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EVALUATION OF MORAL INTELLIGENCE IN PREHOSPITAL EMERGENCY HEALTHCARE EMPLOYEES: THE CASE OF BOLU-DÜZCE

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Abstract: Prehospital emergency healthcare employees are frequently faced with ethical problems. Moral intelligence, which is seen as a rising value in the field of health, is very important for prehospital emergency health employees to choose the best and right action ethically. This study aims to evaluate the moral intelligence of prehospital emergency healthcare employees and to determine whether moral intelligence parameters differ according to various socio-demographic characteristics. This study was conducted with 261 emergency medical personnel working in the ambulance service between November 2021 and February 2022. Participants showed high sensitivity to equality, empathy, moral intelligence, justice, tolerance, self-control, and kindness in the delivery of healthcare services. There were no significant differences between the groups in the scale dimensions in terms of gender, educational level, working hours, working systems, income level and having children. Single/widowed/divorced/separated participants had significantly higher levels of empathy (p=0.004), justice (p=0.039) and self-control (p=0.009) than married participants. The self-control levels of paramedics were found to be higher than those of health officers/nurses/midwives/others (p=0.015). The high sensitivity of employees towards moral intelligence parameters can play an effective role in solving both ethical issues and problems related to other moral intelligence parameters in the field of prehospital healthcare.

Keywords: moral intelligence, prehospital emergency healthcare, socio-demographic characteristics, intelligence

Evaluación de la inteligencia moral en empleados de urgencias sanitarias prehospitalarias: el caso de Bolu-Düzce

Resumen: Los empleados de sanidad prehospitalaria de urgencias se enfrentan con frecuencia a problemas éticos. La inteligencia moral, considerada un valor en alza en el ámbito de la salud, es muy importante para que los empleados sanitarios de urgencias prehospitalarias elijan, éticamente, la mejor y más correcta acción. Este estudio pretende evaluar la inteligencia moral de los empleados sanitarios de emergencias prehospitalarias y determinar si sus parámetros difieren en función de diversas características sociodemográficas. El estudio se realizó entre noviembre de 2021 y febrero de 2022, en conjunto con 261 miembros del personal médico de urgencias que trabajaban en el servicio de ambulancias. Los participantes mostraron una alta sensibilidad hacia la igualdad, la empatía, la inteligencia moral, la justicia, la tolerancia, el autocontrol y la amabilidad en la prestación de servicios sanitarios. No se encontraron diferencias significativas entre los grupos en las dimensiones de la escala en términos de género, nivel educativo, horas de trabajo, sistemas de trabajo, nivel de ingresos y tener hijos. Los participantes solteros/viudos/divorciados/separados tenían niveles significativamente más altos de empatía (p=0,004), justicia (p=0,039) y autocontrol (p=0,009) que los participantes casados. Se determinó que los niveles de autocontrol de los paramédicos eran superiores a los de los funcionarios sanitarios/enfermeros/parteras/otros (p=0,015). La elevada sensibilidad de los empleados hacia los parámetros de inteligencia moral desempeña un papel eficaz en la resolución tanto de cuestiones éticas como de problemas relacionados con otras referencias de inteligencia moral en el ámbito de la asistencia sanitaria prehospitalaria.

Palabras clave: inteligencia moral, atención sanitaria prehospitalaria de urgencia, características sociodemográficas, inteligencia

Avaliação de inteligência moral em funcionários de cuidados à saúde de emergência pré-hospitalar: o caso Bolu-Düzce

