Öğrencilerin Klinik Eğitim Ortamına İlişkin Algılarının ve Akademik Öz-Yeterliliğin Değerlendirilmesi: Kesitsel bir çalışma*

*Evaluation of Students' Perceptions of ClinicalEducation Environment andAcademic Self-Sufficiency: a cross-sectionalstudy**

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ÖZET:

Amaç: Klinik öğrenme ortamı sağlık personelinin eğitiminde önemlidir. Öğrencilerin eğitimlerinin bir parçası olan klinik ortamlardan memnuniyetleri, motivasyon ve özgüvenleri akademik özyeterlilikleri ile ilişkili olabilmektedir. Adnan Menderes Üniversitesi Sağlık Bilimleri Fakültesi ve Hemşirelik Fakültesi öğrencilerinin klinik eğitim ortamı algısı ile akademik özyeterlilik algılarının değerlendirilmesidir.

Gereç ve Yöntem: Bu kesitsel çalışma Adnan Menderes Üniversitesi Hemşirelik Fakültesi ve Sağlık Bilimleri Fakültesinde 2,3 ve 4. sınıfa devam eden öğrencilerin katılımı ile gerçekleştirilmiştir. Toplam 678 öğrenci gönüllü olarak öz bildirim ile anket formunu doldurmuştur. Anket formu 3 bölümden oluşmaktadır. Birinci bölümde sosyodemografik özellikleri, başarı algıları ve kariyer tercihleri sorgulanmıştır. İkinci bölümde, Akademik Özyeterliliği değerlendirmek üzere "Akademik Özyeterlik Ölçeği" kullanılmıştır. Üçüncü bölümde ise "Klinik Öğrenme İklimi" ölçeği yer almıştır.

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Bulgular: Öğrencilerin çoğunluğu kız, hemşirelik bölümüne devam etmektedir. Akademik özyeterlilik puan ortalamaları, 18,66±3,09 (7-28) bulunmuştur. Hemşirelik öğrencileri, erkekler, başarı algısı iyi olanlar, mezuniyet sonrası doktora planlayanlar, istatistiksel anlamlı yüksek puan almıştır. Klinik öğrenme ortamı ölçeğinden alınan ortalama puan 127,42±21,56 olarak hesaplanmıştır. Mezuniyet sonrası akademik kariyer planlayanlar, başası algısı iyi olanlar, dönem kaybı olmayanlar, hemşirelik öğrencileri, kızlar ve 2. sınıflar daha yüksek puan almışlardır

Sonuç: Sağlık hizmet sunucusu yetiştiren okulların uygulama alanı olarak kliniklerin ortamının olumlu hale getirilmesi öğrencilerin akademik özgüvenlerini de artıracaktır.

ABSTRACT:

Aim: *Clinical learning environments are important for education of health care professionals. Students' satisfaction with, motivation about and self-confidence in clinical environments, as part of their education, can be related to their academic self-efficacy. The aim of this cross-sectional study is to evaluate perceptions of clinical education environments and perception of academic self-efficacy in second-, third- and fourth-year students in the health sciences and nursing departments of Adnan Menderes University*

Methods: *The study included a total of 678 students voluntarily accepting to participate in the study. Data were collected with a self-report questionnaire composed of three sections. The first section included questions about socio-demographic features, perceived success and career choices. The second section included Academic Self-Efficacy Scale. The third section included Clinical Learning Environment Scale.*

Results: *Most of the students were female and from the nursing department. The mean academic self-efficacy score was 18,66±3,09 (range: 7-28). The nursing students, the male students, the students with higher perceived success and the students planning to attend a PhD program after graduation had significantly higher scores. The mean score for Clinical Environment Scale was 127,42±21,56. The students planning to follow a post-graduate career path, those having higher perceived success, those not missing a term, the nursing students, the female students and the second-year students had higher scores.*

Conclusions: *More positive clinical environments as practice areas of the schools which offer education for students who will become health care providers will increase their academic self-efficacy.*

INTRODUCTION

Clinical learning environments are important to education of health care professionals. Students receive education and training on the job from their educators in these environments. Clinical education involves education given in an environment in which medical practices are performed on real patients. Such environments are variable, instant, opportunistic and nonpermanent places where students have a chance of putting what they have learned into practice. The clinical learning environment (CLE) is a multidimensional, complex social context. It involves patients, educators and clinical staff. Behavior, values and relationships influence this nontraditional classroom environment. On one hand, the CLE can make learning attractive, on the other hand it can function as a barrier. Therefore, this interactive dynamic environment should be managed well. In the CLE, learning is achieved by a student-

centered approach, active participation and trying. Students are not only expected to fulfill their roles related to the subject learned but also to exhibit professional thinking, attitudes and behavior in this environment (1, 2, 3). It has four components, namely: " the physical space (1); psychosocial and interaction factors (2); the organizational culture (3) and teaching and learning (4). The relationship between the clinical staff and students is effective in learning. Team spirit and relationships have a positive effect on the learning atmosphere. Professional figures are also important for students.

