ARAŞTIRMA RESEARCH

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Evaluation of Academic Ethics Perceptions of Academicians: A Cross-Sectional Analysis

Akademisyenlerin Akademik Etik Algılarının Değerlendirilmesi: Kesitsel Bir Analiz

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ABSTRACT This study aims to evaluate the academic ethics perception of academics at a state university and to examine how this perception is shaped according to various variables. This descriptive and cross-sectional study was conducted at a state university in Türkiye between September and December 2023. The sample consisted of 126 academics working in different professional positions and volunteering for the study. Data were collected using Personal Information Form and Academic Ethical Values Scale. 38.9% of the participants were female and 61.1% were male, and there was no significant difference in academic ethical values scores according to gender ($p>0.05$). The mean academic ethical values of the academicians was 206.1±21.73 and their attitudes were evaluated positively. The highest score was found in the sub-dimensions of "values related to the teaching process" (62.16±6.53) and the lowest score was found in the sub-dimensions of "values related to society" (29.25±2.32). Age positively affected scientific research values ($p<0.05$) and negatively affected teaching process values ($p<0.05$). Differences were observed in ethical values according to academic titles and clinical experience ($p<0.05$). This study contributes to the understanding of the relationships between perception of academic ethics and various variables. The findings are valuable for identifying and implementing strategies to increase ethical awareness.

Keywords: Academia; academician; ethics; academic ethics

ÖZET Bu çalışma, bir devlet üniversitesindeki akademisyenlerin akademik etik algısını değerlendirmeyi ve bu algının çeşitli değişkenlere göre nasıl şekillendiğini incelemeyi amaçlamaktadır. Tanımlayıcı ve kesitsel nitelikteki bu çalışma, Eylül-Aralık 2023 tarihleri arasında Türkiye'de bir devlet üniversitesinde gerçekleştirilmiştir. Örneklemi, farklı profesyonel pozisyonlarda çalışan ve çalışmaya gönüllü olan 126 akademisyen oluşturmaktadır. Veriler, kişisel bilgi formu ve Akademik Etik Değerler Ölçeği kullanılarak toplanmıştır. Katılımcıların %38,9'u kadın, %61,1'i erkek olup, akademik etik değerler puanlarında cinsiyete göre anlamlı fark bulunmamıştır ($p>0,05$). Akademisyenlerin akademik etik değerleri ortalaması 206,1±21,73'tür ve tutumları olumlu değerlendirilmiştir. En yüksek puan "öğretim süreci ile ilgili değerler" (62,16±6,53), en düşük puan ise "toplum ile ilgili değerler" (29,25±2,32) alt boyutlarında tespit edilmiştir. Yaş, bilimsel araştırma değerlerini olumlu ($p<0,05$), öğretim süreci değerlerini ise olumsuz etkilemiştir ($p<0,05$). Akademik ünvanlara ve klinik deneyimlere göre etik değerlerde farklılıklar gözlemlenmiştir ($p<0,05$). Bu çalışma, akademik etik algısı ve çeşitli değişkenler arasındaki ilişkilerin anlaşılmasına katkı sağlamaktadır. Bulgular, etik farkındalığı artırmaya yönelik stratejilerin belirlenmesi ve uygulanması için değerlidir.

Anahtar Kelimeler: Akademi; akademisyen; etik; akademik etik

Academic ethics encompasses the basic principles governing the production, sharing and teaching of knowledge.[1,2] It involves ensuring that activities in educational and scientific institutions, especially universities, conform to moral, philosophical and professional standards. Core values include professionalism, integrity, honesty, trustworthiness, transparency and responsibility towards researchers and teaching staff.[3,4]

The aim of academic ethics is to ensure that scientific research and teaching is conducted in a fair, transparent and accurate manner. This requires ethi-