Resumo: Funcionários de cuidados à saúde de emergência pré-hospitalar são frequentemente confrontados com problemas éticos. Inteligência moral, que é vista como um valor crescente no campo da saúde, é muito importante para funcionários de cuidados à saúde de emergência pré-hospitalar escolherem a melhor e mais correta ação ética. Esse estudo objetiva avaliar a inteligência moral de funcionários de cuidados à saúde de emergência pré-hospitalar e determinar se parâmetros de inteligência moral diferem de acordo com várias características sócio-demográficas. Esse estudo foi realizado com 261 funcionários de emergência médica trabalhando no serviço de ambulâncias entre novembro de 2021 e fevereiro de 2022. Os participantes mostraram alta sensibilidade a igualdade, empatia, inteligência moral, justiça, tolerância, auto-controle e gentileza no fornecimento de serviços de cuidados à saúde. Não houve diferenças significativas entre os grupos nas dimensões das escalas em termos de gênero, nível educacional, horas de trabalho, sistemas de trabalho, nível de receita e ter filhos. Participantes solteiros/viúvos/divorciados/separados tiveram níveis significativamente mais altos de empatia (p=0.004), justiça (p=0.039) e auto-controle (p=0.009) que participantes casados. Os níveis de auto-controle de paramédicos foram mais altos que aqueles de agentes de saúde/enfermeiras/parteiras/outros (p=0.015). A alta sensibilidade de funcionários em relação aos parâmetros de inteligência moral pode desempenhar um papel eficaz na resolução tanto de questões éticas como de problemas relacionados com outros parâmetros de inteligência moral no domínio dos cuidados à saúde pré-hospitalares.

Palavras chave: inteligência moral, cuidados à saúde de emergência pré-hospitalar, características sócio-demográficas, inteligência

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Introduction

The concept of intelligence is defined as the ability to learn from experience and to shape, select and adapt to the environment*(1)*. Although there are many different definitions of intelligence, most researchers agree that intelligence includes three main elements as abstract thinking, the capacity to acquire knowledge and the ability to use this knowledge to solve problems*(2)*. While the concept of intelligence was evaluated as unidimensional until the middle of the 19th century, it has been understood that intelligence is a multidimensional concept in the studies conducted since the beginning of the 20th century. This complex structure of intelligence has led researchers to explain intelligence with different theories*(3)*.

In his Theory of Multiple Intelligences, Gardner argued that the human brain has different units of intelligence. Since each of these units has observable and measurable characteristics, he named them separately as intelligence*(4)*. Gardner focused on creating a world where people can live in peace, arguing that people have different types of intelligence and that we need to think about how intelligence and morality can be combined. In addition to this idea, Gardner discussed the existence of a new type of intelligence which is called moral intelligence*(5)*. It is argued that moral intelligence is one of the separate, autonomous, multiple intelligences*(6)*.

The concept of moral intelligence is defined as "*the capacity to distinguish right from wrong*"*(7)*. Moral intelligence refers to a skill set that individuals can use in ethical decision-making*(8)*. Studies show that moral intelligence which is built on fundamental virtues consists of various parameters. These parameters can be listed as follows: empathy, conscience, self-control, respect, kindness, tolerance, justice, honesty, responsibility, compassion, forgiveness, courtesy, equality and moral intelligence*(7-12)*.

The prehospital emergency healthcare services are quite different from hospital emergency services and other healthcare services due to their dynamics. Unexpected and sudden events, unpredictable case profiles, and challenges such as providing healthcare in an area where an emergency occurs lead to many problems. The main problems are the ethical issues, and the prehospital field consists of many conflicts where ethical decisions should be made. Therefore, it is quite important to recognize the ethical issues that may arise in the prehospital field and to choose the action that protects values the most*(13)*.

It is emphasized that moral intelligence which is observed to be a rising value in the field of healthcare services has important functions in solving ethical problems*(14-16)*. Besides, it is stated that individuals with high moral intelligence have high ethical decision-making skills, so it is possible to increase ethical behaviors by focusing on the development of moral intelligence*(16)*. In this context, it is thought that moral intelligence will guide prehospital professionals both in solving the ethical problems that they will encounter in the field and in overcoming various problems related to moral intelligence parameters that they may experience with patients, relatives, and other members of the healthcare team.

This study aims to evaluate the moral intelligence of prehospital emergency healthcare employees and to determine whether moral intelligence parameters differ according to various socio-demographic characteristics.

Material and Method

Ethical Approval

The ethics committee approval for the study was received from Eskişehir Osmangazi University Non-Interventional Clinical Research Ethics Committee (Protocol No: 2021/153). The study was designed in accordance with the principles of the Declaration of Helsinki. Informed consent was obtained from all volunteer participants. Required institutional permissions were obtained for the study.

Universe and Sample

The study was conducted between November 2021 and February 2022 with healthcare personnel working under the Provincial Ambulance Service Chief Medical Directorates of Bolu and Düzce Provincial Health Directorates. The universe

of the research is composed of 450 people. 261 people participated in the research on a voluntary basis.