Self-confidence and encouragement of students strengthen learning in the CLE. A positive relationship between health staff in the clinic and students increase motivation and learning. Friendly, tolerant and helpful staff maintains education. The relationship between students is as important as the one between the teacher and students (4, 5).

Cognitive learning outcomes involve knowledge, critical thinking and academic success. So that capabilities of students can be improved, they should observe clinical staff and teachers, experiment what they have learned and put their theoretical knowledge into practice (6, 7).

The CLE improves clinical competences of students. Students' satisfaction with clinical environments as part of their education, motivation and self-confidence can be associated with their academic self-efficacy. It refers to students' belief and self-confidence for achieving their academic tasks and goals. Perceived academic self-efficacy is defined as the feeling of confidence developing as a result of fulfillment of some tasks. It is reported that strong self-efficacy can only be created by having direct experiences. As the year of study increases, so do experiences and gains of students in classes. Perceived academic self-efficacy is the student's belief that he/she can complete an academic task successfully. Self-efficacy is based on the belief in abilities and is necessary to arrange and exhibit behavior required to reachgoals. It is a belief created through experiences over time. The CLE is valuable for its creation. Academic self-efficacy enhances students' success (6, 7).

The aim of this study is to evaluate perceived clinical environment and academic self-efficacy in the students in the Department of Nursing and the Department of Health Sciences at Adnan Menderes University.

MATERIAL AND METHODS

This cross-sectional study was performed in the second-, the third- and the fourth-year students in the Department of Nursing and the Department of Health Sciences at Adnan Menderes University. Data were gathered with a self-report questionnaire from 678 students volunteering to participate in the study. The questionnaire has three parts. The first part included questions about socio-demographic features, perceived success and career choices. The second part was composed of Academic Self-Efficacy Scale. The scale was developed by Jerusalem and Schwarzer (1981) and had one factor and seven items (8). It was adapted to Turkish by Yılmaz et al. (9). It is a four-point scale, and one corresponds to not completely true for me, two slightly true for me, three true for me and four completely true for me. As the total score for the scale increases, so does academic self-efficacy. The third part included Clinical Learning Environment Scale. Its validity and reliability for the Turkish population were tested by DemiralYilmaz (10). It has 36 items and three subscales, namely clinical environment (23 items), emotions (eight items) and motivation

(5 items). It is a five-point Likert scale: one corresponding to completely disagree, two disagree, three indecisive, four agree and five completely agree. The maximum and minimum scores for the scale are 180 and 36 respectively. It does not have a cut-off point. High scores indicate a positive clinical environment. Data were analyzed with Statistical Package Program for Social Sciences. Descriptive characteristics of the participants were expressed in the distribution of number and percentage, mean, standard deviation and minimum and maximum values. Student's t test, ANOVA and Spearman correlation analysis were used to determine the factors related to the scores for the scale. $p<0,05$ was accepted significant for the statistical tests and the relations were evaluated within 95% confidence interval.

Ethical approval was obtained from the Ethical Committee for Non-Interventional Research at Adnan Menderes University Hospital.

RESULTS

Table 1 presents descriptive characteristics of the students. Most of the students were female and studying nursing. Only one fifth of the students considered their performance as good. About 30% of the students were planning to be academicians. The perceived academic self-efficacy score was 18,66±3,09 (range: 7-28). The nursing students, the male students, the students with high perceived success and the students planning to attend a PhD program got significantly higher scores for perceived academic self-efficacy. The mean score for Clinical Learning Environment Scale was 127,42±21,56. The students planning to attend a postgraduate program, the students with high perceived success, the students without a term missed, the nursing students, the female students and the second-year students received higher scores for Clinical Learning Environment Scale. The statements in Clinical Learning Environment Scale about which the students agreed the most were as in the following: I have good relationships with my friends at school (84.4%); I am willing to learn (83.8%) and I like offering care to patients (72.2%). The statements about which the students agreed the least were as follows: I had time for myself during practicums (41.7%), I had time to study during practicums (31.7%) and I had time to have a rest during practicums (30.7%).

The statement in Academic Self-Efficacy Scale about which the students agreed the most was "I always get a high grade for exams when I get prepared well" (85.2%) and the statement they agreed about the least was "I cannot imagine any exams in which I fail (38.1%). Table 2 shows the distribution of the scores for the scales by their characteristics. The female students, the nursing students, the fourth-year students, the students with high perceived success, those without a term missed and those planning to become an academician got significantly higher scores for the scale. There was a significant moderate correlation between the scores for academic self-efficacy and the scores for clinical learning environment (Pearson correlation analysis: 0.318, $p<0.0001$).