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cal behavior at all stages of scientific work, from knowledge sharing to student education, from production to evaluation.[1,5,6] Ethical considerations also cover all areas of scholarly communication, including collegial relations, institutional responsibilities and student interactions.[6,7] Sevim defines the sub-dimensions of academic ethics as research conduct, academic relations, institutional responsibilities, education and community relations.[8]

Unethical behaviors in scientific research include misrepresentation, forgery, plagiarism, malicious use, unauthorized use, careless work, and biased publication.[1,9-12] Unethical behaviors in academic relationships include disrespect for intellectual property, theft of ideas, nepotism, unfair evaluations, and malicious statements about colleagues.[4,13] In terms of institutional responsibilities, unethical behaviors include failure to support the institution, failure to credit the institution, and abuse of authority.[14] Unethical behaviors in the educational process include ignoring innovations, not respecting class time, charging absentee fees, sending substitutes to class, not including students, discriminating based on language, religion, race or marital status.[13,14] Unethical behaviors in social relations include reflecting personal views as the university's and disrespecting different beliefs.[13]

In Türkiye, there are not enough studies that quantitatively evaluate academics' perceptions of academic ethics. This study aims to contribute to our understanding of academics' views on this issue by filling the gap in the academic community in Türkiye in terms of compliance with ethical norms and emphasizing ethical values.

MATERIAL AND METHODS

This descriptive and cross-sectional study, conducted between September and December 2023, focused on academics working at a university in the Eastern Anatolia region of Türkiye. The sample size, determined using G*power 3.1, was 120 based on an effect size of 0.41, a margin of error of 0.05, a confidence level of 0.95 and a population representation of 0.95.[15,16] Academics were randomly selected using simple random sampling method. Data were collected through the personal information form and Academic Ethical Values Scale (AEVS) developed by the researcher and administered through the Google Form.

AEVS

Sevim's 2014 scale is a 5-point Likert-type attitude scale consisting of 50 questions divided into 5 sub-dimensions.[8] These sub-dimensions include 9 items on values towards scientific research, 10 items on values towards colleagues, 9 items on values towards the institution, 8 items on values towards society, and 14 items on values in the teaching process. The total scores range from 50 to 250. Among the 50 items, 20 are negative statements (e.g., items 45, 44, 51, 48, 46, 37, 57, 38, 13, 17, 14, 16, 25, 2, 33, 30, 59, 42, 4, 31), while the remaining 30 are positive statements. The Cronbach's alpha reliability coefficient for the scale is typically 0.86 but was found to be higher at 0.94 in this study.

PERSONAL INFORMATION FORM

The researcher-developed personal information form includes questions about participants' tenure as academics, titles, age, gender, clinical work experience, publication history (national and international), familiarity with academic ethics, personal experiences or suggestions, and willingness to report unethical behavior. It consists of 10 questions in total.

ETHICAL CONSIDERATIONS

This study aligns with the ethical standards set forth in the Helsinki Declaration. Ethical approval for the research was secured from the Malatya Turgut Özal University Non-Interventional Clinical Research Ethics Committee (date: July 28, 2023; no: 32).

LIMITATIONS AND GENERALISABILITY OF THE STUDY

The limitation of the research is that the sample consists of academicians of only one university and the results can only be generalised to the group in which the research was conducted.

STATISTICAL ANALYSIS

Data analyses were conducted using SPSS 25. The Kolmogorov-Smirnov test assessed normal distribution, with a significance level of 0.05. Since the data

did not exhibit normal distribution (p>0.05), non-parametric tests were used. The Mann-Whitney U test compared independent paired groups, and the Kruskal-Wallis test compared independent multiple groups. A Bonferroni corrected p value addressed multiple comparison issues. Relationships between numerical variables were analyzed using the Spearman rank correlation coefficient, and scale reliability was assessed using Cronbach's α coefficient.

