	31 and over	106	26.7
Gender	Female	222	55.9
	Male	175	44.1

Of the 397 pedagogical formation students participating in the current study, 28% (111) are in the age group “20 and under”, 30% (119) are in the age group “21 -25”, 15.4% (61) are in the age group “26–30” and 26,4% (106) are in the age group “31 and over”. Of the 397 pedagogical formation students participating in the current study, 55.9% (222) are females and 44.1% (175) are males.

As the data collection tool in the current study, the academic locus of control scale and a personal information form were used. The academic locus of control scale was developed by [2]. The academic locus of control scale is comprised of 17 items and two dimensions being internal locus of control and external locus of control. Of these 17 items, 11 are related to external locus of control and 6 are related to internal locus of control. The internal consistency coefficient for the internal locus of control dimension was found to be .78 and the internal consistency coefficient for the external locus of control was found to be .79. The academic locus of control scale does not have any reverse items. The scores taken from the internal locus of control and external locus of control dimensions can be interpreted as follows: the higher the mean score taken from one dimension, the more characteristics of the related dimension the respondent has.

In the analysis of the collected data, first the collected data were entered into the computer environment; the questionnaires not having been responded properly were excluded from the analyses. The data were analyzed in IBM SPSS 21 program package. The homogeneity of the variance was examined; as a result of the homogeneity tests, the students' level of academic locus of control was determined. The correlation between the academic locus of control and the gender variable was tested with t-test and the correlations between the level of academic locus of control and the age, department and satisfaction were tested with one-way variance analysis (ANOVA).

3. RESULTS AND DISCUSSION

In line with the general purpose of the study, the results of the analyses conducted to find answers to the research questions are presented in this section. Findings related to the pedagogical formation students' level of academic locus of control are given in Table 2. As can be seen in Table 2, the pedagogical formation students' mean level of academic locus of control was found to be medium. The mean level of internal locus of control was found to be high and the mean level of external locus of control was found to be low.

Table 2. Pedagogical formation students' levels of academic locus of control

	N	\bar{X}	Ss	Min.	Max.
External control	397	1.44	.55	1.00	3.00
Internal control	397	2.69	.54	1.00	3.00
Academic control	397	1.95	.38	1.00	3.00

In Table 3, the results of t-test conducted to determine whether the pedagogical formation students' level of academic locus of control varies significantly depending on the gender variable are presented. As can be seen in Table 3, the pedagogical formation students' levels of academic locus of control do not vary significantly depending on the gender variable ($p > .05$). In other words, gender was found to have not a significant influence on academic locus of control, internal locus of control and external locus of control. When the relevant literature is reviewed, it is seen that there are some studies reporting that pre-service teachers' academic locus of control does not vary by gender [18-23].

Table 3. Gender-based differences between the pedagogical formation students' levels of academic locus of control

	Gender	N	\bar{X}	Ss	t	p
Academic control	Female	222	2.85	.44	1.29	.196
	Male	175	2.91	.49		
Internal control	Female	222	4.05	.71	1.95	.846
	Male	175	4.07	.77		
External control	Female	222	2.19	.65	1.25	.210
	Male	175	2.28	.71		

In Table 4, the results of the one-way variance analysis (ANOVA) conducted to determine whether the pedagogical formation students' levels of academic locus of control vary significantly depending on the age variable are given.

As can be seen in Table 4, the pedagogical formation students' levels of academic locus of control, internal locus of control and external locus of control vary significantly by age. The significant difference found in the external locus of control dimension seems to have stemmed from the difference between the age groups 21-25 and 31 and over. The significant difference found in the internal locus of control dimension seems to have stemmed from the difference between the age groups 20 and under and 26-30. The significant difference found in the academic locus of control dimension seems to have stemmed from the difference between the age groups 21-25 and 31 and over. This finding is parallel to [24] reporting that with increasing age, individuals tend to be more internally controlled.