Data Collection Tools

The data of the research were collected through the "*Socio-demographic Data Form" and the "Survey for Measuring Moral Intelligence in the Provision of Healthcare Services*"*(8)*. The required permission was obtained from the authors for the use of the scale.

Socio-demographic Data Form

The socio-demographic data form questioning the personal and professional characteristics of the participants was created by the researchers as a result of the literature review. The form consists of 9 questions inquiring various socio-demographic characteristics of the participants.

Survey for Measuring Moral Intelligence in the Provision of Healthcare Services

The scale used in this research was developed by Öztürk et al. (2019) using the C.H. Lawshe method. There are 47 items in total in the 5-point Likert-type scale. All of the items in the scale are positive and there are no items scored in reverse. The scale is composed of seven dimensions as follows: equality, empathy, moral intelligence, justice, tolerance, self-control and kindness. The reliability coefficient (Cronbach's Alpha) values of the scale dimensions were calculated as follows: equality dimension 0,922; empathy dimension 0,910; moral intelligence dimension 0,874; justice dimension 0,859; tolerance dimension 0,799; self-control dimension 0,840 and kindness dimension 0,772 (8). In this study, the reliability coefficients of the scale dimensions were calculated as follows: equality dimension 0,927; empathy dimension 0,935; moral intelligence dimension 0,840; justice dimension 0,657; tolerance dimension 0,838; self-control dimension 0,838 and kindness dimension 0,793.

Statistical Analysis

SPSS 22.0 package program was used for the statistical evaluation of the data. The results were expressed as mean, median, standard deviation, number, percentage, lowest and highest values. The kurtosis and skewness values and Kolmogorov-Smirnov test were used to determine whether the data fit the normal distribution. Since it was determined that the data were not normally distributed, Mann Whitney U test was applied for comparisons between two groups and the Kruskal Wallis H test for comparisons of three or more groups. Post-hoc Dunn's test was applied to evaluate the differences between the groups. The relationship between the ages of the participants and the scale dimensions was analyzed with the Spearman correlation coefficient. The relationship level of the correlation coefficient was interpreted according to the criteria in the literature*(17)* and the relationship between 0.00-0.25 was evaluated as very weak, 0.26-0.49 as weak, 0.50-0.69 as moderate, 0.70-0.89 as high and 0.90-1.00 as very high. The statistical significance was accepted at the level of $p<0,05$.

Results

The mean age of the prehospital emergency medical service employees who participated in the study was found to be 30,77+6,10 years. Of the participants, 130 (49,8%) were female, 160 (61,3%) were married, 11 (4,2%) were physicians and 106 were paramedics (40,6%), 102 (39,1%) had bachelor's degree and 92 (35,2%) had 0-5 years of professional experience, 231 (88,5%) worked a 24-hour shift and 184 (70,5%) had a middle-income level (Table 1).

As a result of the answers given by the participants to the scale, it was determined that the "equality" dimension had the highest value with a mean score of 4,47±0,57, and the "justice" dimension had the lowest value with a mean score of 4,04±0,61. Empathy dimension had a mean score of 4,32±0,58; the moral intelligence dimension 4,26±0,58, tolerance dimension 4,42±0,58; self-control dimension 4,46±0,57 and kindness dimension 4,30±0,66 (Table 2).

There were no significant differences between the groups in the scale dimensions in terms of gender, educational level, working hours, working systems, income level and having children. In terms of marital status, empathy (p=0,004), justice (p=0,039) and self-control (p=0,009) levels of

Table 1. Socio-Demographic Characteristics of Prehospital Emergency Healthcare Employees

	$\bar{x}\pm\sigma$	median- min./max.	
Age	30,77±6,10	29,00 - 22/52	
		n	%
Gender	female	130	49,8
	male	131	50,2
Marital status	married	160	61,3
	single/widowed/divorced/separated	101	38,7
Profession	physician	11	4,2
	paramedic	106	40,6
	emt	109	41,8
	health officers/nurses/midwives/others	35	13,4
Educational level	high school	32	12,3
	associate's degree	114	43,7
	bachelor's degree	102	39,1
	postgraduate	13	5,0
Professional experience	0-5 years	92	35,2
	6-10 years	79	30,3
	11-15 years	66	25,3
	15 years and over	24	9,2
Working system	day shift	30	11,5
	24-hour shift	231	88,5
İncome level	low	72	27,6
	middle	184	70,5
	high	5	1,9
Having children	Yes	136	52,1
	No	125	47,9
Province	Bolu	151	57,9
	Düzce	110	42,1

