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EVALUATION OF LIFELONG LEARNING TENDENCIES OF HEALTH PERSONNEL PROVIDING PREHOSPITAL EMERGENCY HEALTH SERVICES

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ABSTRACT

Aim: The acquisition of lifelong learning habits by healthcare professionals for the enhancement of their knowledge and skills post-graduation holds paramount significance for the beneficiaries of healthcare services. The aim of this study was to evaluate the lifelong learning approaches of emergency ambulance employees.

Material and Methods: Within the scope of the research, data was collected online from 390 healthcare professionals working in emergency ambulances using the lifelong learning tendencies scale in in Turkey. When evaluating the data, group characteristics were summarized by descriptive analyses and In the comparisons of numerical variables, normal distribution condition was sought and nonparametric comparison tests were used.

Results: Within the scope of the research, the mean lifelong learning approach scores of the health personnel working in the emergency ambulance were found to be 113.89±16.03 (min. 61, max. 145) and the obtained score shows that their lifelong learning tendencies are at a low level. The findings indicate that there is no statistically significant difference among groups based on gender, title, age, and years of work experience in terms of the total scores on the Lifelong Learning Tendencies Scale ($p>0.05$ for each). However, significant differences were observed among certain groups in terms of the subscales of the scale. It was determined that participants aged 30 and above exhibited decreased levels of motivation and perseverance. Additionally, it was found that as years of work experience increased, deficiencies in learning levels and curiosity deficiencies decreased.

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Conclusion: Research findings indicate the necessity of developing content aimed at enhancing lifelong learning tendencies among healthcare personnel serving in emergency medical ambulances post-graduation education, increasing motivation for in-team training among personnel, and supporting improvement efforts such as facilitating access to up-to-date information and readily accessible educational opportunities.

Keywords: Lifelong Learning, Pre-hospital Emergency Healthcare Workers, Motivation

HASTANE ÖNCESİ ACİL SAĞLIK HİZMETİ SUNAN SAĞLIK PERSONELLERİNİN YAŞAM BOYU ÖĞRENME EĞİLİMLERİNİN DEĞERLENDİRİLMESİ

ÖZ

Amaç: Sağlık profesyonellerin mezuniyet sonrası bilgi ve becerilerini geliştirmeleri ille ilgili edinecekleri yaşam boyu öğrenme alışkanlıkları hizmet alıcıları için hayati önem taşımaktadır. Çalışmanın amacı acil yardım ambulansı çalışanlarının yaşam boyu öğreneme yaklaşımlarının değerlendirilmesidir.

Gereç ve Yöntemler: Araştırmada Türkiye'de acil yardım ambulanslarında görev yapan 390 sağlık personelinden yaşam boyu öğrenme eğilimleri ölçeği ile online olarak veri toplanmıştır. Grup özellikleri tanımlayıcı analizlerle, sayısal değişkenler nonparametrik karşılaştırma testleri ile analiz edilmiştir.

Bulgular: Acil yardım ambulansında görev yapan sağlık personellerinin yaşam boyu öğrenme yaklaşımı puan ortalaması 113.89±16.03 (min.61, max.145)'dır ve yaşam boyu öğrenme eğilimlerinin düşük düzeyde olduğunu tespit edilmiştir. Cinsiyet, ünvan, yaş ve çalışma yılı grupları ile toplam puanlar arasında anlamlı farklılık olmadığı tespit edilmiştir. Ancak ölçek alt boyutlarında motivasyon ve sebatın 30 yaş üstü katılımcılarda azaldığı, çalışma yılı arttıkça öğrenme düzeyinde yoksunluğun ve merak yoksunluğunun azaldığı gözlenmiştir ($p<0,05$).

Sonuç: Araştırma bulguları acil yardım ambulanslarında görev yapan sağlık personellerinin mezuniyet sonrası eğitimlerinde yaşam boyu öğrenme eğilimlerini arttıracak içeriklerin geliştirilmesi, personellerin ekip içinde eğitim yapma motivasyonları arttırılması, güncel bilgiye ulaşım ve kolay erişilebilen eğitim olanakları gibi iyileştirme çalışmalarının desteklenmesi gerekliliği ortaya çıkmaktadır.

Anahtar Kelimeler: Yaşam Boyu Öğrenme, Hastane Öncesi Acil Sağlık Hizmeti Çalışanları, Motivasyon.