Table 4. The results of one-way variance analysis conducted to determine whether the pedagogical formation students' levels of academic locus of control vary significantly depending on the age variable

		Sum of Squares	Sd	Mean Squares	F	p	Difference
External Control	Between-groups	5.15	3	1.72	3.77	.01	2-4
	Within-groups	179.21	393	.46			
	Total	184.36	396				
Internal Control	Between-groups	5.10	3	1.70	5.16	.03	1-3
	Within-groups	211.90	393	.54			
	Total	217.00	396				
Academic Control	Between-groups	1.89	3	.63	2.91	.03	2-4
	Within-groups	84.87	393	.22			
	Total	86.76	396				

In Table 5, the results of the one-way variance analysis (ANOVA) conducted to determine whether the pedagogical formation students' levels of academic locus of control vary significantly depending on the department variable are given. As can be seen in Table 5, the pedagogical formation students' levels of academic locus of control, internal locus of control and external locus of control do not vary significantly depending on the department variable. Whether the students are from literacy departments, numeracy departments or vocational departments does not lead to any significant influence on any of the dimensions of academic locus of control. In a study conducted by [25] on senior students of all the departments of the KTÜ Education Faculty, it was found that the students' academic locus of control does not vary significantly depending on the department attended. Similarly, [26], [27] reported that the students' academic locus of control does not vary significantly depending on the department variable.

Table 5. The results of one-way variance analysis conducted to determine whether the pedagogical formation students' levels of academic locus of control vary significantly depending on the department variable

		Sum of Squares	Sd	Mean Squares	F	p	Difference
External Control	Between-groups	.18	2	.09	.19	.83	-
	Within-groups	184.18	394	.47			
	Total	184.36	396				
Internal Control	Between-groups	.58	2	.29	.53	.59	-
	Within-groups	216.42	394	.55			
	Total	217.00	396				
Academic Control	Between-groups	.01	2	.01	.03	.98	-
	Within-groups	86.75	394	.22			
	Total	86.76	396				

In Table 6, the results of the one-way variance analysis (ANOVA) conducted to determine whether the pedagogical formation students' levels of academic locus of control vary significantly depending on the satisfaction variable are given. As can be seen in Table 6, the pedagogical formation students' level of external locus of control varies significantly depending on the satisfaction variable but their levels of academic locus of control and internal locus of control do not. When the source of this difference was examined, it was found that it stemmed from the difference between those who are satisfied and those who are dissatisfied and between those who are partially satisfied and those who are dissatisfied.

Table 6. The results of one-way variance analysis conducted to determine whether the pedagogical formation students' levels of academic locus of control vary significantly depending on the satisfaction variable

		Sum of Squares	Sd	Mean Squares	F	p	Difference
External Control	Between-groups	3.65	2	1.83	3.98	.02	1-2, 2-3
	Within-groups	180.71	394	.46			
	Total	184.36	396				
Internal Control	Between-groups	.53	2	.27	.48	.62	-
	Within-groups	216.47	394	.55			
	Total	217.00	396				
Academic Control	Between-groups	1.23	2	.61	2.83	.06	-
	Within-groups	85.53	394	.22			
	Total	86.76	396				

4. CONCLUSION

In the current study, it was found that the pedagogical formation students' level of academic locus of control is medium, level of internal locus of control is high and level of external locus of control is low. The students' high level of internal locus of control can be evaluated as a positive finding in terms of the students' qualifications. The students with internal locus of control admit that their success depends on their own behaviors and thus they invest the required effort. They are more successful in coping with stress, more active in interpersonal relationships, take their responsibility, their motivation is high, they are more successful in solving problems, their self-efficacy is high, they are academically successful and socially active. Whether individuals are internally or externally controlled in their academic endeavors is highly influential on making preferences that will shape the future such as fulfilling duties and responsibilities and making academic decisions. In addition to these findings it was also found that the pedagogical formation

students' levels of academic locus of control, internal locus of control and external locus of control do not vary significantly depending on the department and gender variables. However, their levels of academic locus of control, internal locus of control and external locus of control vary significantly by age. Besides, their level of external locus of control varies significantly depending on the satisfaction variable but their levels of academic locus of control and external locus of control do not.

The current study was conducted with the pre-service teachers enrolled in a pedagogical formation program. Similar studies can be conducted on pre-service teachers from different departments. In the current study, four independent variables (gender, age, department, satisfaction level) thought to affect academic locus of control were investigated. Future research may explore the effect of different variables on academic locus of control. Whether individuals are internally or externally controlled has significant impacts on their academic experiences. Future research can focus on ways of developing students' academic locus of control.

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