Table 2. The Distribution of the Participants' Scores on the Scale

Dimension	n	min.-max.	$\bar{x}\pm\sigma$	Cronbach's alpha
Equality	261	1-5	4,47±,57	0,927
Empathy	261	1-5	4,32±,58	0,935
Moral Intelligence	261	1-5	4,26±,58	0,840
Justice	261	1-5	4,04±,61	0,657
Tolerance	261	1-5	4,42±,58	0,838
Self-Control	261	1-5	4,46±,57	0,838
Kindness	261	1-5	4,30±,66	0,793

single/widowed/divorced/separated participants were found to be significantly higher than married participants. In terms of profession variable, self-control levels of paramedics were found to be higher than those of health officers/nurses/midwives/other health personnel (p=0,015). The comparisons between the variables of the participants and the parameters of moral intelligence are presented in Table 3.

No statistically significant correlation was found between the age of the participants and the scores of equality, empathy, moral intelligence, justice, tolerance, and self-control dimensions of the scale. A very weak negative correlation was found between the kindness dimension score of the scale and the age of the participants (Table 4).

Discussion

Expressed as the ability to distinguish between right and wrong and to act ethically, moral intelligence helps the application of ethical principles to personal goals, values, and actions(18). The importance of moral intelligence has gradually been increasing in workplaces where ethical problems are frequently encountered and quick decisions need to be made for good action. In this study, the moral intelligence of prehospital healthcare employees was evaluated and the effect of sociodemographic variables on their moral intelligence was investigated.

Moral intelligence can be expressed as a cognitive ability that takes individual and social values into account in solving ethical problems significantly*(14)*. As the parameters of moral intelligence, the concepts of kindness, tolerance, justice, empathy, self-control, and equality are highly needed in establishing good relationships during the provision of healthcare service. It is observed that the parameters of moral intelligence significantly affect each other and are closely interdependent. Without the ability to empathize, it is not possible to understand people's emotional states, and such a situation may lead people to exhibit behaviors that lack skills such as respect, kindness, tolerance, self-control and conscientious feelings*(16)*.

In the provision of prehospital emergency healthcare services, core values such as equality, empathy, justice, tolerance, self-control and kindness are essential. The provision of care in an equitable and accessible framework with a fair and equal distribution of resources among different groups in society is crucial for the performance and effectiveness of prehospital emergency healthcare services*(19-22)*. Empathy helps prehospital professionals cope with communicative difficulties during the interaction with their patients*(23)*. The values of tolerance, self-control and kindness have critical roles in the effective provision of prehospital emergency healthcare*(24-27)*. Effective use of moral intelligence parameters in the prehospital field will contribute to taking good action in emergen-