RESULTS

The average age of the participants is 42.77±6.74 years, and the average duration of their academic careers is 9.27±10.11 years. Among the participants, 38.9% are female, and 61.1% are male; 46.8% are research assistants and lecturers, while 53.2% are faculty members (assistant professors, associate professors, professors); 77.8% have no clinical experience; 68.3% have international publications; 87.3% have national publications; 54% stated that they have sufficient knowledge about academic ethics, and 63.5% indicated that they would report unethical behavior (Table 1).

The mean of "values towards scientific research" was 38.06±5.38, the mean of "values towards colleagues" was 40.48±4.63, the mean of "values towards the institution" was 36.14±5.99, the mean of "values towards society" was 29.25±2.32, the mean of "values towards the teaching process" was 62.16±6.53, and the mean of "total mean of academic ethical values" was 206.1±21.73 (Table 2). When the Cronbach α coefficients of the scale are analysed, it is seen that the reliability of the dimensions is high.[17,18]

Statistically significant differences were found in the "values towards scientific research" sub-dimension score based on the variables of gender (p=0.005), academic title (p=0.001), knowledge of academic ethical values (p=0.002), reporting unethical behavior (p=0.010), and having international and national publications (p=0.002, p=0.001) (p<0.05, Table 3).

For the "values towards colleagues" sub-dimension score, statistically significant differences were found based on the variables of academic title (p=0.001), knowledge of academic ethical values

TABLE 1: Demographic information of participants.

Variables	Groups	Number	Percent
Gender	Female	49	38.9
	Male	77	61.1
Title	Research asisstants and lecturer	59	46.8
	Dr. Faculty member	37	29.4
	Assoc. Prof.	30	23.8
Clinic duty doing	No	98	77.8
	Yes	28	22.2
International article	No	40	31.7
	Yes	86	68.3
National article	No	16	12.7
	Yes	110	87.3
Academic ethics about sufficient knowledge	Yes	68	54
	Partially	58	46
Unethical behaviour complaint	No	8	6.3
	Yes	80	63.5
	Undecided	38	30.2
Variable		**X̄±SD**	**Minimum-maximum**
Age		42.77±6.74	29-64
Academic tenure		9.27±10.11	1-39

SD: Standard deviation.

TABLE 2: Descriptive statistics and reliability of scale scores.

Variable	X̄±SD	Minimum-maximum	Cronbach's
Values towards scientific research	38.06±5.38	27-45	0.82
Values towards colleagues	40.48±4.63	30-49	0.71
Values towards the institution	36.14±5.99	24-45	0.85
Values towards society	29.25±2.32	24-36	0.78
Values towards the teaching process	62.16±6.53	42-70	0.91
Total mean of academic ethical values	206.1±21.73	150-243	0.94

SD: Standard deviation.

(p=0.001), and having national publications (p=0.001) (p<0.05, Table 3).

In the "values towards the institution" sub-dimension score, statistically significant differences were observed based on academic title (p=0.003) and having national publications (p=0.001) (p<0.05, Table 3).

The "values towards society" sub-dimension score showed statistically significant differences based on gender (p=0.002), knowledge of academic ethical values (p=0.001), and having international and national publications (p=0.001, p=0.001) (p<0.05, Table 3).

For the "values in the teaching process" sub-dimension score, statistically significant differences were found based on academic title (p=0.001), knowledge of academic ethical values (p=0.017), clinical experience (p=0.004), reporting unethical behavior (p=0.002), and having national publications (p=0.001) (p<0.05, Table 3).

Clinical experience only affected the scores in the "values in the teaching process" sub-dimension (p=0.004), while academic title did not affect the scores in the "values towards society" sub-dimension (p=0.248) (Table 3).

COMPARISON OF VARIABLES ACCORDING TO SCALE TOTAL SCORES

Statistically significant differences were identified in the total scores for academic ethical values based on the variables of academic title (p=0.001), knowledge of academic ethical values (p=0.009), and having national publications (p=0.001) (p<0.05, Table 4). However, no statistically significant differences were observed concerning gender (p=0.663), having clinical duties (p=0.775), reporting unethical behavior (p=0.891), and having international publications (p=0.097) (p>0.05, Table 4).