Table 1. The Distribution of the Students by their Characteristics

	Number	%
Gender		
Male	**130**	**19,2**
Female	**548**	**80,8**
Year of Study		
2,00	**204**	**30,9**
3,00	**253**	**38,2**
4,00	**205**	**31,0**
Field of Study		
Nursing	**408**	**63,4**
Midwifery	**171**	**26,6**
Nutrition and Dietetics	**65**	**10,1**
Missing a Term		
Yes	**61**	**9,4**
No	**590**	**90,6**
Perceived Performance		
Good	**150**	**22,2**
Moderate	**480**	**71,1**
Poor	**45**	**6,7**
Career Choice		
Hospital	**399**	**59,5**
Academician	**202**	**30,1**
Other	**70**	**10,4**

Table 2. The distribution of the Scores for Clinical Learning Environment Scale and Academic Self-Efficacy Scale by the Students' Characteristics

	Clinical Learning Environment Scale		Academic Self-Efficacy Scale	
	mean±SD	p	mean±SD	p
Gender				
Male	122,89±26,93	2,30	19,28±3,34	2,423
Female	128,12±20,43	0,021	18,52±3,03	0,016
Year of Study				
2,00	130,48±21,07	4,80	18,63±2,80	1,210
3,00	123,98±23,03	0,008	18,48± 3,34	
4,00	128,24±19,88		18,68±2,75	
Field of Study				
Nursing	129,59±21,70	7,18	18,86±3,05	3,63
Midwifery	126,24±20,89	0,001	18,10±2,95	0,027
Nutrition and Dietetics	117,43±19,40		18,81±3,27	
Missing a Term				
Yes	116,70±21,84	4,108	19,00±2,80	p>0.05
No	128,73±20,92	0,000	18,60±2,97	
Perceived performance				
Good	130,31±19,43	16,54,	19,92±3,11	19,77
Moderate	127,92±20,56	0,000	18,44±2,83	0 ,000
Poor	109,51±31,51		17,04±4,24	
Career Choice				
Hospital	126,52±20,70	8,37	18,31±3,20	10,16
Academician	131,48±22,13	0.00	19,48±2,86	0.00
Other	118,98±24,27		18,19±2,84	

DISCUSSION

A positive learning environment is essential in that it helps educational organizations to be more effective and productive. Clinics are the learning environments for health sciences students. They have to be active participants in these learning environments so that they can acquire some professional competences. Although clinical learning environments are structured, learning occurs in a real environment involving unexpected situations. Having high academic self-efficacy plays an important role in coping with difficulties there. In the present study, there was a significant correlation between academic self-efficacy and clinical learning environment.

The score of all the students for Clinical Learning Environment Scale indicated an overall positive perception of learning environments. The females, the nursing students, the second-year students, the students not missing a term, the students planning to become an academician got significantly higher scores. Consistent with the present study, it has been reported in the literature that female and male students differed in their attitudes to learning (11, 12). In addition, in a study by Brown, Williams and Lynch on students from different disciplines, nutrition and dietetics students had a more favorable attitude than midwifery students (11). Unlike the results of present study, other studies showed that the last-year students received higher scores for their attitudes to learning. In this study, the second-year students had a more positive attitude to learning. It can be attributed to the fact that as the year of study increases, so does the amount of responsibility students have to fulfill in the clinical environment. This may cause them to recognize problems in the clinic and have negative perceptions about their learning environment.

In the current study, the students were found to have a good relationship with their friends. Peer support and good relationships with peers are considered as factors contributing to a positive learning attitude (3, 13).

Willingness to learn is crucial for both academic self-efficacy and a positive learning attitude (14). The students in the present study were also willing to learn, which will support academic self-efficacy in their learning environment. Since healthcare professions are based on both theoretical knowledge and practice, candidates of healthcare professionals have to receive education in the clinical environment integrated with theoretical courses. It is important for students to actively participate in healthcare services. The clinical environment should allow students to display their intellectual, practical and communication skills and help them improve their competences. It prepares students for the real life. Therefore, it is desirable that students should be enthusiastic with communicating with patients and offering them care. In a similar study, the students were found to be aware of importance of hands-on training for patient care (5).

In the present study, the findings showed that the students had difficulty in having time to study and to spend on leisure activities. Some researchers emphasize that time pressure can have a relatively positive effect on motivation for learning (15). However, other researchers underline time management (16). Waterworth emphasized that the ability to synchronize one routinewith others is important and in addition, the ability to prioritize is a prerequisite for effective work performance (17). Mirzaei (2012) et al. Reported that time management is to enable nursing students to achieve a better balance between work and personal life and prepare themselves for clinical environments. Nursing student should learn planning and

prioritizing their academic and non-academic activities (18). The studies demonstrated that time management training programs generally increased studens time management skills and the copying time pressure (19).

The curriculum of the undergraduate nursing education is appropriate to the age, social, culture and environment of students (18).

One limitation of this study was that it was not sufficient to explain causality since it was cross-sectional. Another limitation was that its results cannot be generalized since it was performed in a single center. However, it is one of the few studies in Turkey which involve students from different disciplines and which evaluate the relation between academic self-efficacy and clinical learning environments. An important strength of clinical education is that it is based on real problems of professional practices. However, clinical education can pose some difficulties for students since it can have a negative clinical learning environment. In the present study, the students' positive perceptions and attitudes concerning the clinical learning environment and sufficient academic confidence are their important gains. However, the students were found to experience difficulty in time management. Therefore, they should be provided support for and guidance in time management.

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