Variables		Equality	p	Empathy	p	Moral Intelligence	p	Justice	p	Tolerance	p	Self-Control	p	Equality	p
Gender	Female	4,44 ±0,60	,540	4,32 ±0,62	,793	4,26 ±0,59	,806	4,05 ±0,65	,181	4,41 ±0,60	,761	4,45 ±0,59	,313	4,35 ±0,65	,094
	Male	4,50 ±0,54		4,32 ±0,56		4,27 ±0,58		4,01 ±0,59		4,44 ±0,55		4,40 ±0,53		4,26 ±0,64	
Marital status	Married	4,47 ±0,45	,084	4,28 ±0,50	,004*	4,24 ±0,48	,095	3,99 ±0,56	,039*	4,40 ±0,50	,058	4,39 ±0,48	,009*	4,27 ±0,59	,067
	Single/widowed/divorced/separated	4,48 ±0,72		4,40 ±0,70		4,30 ±0,71		4,11 ±0,70		4,45 ±0,69		4,49 ±0,66		4,37 ±0,73	
Profession	Physician	4,40 ±0,50	,086	4,37 ±0,58	,091	4,08 ±0,52	,079	3,93 ±0,57	,082	4,28 ±0,57	,100	4,38 ±0,44	,015*	4,11 ±0,61	,117
	Paramedic	4,52 ±0,64		4,40 ±0,66		4,33 ±0,65		4,11 ±0,65		4,49 ±0,61		4,51 ±0,60[a]		4,39 ±0,71	
	EMT	4,46 ±0,51		4,26 ±0,55		4,25 ±0,53		3,97 ±0,59		4,39 ±0,55		4,39 ±0,55		4,27 ±0,63	
	Healthofficers/nurses/midwives/others	4,37 ±0,57		4,27 ±0,46		4,20 ±0,53		4,02 ±0,61		4,34 ±0,54		4,31 ±0,45[b]		4,27 ±0,47	
Educational level	High school	4,53±0,39	,836	4,41±0,47	,788	4,33±0,52	,585	4,10 ±0,63	,640	4,44 ±0,46	,829	4,47±0,47	,951	4,43±0,57	,530
	Associate's degree	4,45±0,69		4,31±0,68		4,26±0,67		3,99±0,67		4,37 ±0,68		4,41±0,66		4,30±0,69	
	Bachelor's degree	4,48±0,48		4,31±0,52		4,25±0,51		4,07±0,56		4,47 ±0,51		4,43±0,48		4,29±0,62	
	Postgraduate	4,42±0,48		4,31±0,56		4,19±0,51		3,92±0,55		4,43 ±0,45		4,43±0,45		4,15±0,70	
Professional experience	0-5 years	4,53±0,39	,836	4,41±0,47	,788	4,33±0,52	,585	4,10 ±0,63	,640	4,44 ±0,46	,829	4,47±0,47	,951	4,43±0,57	,530
	6-10 years	4,45±0,69		4,31±0,68		4,26±0,67		3,99±0,67		4,37 ±0,68		4,41±0,66		4,30±0,69	
	11-15 years	4,48±0,48		4,31±0,52		4,25±0,51		4,07±0,56		4,47 ±0,51		4,43±0,48		4,29±0,62	
	15 years and over	4,42±0,48		4,31±0,56		4,19±0,51		3,92±0,55		4,43 ±0,45		4,43±0,45		4,15±0,70	
Working system	Day shift	4,44 ±0,60	,436	4,32 ±0,62	,796	4,26 ±0,59	,912	4,05 ±0,65	,285	4,41 ±0,60	,818	4,45 ±0,59	,263	4,35 ±0,65	,152
	24-hour shift	4,50 ±0,54		4,32 ±0,56		4,27 ±0,58		4,01 ±0,59		4,44 ±0,55		4,40 ±0,53		4,26 ±0,64	
Income level	Low	4,53±0,39	,836	4,41±0,47	,788	4,33±0,52	,585	4,10 ±0,63	,640	4,44 ±0,46	,829	4,47±0,47	,951	4,43±0,57	,530
	Middle	4,45±0,69		4,31±0,68		4,26±0,67		3,99±0,67		4,37 ±0,68		4,41±0,66		4,30±0,69	
	High	4,48±0,48		4,31±0,52		4,25±0,51		4,07±0,56		4,47 ±0,51		4,43±0,48		4,29±0,62	
Having children	Yes	4,44 ±0,60	,436	4,32 ±0,62	,796	4,26 ±0,59	,912	4,05 ±0,65	,285	4,41 ±0,60	,818	4,45 ±0,59	,263	4,35 ±0,65	,152
	No	4,50 ±0,54		4,32 ±0,56		4,27 ±0,58		4,01 ±0,59		4,44 ±0,55		4,40 ±0,53		4,26 ±0,64	

Table 3. Comparison of scale scores according to socio-demographic variables of the participants

Table 4. Correlation analysis of the relationship between participants' age and scale scores

Spearman's rho	Equality	Empathy	Moral Intelligence	Justice	Tolerance	Self-Control	Kindness
Age	-,003	-,119	-,086	-,059	-,080	-,091	-,169**

** Correlation is significant at 0.01 level (2-way).

cies, making the right decisions, considering the needs of the patient and working in harmony with colleagues within and outside the team. This will positively affect the processes in the prehospital field and as a result, patient-employee satisfaction will increase and the quality of healthcare services will improve.