Upon reviewing Table 5: In the "values towards scientific research" sub-dimension, a positive statistically significant relationship exists with both age (p=0.019) and duration of academic tenure (p=0.028). Scores in this sub-dimension increase as age and academic tenure increase.

In the "values towards colleagues" and "values towards the institution" sub-dimensions, no statistically significant relationships were found with either age (p=0.957, p=0.087) or duration of academic tenure (p=0.386, p=0.157).

The "values towards society" sub-dimension score did not show a statistically significant relationship with age (p=0.598). However, a positive statistically significant relationship was found with the duration of academic tenure (p=0.001). Scores in this sub-dimension increase as academic tenure lengthens.

In the "values in the teaching process" sub-dimension, no statistically significant relationship was identified with the duration of academic tenure (p=0.121). Conversely, a negative statistically significant relationship was found with age (p=0.041). Scores in this sub-dimension decrease as age increases.

There was no statistically significant relationship between the total scale score and age (p=0.592). Nonetheless, a positive statistically significant relationship was observed with the duration of academic

TABLE 3: Comparison by scale scores and sub-dimensions.

Variables	Groups	For scientific research X̄±SD	M (minimum-maximum)	Colleague oriented M (minimum-maximum)	X̄±SD	For the organisation X̄±SD	M (minimum-maximum)	Community oriented M (minimum-maximum)	X̄±SD	For the teaching process X̄±SD	M (minimum-maximum)
Gender	Woman	37.29±3.42	38 (27-44)	39.41±4.04	41 (30-45)	35.94±4.63	37 (27-43)	30.12±2.4	30 (24-36)	62.63±6.23	64 (42-70)
	Male	38.56±6.29	40 (27-45)	41.16±4.87	41 (33-49)	36.27±6.74	40 (24-45)	28.7±2.1	29 (26-36)	61.86±6.73	66 (52-70)
	Mann-Whitney	**1334.000**	1570.500	1685.000	1265.500	1779.000					
	p value	**0.005***	0.108	0.310	0.002*	0.589					
Title	Research assistants and lecturers[1]	35.02±4.85	35 (27-44)	38.41±4.19	41 (33-45)	34.63±5.52	37 (26-42)	29.51±2.39	29 (26-33)	59.03±6.12	57 (52-69)
	Dr. Faculty member	41.19±2.03	42 (37-44)	41.57±2.27	42 (35-45)	36.97±5.23	40 (27-43)	28.92±2.31	29 (27-36)	66.68±3.38	67 (57-70)
	Assoc and prof	40.2±6.04	44 (27-45)	43.2±5.74	41 (30-49)	38.1±7.09	38 (24-45)	29.17±2.21	30 (24-36)	62.73±6.95	67 (42-70)
	Kruskal-Wallis	**41.001**		**16.983**		**11.561**		2.790		**29.958**	
	p value	**0.001***		**0.001***		**0.003***		0.248		**0.001***	
	Difference	Research Assistants. Lecturer. Dr Lect. Member and Assoc. Prof.		Research Assistants. Lecturer and Dr Lect. Member and Assoc. Prof.		Research Assistants. Lecturer and Dr Lect. Member and Assoc. Prof.		-		Research Assistants. Lecturer and Dr Lect. Member and Assoc. Prof.	
Sufficient knowledge about academic ethics	Yes	37.46±3.66	38 (27-45)	39.44±3.47	41 (30-47)	35.81±4.87	37 (24-45)	30±2.46	30 (24-36)	60.9±5.88	61 (42-70)
	Partially	38.78±6.84	42 (27-45)	41.69±5.48	43 (33-49)	36.53±7.11	40 (26-45)	28.38±1.81	29 (26-33)	63.64±6.97	67 (52-70)
	Mann-Whitney	**1343.500**		**1322.000**		1642.500		**1214.500**		**1486.000**	