INTRODUCTION

In today's context, the definition of learning has evolved to emphasize the acquisition of the ability to access updated information through the fastest and most reliable means, as well as the development of skills to use that knowledge effectively for specific purposes, rather than simply transmitting past knowledge to students (Arslan et al. 2016). The understanding of "education and learning" that continues during adulthood and/or vocational education has

evolved into the "lifelong education and learning" approach. The education process, which is more dependent on the teacher and the learning environment, has also begun to be organized towards independent learning methods and independent learning environments (Amin and Eng, 2012). According to Doyle (1994), lifelong learning is intertwined with life itself. Lifelong learning can be perceived not as an alternative to formal education but as a means to complement deficiencies or inadequacies in formal education, or to discover previously unrecognized talents. Learning to learn is considered as the fundamental concept of lifelong learning (Doyle, 1994). Lifelong learning is a comprehensive framework aimed at restructuring the existing system and maximizing the potential of education beyond formal educational institutions, encompassing all forms of formal and informal educational activities. The ability for individuals to closely monitor advancements in their profession and continuously renew themselves can be facilitated through lifelong learning (Güleç et al., 2012). Professionally, lifelong learning is defined as individuals' participation in formal, informal, and continuous learning activities throughout their lives with the aim of developing competencies that are aligned with their interests and needs in various learning domains (Aksoy, 2008).

Pre-hospital emergency healthcare service involves the initial assessment, emergency intervention, and appropriate transfer to the suitable hospital by trained professional healthcare personnel using emergency medical ambulances when there is a need for urgent assistance. While technological advancements in emergency intervention vehicles and equipment have progressed rapidly in this healthcare service, the most crucial element of the system remains healthcare personnel who have received specialized training in this field. This healthcare service, provided to the location of the patient or injured individual, directly affects morbidity and mortality rates. Healthcare professionals working in emergency medical ambulances, including doctors (Dr), Paramedics (Prm), and Emergency Medical Technicians (EMT), make vital decisions as a team in complex cases under stress and environmental factors, which are crucial for the individuals receiving the service (Uysal et al. 2020).

While there are studies in the literature that investigate the lifelong learning tendencies of different professional groups, there are relatively few studies conducted with healthcare professionals. Arslan (Arslan, 2017) found that paramedic students had above-average lifelong learning tendencies, indicating their receptiveness to continuous learning and development, which is a positive finding (Arslan, 2017). In a study conducted with nursing students, it was determined that the participants had low lifelong learning tendencies (Dikmen et al. 2016). In research examining the lifelong learning tendencies of students in health sciences faculties, it was found that their lifelong learning tendencies were at a good level (Güçlü et al. 2023). A study with medical faculty students found that the average scores for lifelong learning

tendencies were determined to be 74.34 + 9.56, and they observed a significant difference among students in different study periods (Gayef and Alptürk, 2022).

In this regard, tracking guidelines related to advancements in the professional practices of emergency healthcare service workers in ambulance units and utilizing data obtained from lifelong learning approaches will contribute to the planning aimed at identifying and enhancing the lifelong learning approaches of pre-hospital emergency healthcare service providers. A study investigating the lifelong learning tendencies of healthcare professionals working in pre-hospital emergency ambulances in Turkey has not been encountered in the literature. In this respect, the study aimed to determine the lifelong learning tendencies of healthcare personnel working in emergency ambulances and examine their significance in relation to demographic variables.

1. MATERIAL and METHODS

1.1. Research Design

The conducted research is a descriptive, cross-sectional study structured to determine the lifelong learning tendencies of healthcare personnel involved in the provision of pre-hospital emergency medical services in Turkey and to examine the relationship between levels of lifelong learning tendencies and demographic variables.

1.2. Research Group

Within the scope of the research, data were collected from 390 healthcare personnel (43 Doctors, 214 Paramedics, and 133 Emergency Medical Technicians) working in emergency medical ambulances in various provinces of Turkey. The population of the study comprises 35,000 healthcare personnel providing pre-hospital emergency healthcare services in Turkey (T.C. Sağlık Bakanlığı, 2022). In determining the sample, the sample size table reported in the study by Krejcie and Morgan (1970) for determining the sample size for research purposes was used as a reference (Krejcie and Morgan, 1970). According to Krejcie and Morgan (1970), it is recommended to determine a sample size of 380 for a population of 35,000. In this context, data were collected from 390 participants through purposive sampling for the research, and the online survey application, based on voluntary participation, was concluded.