According to this study, the mean score of the equality dimension of the scale is determined to be 4.47±0.57 as the highest score compared to the other dimensions of the scale. In the study by Öztürk et al. (2019), the mean score of the equality dimension of the scale was found to be 4.46± 0.53(8). Professionals in the prehospital field frequently encounter individuals with various needs and social, economic, ethnic, or cultural differences. Therefore, it is crucial that they are sensitive to different values and meticulously apply the principle of equality in their actions. Within the context of this study's results, the positive attitudes of participants towards equality are highly valuable.

According to these results, the mean score of the empathy dimension of the scale is found to be 4.32±0.58. While the results of this study on the empathy dimension show similarity to those in the study by Dur et al. (2022), they are higher than Karabey (2021)*(28,29)*. Empathy is very important in terms of relationships with patients, service quality and satisfaction in emergency areas(30). The ability to empathize has a critical role in better understanding the feelings and needs of patients in emergency settings and providing services. The use of empathy skills by prehospital professionals will positively affect communication and healthcare processes.

According to this research, the mean score of the moral intelligence dimension of the scale is determined to be 4.26±0.58. The results of this study regarding the moral intelligence dimension are similar to those determined by Dur et al. (2022) and higher than those by Öztürk (2019)*(8,29)*. The relationship between moral intelligence and ethical decision-making is emphasized*(16)*. Moral intelligence is extremely important in emergency areas where ethically problematic situations abound, and a quick ethical decision-making process is necessary. In this context, the results of this study are valuable for professionals in the prehospital field to make quick and accurate decisions for good actions.

According to the results of this study, the mean score of the justice dimension of the scale is found to be 4.04±0.61. These results are similar to those in the study by Dur et al. (2022) but lower than those determined by Öztürk (2017)*(28,29)*. In prehospital emergency healthcare services, various ethical concerns and issues about justice may arise, especially when there is a lack of resources and a need to choose between multiple emergencies (Erbay, 2014). The high sensitivity of prehospital professionals towards justice will help them deal with justice-related ethical issues.

According to this research, the mean score of the tolerance dimension of the scale is determined to be 4.42±0.58. This result regarding the tolerance dimension is higher than the results of the study by Öztürk (2019) and Dur et al. (2022)*(8,29)*. The value of tolerance is associated with having a fair and objective attitude toward people who may be different from them*(31)*. Prehospital professionals encounter individuals with different cultures, beliefs, worldviews and lifestyles due to the uniqueness of their case profiles. At this point, tolerance will contribute to professionals being more understanding and tolerant in their interactions with patients, relatives and other healthcare team

members. This will lead to a better experience for those involved in emergency healthcare processes.

According to the results of this study, the mean score of the self-control dimension of the scale is found to be 4.46±0.57. In the literature, the self-control dimension was found to be 4.19±0.63 by Öztürk (2019), 3.72±0.97 by Karabey (2021), 3.79±0.68 by Aras (2022) and 17.59±2.14 by Dur et al. (2022), indicating different results*(8,28,29,32)*. Self-control is an essential element for individuals to protect the value that they and their environment deserve (Öztürk, 2021). It is crucial for good action in prehospital emergency healthcare which is characterized by sudden, unexpected and uncontrolled events. In this context, the high results obtained in the self-control dimension are quite important in terms of protecting various values related to prehospital emergency healthcare processes.

According to this study, the mean score of the kindness dimension of the scale is calculated as 4.30±0.66. In various studies in the literature, the kindness dimension was found to be 4.18±0.65 by Öztürk (2017), 3.72±0.97 by Karabey (2021), 4.51±0.57 by Aras (2022) and 12.74±3.93 by Dur et al. (2022)*(8,28,29,32)*. Kindness is a human-centered concept that is associated with the tendency to show genuine concern for the welfare and happiness of others(33). Individuals who experience stressful emergencies become fearful and anxious. At this point, the kind behaviors of prehospital professionals will increase the patient's willingness and compliance with the treatment by creating an environment of trust, thus providing a patient-centered and highly satisfying healthcare service delivery.

In this study, no significant difference was found between the groups in the scale dimensions in terms of the participants' gender, educational level, working hours, work systems, income levels and having children. Among the participants, there are differences in terms of gender, educational level, working time, work system, income level and having children. As a result, it was observed that the mean scores of the scale dimensions of the participants did not differ according to these socio-demographic variables and that these variables did not have any effect on the items in the scale dimensions that could cause differentiation. It is thought that the fact that health professionals with different socio-demographic characteristics agree on their high sensitivity towards moral intelligence parameters will positively affect the quality of service in all aspects in terms of taking good action, protecting patient's values and communicating effectively in prehospital emergency healthcare processes. Besides, if members of the same team with different socio-demographic characteristics approach the parameters of moral intelligence with similar sensitivity and cooperate as a team that adopts these values, it may help them to act consistently and effectively in emergencies and contribute to the quality provision of healthcare services.

In this study, the empathy level of single/widowed/divorced/separated participants was significantly higher than married participants (p=0.004). In the literature, contrary to the studies reporting that the empathy skills of single individuals are significantly higher than married individuals*(34,35)*, there are also studies indicating that the empathy skills of married individuals are high*(36)*. It is claimed that single individuals may tend to show more empathy towards other people because they have more opportunities to communicate and do not have family responsibilities*(37)*. The results on empathy in this study suggest that the fact that single people have a larger social environment and fewer responsibilities may be associated with the fact that they generally show more empathy.

In this study, single/widowed/divorced/separated participants had significantly higher levels of justice dimension compared to the married participants (p=0.039). In a study conducted with nurses, it is claimed that various professional values, including justice, are affected as a result of marital responsibilities disrupting the balance between home and work life*(38)*. These results are consistent with the results of this study and suggest that marital responsibilities may negatively affect the sensitivity and perceptions of employees toward justice.

According to this study, the self-control level of single, widowed, divorced or separated healthcare employees was significantly higher compared to married healthcare employees (p=0.009). Self-control refers to the individuals' ability to mana-

ge their feelings, thoughts and behaviors, to gain self-confidence and to control their own life*(39)*. As a result of this research, the fact that single, widowed, divorced or separated healthcare employees have higher self-control scores compared to their married colleagues shows that personal factors such as marital status may affect the perception of self-control.

Self-control levels of paramedics in this study were found to be higher than those of health officers/nurses/midwives/others (p=0.015). As professionals providing healthcare services in the prehospital field and receiving field-specific training, paramedics have an important position in the field*(40)*. They are given a wide range of duties, authorities and responsibilities in the prehospital field and are often faced with situations regarding decision-making in the position of leader in the team they are a part of. Factors such as the role of paramedics within the team, their training in the field, their experience and specialization in case diversity may explain their high level of self-control.

A very weak negative correlation was found between the age of the participants and the kindness dimension scores of the scale. This indicates that as the age of the participants increases, their sensitivity toward the items in the kindness dimension decreases. Contrary to these results, a positive relationship between age and kindness was found in the study by Dönmez et al. (2020)*(41)*. In addition, it was observed in the study by Yıldız and Emecen (2019) that the ideas of trust, love, kindness, respect, virtuousness and creating a virtuous society gain importance with increasing age (Yıldız & Emecen, 2019)*(42)*. It is thought that the negative relationship between age and kindness in this study may be due to the increase in individual, social, and economic problems arising from the age of the participants in the sample examined.

Conclusion

The field of prehospital emergency healthcare services involves many challenges such as unpredictable patient profiles, sudden and unexpected emergencies and service delivery in non-medical settings. Due to the structure and dynamics of the field, professionals frequently encounter ethically problematic situations while providing prehospital care and have to make quick and accurate decisions in favor of the patient (Becker et al., 2013; Erbay, 2014). Considering that the ability of moral intelligence helps professionals become sensitive to ethical issues that they may encounter while practicing their profession and take ethical action, its importance for the prehospital field is obvious.

In conclusion, the participants in this study showed a high sensitivity toward equity, empathy, moral intelligence, justice, tolerance, self-control, and kindness in the provision of healthcare service. It is thought that the high sensitivity of employees towards moral intelligence parameters may be effective in solving both ethical issues and other problems related to moral intelligence parameters that they may encounter in the prehospital field. Therefore, it is extremely important for prehospital professionals to consider and functionalize the parameters of moral intelligence in their actions and relationships.

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