1.3. Data Collection Tools

The research data were collected using the Lifelong Learning Tendency Scale (LLTS), which was developed by Coşkun (2009) and its validity and reliability in medical education were tested by Arslan et al. (2016) (Coşkun, 2009; Arslan et al. 2016). Low scores on the LLTS scale (min. 25 - max. 150) indicate a high level of lifelong learning tendency. High scores in the

subscales of the scale, Motivation (min. 4 - max. 24) and Perseverance (min. 8 - max. 48), indicate high motivation and perseverance, while high scores in the Lack of Regulating Learning (min. 5 - max. 30) and Lack of Curiosity (min. 8 - max. 48) subscales suggest low deficiencies in regulating learning and curiosity (Arslan et al. 2016). When examining the internal consistency of the data collected from 390 participants in the study, the Cronbach's alpha value for the scale was determined to be 0.896. Internal consistency analyses were separately conducted for each of the four subscales, resulting in values of 0.803 for the motivation subscale, 0.902 for the perseverance subscale, 0.813 for the lack of regulating learning subscale, and 0.777 for the lack of curiosity subscale. The data collection instrument includes a lifelong learning tendencies scale consisting of a total of 25 items structured in a 6-point Likert format. In the survey form created within the scope of the research, participants' gender, age, years of working in the profession and their titles were asked as demographic variables.

1.4. Data Collection Process

Within the scope of the research, an online participation link was sent to the participants via google forms survey link and social media tools. Participants who confirmed their willingness to participate in the form stating that the purpose of the research and participation was voluntary were included in the study.

1.5. Statistical Analysis

The data in the study were analyzed using SPSS version 18 software (IBM Corp.; Armonk, NY, USA). Descriptive analyses were conducted to provide information about the general characteristics of the groups. Data for continuous variables were summarized as mean ± standard deviation, median, and quartiles, while categorical variables were summarized as counts and percentages. The normality of numerical variables was assessed using the Kolmogorov-Smirnov test and histogram plots, and for comparisons, the Mann-Whitney U and Kruskal-Wallis tests were employed. A significance level of 0.05 was used, and if $p > 0.05$, it was indicated that there was no significant relationship or difference.

1.6. Ethical Approval

Ethical approval was Çanakkale Onsekiz Mart University, Scientific Research Ethics Committee to conduct the study (Decision number / Decision Date: 21-30 / 01.12.2022).

2. RESULTS

In the research, data were collected from 390 healthcare personnel working in emergency medical ambulances in different provinces of Turkey. The participants had an average age of 30.97 ± 6.66 (min. 19 - max. 52), and 56.4% of them were female. Based on their professional titles, 11% were doctors (Md), 54.9% were Paramedics (Prm), and 34.1% were Emergency Medical Technicians (EMT). The duration of service in emergency medical ambulances showed that 10.3% had less than one year of experience and 37.9% had 11 years or more of experience. Demographic data of the participants are presented in Table 1.

Table 1. Socio-Demographic and Introductory Characteristics of the Participants

Variables	Groups	n: 390	%
Gender	Male	170	43.6
	Female	220	56.4
Age	< 30	203	52,1
	>30	187	47,9
Title	Prm	133	34.1
	EMT	214	54.9
	Dr	43	11.0
Professional experience	Less than 1 year	40	10.3
	1-5 years	108	27.7
	6-10 years	94	24.1
	11 years and above	148	37.9

Participants were asked about what they do to maintain their professional qualifications and how they keep up with current information in their fields. In a multiple-choice question, it was observed that the most commonly used methods were in-service training and relevant websites related to their field (Table 2).

Table 2. Distribution of Methods Used to Maintain Professional Competence and Keep Up with Developing Information in Your Field

The most commonly used method?	n	%
In-service training.	281	72.1
Websites related to the field.	219	56.2
By reading articles.	98	25.1
With current books.	92	23.6
From recent publications of organizations like the European Resuscitation Council and ILCOR members.	80	20.5
Total	770	197.4

** Since it is a multiple-response question, the number (n) is calculated based on the sample size, and the percentages are calculated based on the sample, so they may exceed 100%.*

Low scores on the LLTS scale (min. 25 - max. 150) indicate a high level of lifelong learning tendency. In the study, the mean score for participants' lifelong learning tendencies was found to be 113.89 ± 16.03 points (min. 61, max. 145). High scores in the subscales of the scale,

Motivation and Perseverance, indicate high motivation and perseverance, while high scores in the Lack of Regulating Learning and Lack of Curiosity subscales suggest low deficiencies in regulating learning and curiosity. In the conducted study, it was observed that the mean scores for Motivation among emergency medical ambulance personnel were 21.98 ± 2.75 (min. 7, max. 24), for Perseverance were 40.03 ± 6.47 (min. 8, max. 48), for Lack of Regulating Learning were 21.58 ± 4.71 (min. 5, max. 30), and for Lack of Curiosity were 30.30 ± 7.11 (min. 8, max. 48). The obtained scores indicate that emergency medical ambulance personnel have high levels of motivation and perseverance, relatively low deficiencies in regulating learning, and moderate levels of lack of curiosity. The total scores for lifelong learning and the total scores for the sub-dimensions are presented in Table 3.

Table 3. Scores of Lifelong Learning Tendency Scale and Subscale Items for Healthcare Personnel Working in Emergency Medical Ambulance.

Scale	Minimum Possible Score	Maximum Possible Score	Participant Scores		
Sub-dimension			$\bar{X}$ ± ss	Min.	Max.
Lifelong Learning Tendency	25	150	113.89±16.03	61	145
Motivation	4	24	21,98±2,75	7	24
Perseverance	8	48	40,03±6,47	15	48
Lack of Regulating Learning	5	30	21,58±4,71	5	30
Lack of Curiosity	8	48	30,30±7,11	8	43

$\bar{X}$: Mean, SD: Standard Deviation, Min: Minimum - Max: Maximum.

It was found that there was no statistically significant difference between the total scores of the Lifelong Learning Dispositions Scale of 112 emergency ambulance workers and gender, title, age and working year groups ($p>0.05$ for each). However, there were statistically significant differences between the motivation sub-dimension and age groups ($p=0.043$), between the persistence sub-dimension and age ($p=0.048$) and title ($p=0.017$) groups, between the learning level deprivation sub-dimension and title ($p=0.015$) and working year ($p=0.002$) groups, and between the curiosity deprivation sub-dimension and working year ($p=0.002$) groups. The median scores of 112 emergency ambulance workers above the age of 30 show that the motivation and persistence of the participants decreased, paramedics and doctors had higher persistence than emergency medical technicians, other occupational groups had more learning deprivation than doctors, and learning deprivation and curiosity deprivation decreased as the years of employment increased (Table 4).

Table 4. Comparison Test Results Between the Groups Related to Demographic Variables and the Scores of the LLTS

Groups		Motivation		Perseverance		Lack in Regulating Learning		Lack in Curiosity		Scale Total	
		X̄ ±ss	Median [Q1-Q3]	X̄ ±ss	Median [Q1-Q3]	X̄ ±ss	Median [Q1-Q3]	X̄ ±ss	Median [Q1-Q3]	X̄ ±ss	Median [Q_1-Q_3]
Gender	Male	21.85±2.51	22.5(21-24)	39.72±6.94	41(36-45)	21.54±4.58	23.5(20-25)	30.78±7.05	32(28-36)	113.88±16.43	116(108-127)
	Female	22.08±2.93	23(21-24)	40.26±6.1	41(37-45)	21.61±4.82	24(20-25)	29.93±7.16	30(25.5-36)	113.89±15.74	117(104-126)
	Z/p	1.178/0.239		0.151/0.880		1.102/0.270		1.400/0.162		0.049/0.961	
Age Groups	< 30	22.33±2.11	23(21-24)	40.71±5.87	41(38-45)	21.89±4.11	24(20-25)	30.94±6.52	32(27-36)	115.86±13.48	118(109-126)
	> 30	21.61±3.27	23(21-24)	39.28±7.01	40(35-46)	21.25±5.27	24(18-25)	29.61±7.66	30(24-36)	111.74±18.19	113(101-127)
	Z/p	2.019/**0.043**		1.974/**0.048**		0.100/0.920		1.540/0.124		1.755/0.079	
Title	EMT	21.51±3.56	22(21-24)	38.81±6.85	40(36-43)^{a}	21.83±4.69	24(20-25)^{a}	29.36±6.63	31(25-34)	111.52±15.98	114(101-122)
	PRM	22.3±1.95	23(21-24)	40.57±6.39	41.5(37-46)^{b}	21.24±4.78	23(19-25)^{a}	30.63±7.68	32(26-37)	114.74±16.28	117(105-127)
	Dr	21.84±3.12	23(22-24)	41.07±5.12	43(38-43)^{b}	22.49±4.33	25(21-25)^{b}	31.58±5.09	30(29-35)	116.98±14.15	119(108-128)
	X^2/p	2.217/0.330		8.099/**0.017**		8.395/**0.015**		4.659/0.0907		5.267/0.072	
Years of Service	> 1	22.55±1.87	23(22-24)	40.4±4.69	43(38-43)	19.23±5.13	20(15-25)^{a}	29.08±6.77	30(27-34)^{ac}	111.25±13.96	116(107-119)
	1-5	22.15±2.12	23(21-24)	39.7±7.46	41(37-46)	22.7±3.63	24(20-25)^{c}	31.9±6.94	32(28-38)^{b}	116.45±14.78	118.5(106-127)
	6-10	21.49±3.44	23(21-24)	40.02±5.45	41(35-44)	20.79±5.48	22(21-25)^{ab}	28.31±7.01	30.5(24-33)^{a}	110.61±16.77	115(104-121)
	11 <	22.02±2.84	23(21-24)	40.16±6.75	41(36.5-46)	21.9±4.49	24(20-25)^{bc}	30.73±7.11	32(26-36)^{bc}	114.81±16.63	117(105-127)
	X^2/p	1.479/0.687		0.579/0.0901		14.471/**0.002**		14.954/**0.002**		7.581/0.056	

Descriptive statistics are presented as mean ± standard deviation and median [Q1-Q3]. The p-values that are indicated in bold are considered statistically significant (p<0.05). X̄: Mean, ss: Standard deviation, a-c: Variables with the same letter do not differ significantly.

3. DISCUSSION

The study aimed to determine the lifelong learning tendencies of healthcare personnel working in emergency ambulances and examine their significance in relation to demographic variables. Lifelong learning is of vital importance for emergency ambulance workers who make critical decisions as a team in complex cases under stress and environmental factors at the scene of pre-hospital emergencies. Embracing a lifelong learning approach, maintaining professional competence, and staying up-to-date with current information in their field are crucial for providing quality care to patients.

In Turkey, emergency ambulance teams consist of three personnel. In these teams, there must be at least one doctor, first aid and emergency medical technician (paramedic), or an emergency medical technician who has completed module training as the team leader (T.C. Resmi Gazete, 2023). In the research, 11% of the participants were doctors, 54,9% were Paramedics, and 34,1% were Emergency Medical Technicians. The average score for the lifelong learning approach of healthcare personnel working in emergency ambulances was 113.89±16.03 (min. 61, max. 145) points, indicating a high level of lifelong learning tendency. The research found that the lifelong learning tendencies of 112 emergency medical service personnel were at a low level. In studies investigating lifelong learning tendencies among different healthcare professionals in the literature, it has been stated that students in health sciences faculties have a good level of lifelong learning tendencies (Güçlü et al. 2023). In a study conducted with medical faculty students, lifelong learning tendency scores were determined as an average of (74.34 + 9.56), and it was found that there was a significant difference between the periods of study (Gayef and Alptürk, 2022). In the study investigating the lifelong learning tendencies of First and Emergency Aid (Paramedic) program students, it was reported that the students' LLSE scores (58.00±18.89) were at a good level (Arslan, 2017). In a study conducted by Dikmen et al. (Dikmen et al. 2016) with nursing students, they found that the participants had an average score of 64.83±21.51 for lifelong learning tendencies, and they determined that nursing students had low lifelong learning tendencies (Dikmen et al. 2016). Studies with students have shown that final-year students have higher average scores compared to other class groups (Arslan, 2017; Dikmen et al. 2016). A high level of lifelong learning tendency is considered a positive finding, indicating that students are open to continuous learning and development (Arslan, 2017). However, in this study, the low lifelong learning tendencies among healthcare personnel working in emergency medical service ambulances indicate a decrease in their motivation for lifelong learning in their professional careers after graduation. Indeed, it was found that the motivation and perseverance of participants over the age of 30 decreased compared to those under 30. Practical experience may lead to a higher level of competence, but the literature suggests that the number of years spent in practice is inversely related to the quality of care provided (as measured by adherence to guidelines) (Van Leeuwen et al. 1995; Choudhry et al. 2005).

112 emergency ambulance workers' Lifelong Learning Dispositions Scale total scores and gender, title, age and working year groups were not statistically significantly different. Although this study is in parallel with the studies in the literature showing that lifelong learning tendency does not differ according to gender in different research groups (Arslan, 2017, Konokman and

Yelken, 2014; Tunca et al. 2015; Ayaz and Ünal, 2016), there are studies showing that there are significant differences according to the gender variable (Coşkun, 2009; Ayra et al. 2016).

In a professional sense, lifelong learning refers to individuals' continuous learning activities throughout their lives with the aim of developing competencies that are suitable for their interests and needs in various learning environments, including formal, informal, and continuous learning activities (Aksoy, 2008). The motivation of Emergency Medical Services personnel to engage in self-directed learning can be influenced by various factors such as the work environment, pressures, and educational opportunities. Increases in self-directed learning motivation and effort, as reflected in assessments, are shown to be associated with easily accessible educational opportunities, which can enhance the individual motivation of emergency service personnel for self-directed learning (Skydsgaard, 2020). When considering the research findings in conjunction with the literature, it becomes evident that emergency medical professionals need to embrace a lifelong learning approach, and there is a necessity to encourage a learning environment and tools that support adult learners within emergency healthcare service organizations. In a study conducted with healthcare professionals working in different units of a healthcare organization, it was found that employees who participated in certified training programs exhibited higher levels of organizational commitment, continuance commitment, and emotional commitment compared to those who did not receive certification (Bugra, 2016). Within the scope of this research, it was determined that the most commonly used methods for healthcare professionals to maintain their professional competencies and stay updated on their fields were in-service training programs and websites related to their field. In Turkey, the organization of in-service training modules for pre-hospital emergency healthcare service delivery falls under the responsibility of the education units within the provincial ambulance services. It is crucial to continue supporting the training of personnel working in these units, their technical infrastructure, and the organization of training activities to ensure the quality of pre-hospital emergency healthcare services.

The high score obtained from the curiosity deprivation sub-dimension of the lifelong learning approaches scale indicates that curiosity deprivation is low. In the study, the curiosity deprivation scores of 112 emergency ambulance workers were found to be 19.78±8.58 (min. 8, max. 48). In the context of the participants, it is seen that the curiosity deprivation of emergency ambulance workers is at a moderate level. It is stated that doctors should be curious about their own abilities in order to keep up to date with rapidly developing medical knowledge and practice skills (Duffy and Holmboe, 2006). This situation is valid for all healthcare providers, but it is even more important for emergency ambulance workers due to the nature of their work. In a study conducted in Spain to determine research priorities in prehospital care, continuous

education and training were identified as one of the ten research priorities (Castro et al. 2023). Lifelong learning is a central component of physician competence, requiring ongoing learning to enhance performance in practice (Duffy and Holmboe, 2006). Providers of continuing medical education should strive to organize interactive, practice-based, and interdisciplinary sessions. Health professionals should be trained to observe each other's practices and provide effective feedback to optimize workplace learning (Pype et al. 2014).

CONCLUSION

As the volume and quality of research evidence related to pre-hospital care increase, the knowledge base built on evidence-based information for this field also grows, providing updated recommendations for current practices. The adherence of healthcare personnel working in pre-hospital settings to guidelines containing recommendations for optimizing care in pre-hospital emergency situations is of vital importance for service recipients. It is essential for emergency medical ambulance workers to be prepared and willing to improve their theoretical and practical skills as scientific knowledge in their field continues to grow, and new evidence emerges. The results of the research indicate that emergency medical ambulance workers in Turkey have a moderate level of lifelong learning approaches. Both during their training and in postgraduate education, efforts should be made to enhance their motivation for self-directed and team-based learning, as well as improving factors such as access to current information and readily available educational opportunities, all in line with the principles of adult learning. This can contribute to an increase in their individual motivation for lifelong learning.

Limitations

The research data were collected using the Lifelong Learning Tendency Scale (LLTS), which was developed by Coşkun (2009) and its validity and reliability in medical education were tested by Arslan et al. (2016) (Coşkun, 2009; Arslan et al. 2016). However, it has not been used before among emergency ambulance personnel. When evaluating the internal consistency of the data collected from the 390 participants involved in the study, although the Cronbach's alpha value for the scale was obtained as 0.896, further validation of this scale with healthcare personnel working in emergency ambulance services is warranted through additional research.

Author Contributions

İU participated in research design, data collection, data analysis, article writing; TE research design, data analysis, article writing; ESP research design, data collection, article writing; ÇB contributed to the research design, data collection, and article writing.

Conflict of Interest

There is no conflict of interest between the authors.

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