	p value	**0.002***		**0.001***		0.105		**0.001***		**0.017***	
Clinical experience	No.	37.7±5.65	38 (27-45)	40.45±4.98	41 (33-49)	36.57±6.33	40 (24-45)	29.2±2.26	29 (26-36)	61.54±6.19	62 (52-69)
	Yes	39.32±4.12	40 (27-45)	40.57±3.19	41 (30-47)	34.64±4.39	32 (27-45)	29.43±2.56	29 (24-36)	64.32±7.3	67 (42-70)
	Mann-Whitney	1162.000		1359.000		1088.500		1355.000		884.000	
	p value	0.214		0.938		0.094		0.920		0.004*	
Complaint of unethical behaviour	No	36.5±1.85	37 (34-38)	40.88±2.64	39 (38-44)	36.63±5.93	35 (30-43)	29.63±0.92	30 (28-31)	61.25±4.65	61 (56-66)
	Yes	38.66±6.13	40 (27-45)	40.25±5.46	41 (33-49)	36.26±6.82	40 (24-45)	29±2.4	29 (26-36)	61.1±6.47	62 (52-70)
	Undecided	37.13±3.83	38 (27-44)	40.87±2.69	41 (30-45)	35.79±3.91	37 (27-42)	29.71±2.31	29 (24-33)	64.58±6.47	68 (42-70)
	Kruskal-Wallis	**9.150**		0.312		0.946		3.171		**12.734**	
	p value	**0.010***		0.856		0.623		0.205		**0.002***	
	Difference	Yes-undecided		-		-		Yes-undecided			
Internation al article	No	36.88±3.02	38 (30-44)	39.3±3.52	41 (33-44)	37.08±3.85	40 (31-42)	30.38±1.9	31 (28-33)	60.35±5.82	57.5 (53-69)
	Yes	38.62±6.11	40 (27-45)	41.02±4.99	41 (30-49)	35.71±6.74	36 (24-45)	28.73±2.32	29 (24-36)	63±6.7	66.5 (42-70)
	Mann-Whitney	1130.000		1356.000		1664.000		977.500		1361.000	
	p value	0.002*		0.052		0.768		0.001*		0.059	
National article	No	29.19±4.42	27 (27-41)	35.5±4.52	33 (33-45)	28.88±5.28	26 (26-41)	27.06±2.02	26 (26-32)	54.56±5.4	52 (52-67)
	Yes	39.35±4.15	40 (27-45)	41.2±4.2	41 (30-49)	37.2±5.33	39.5 (24-45)	29.57±2.19	29 (24-36)	63.26±5.93	66 (42-70)
	Mann-Whitney	**131.000**		**384.500**		**229.500**		**296.000**		**180.000**	
	p value	**0.001***		**0.001***		**0.001***		**0.001***		**0.001***	

*p<0.05; There is a statistically significant difference between the groups; SD: Standard deviation.

tenure (p=0.046). The total scale score increases as academic tenure lengthens.

DISCUSSION

In our study, the mean of the sum of academic ethical values was determined as 206.1±21.73. This finding is similar to the studies of Kaynak and Karatas and Akçam.[19,20] In the study conducted by Yalçinkaya and Yildirim with nurse academics, the average perception of ethical values was found to be 174.53±6.73.[21] In a study by Tican Başaran et al. investigating the level of teachers' behaviour according to ethical values, it was found that teachers had a moderate level of ethical perception towards other colleagues and students.[22] A study conducted by Uğurlu and Sert showed that graduate students, who are accepted as future academics, have a moderate attitude towards academic ethical values.[23] When the studies are evaluated, it is thought that awareness of academic ethical values is generally at a similar level in the education and research community.

When the average attitude scores of our study were examined, it was stated that "values towards the teaching process" had the highest average attitude score, while "values towards society" had the lowest score. The fact that "values towards the teaching process" has the highest average attitude score shows that academicians feel a great responsibility for education and training activities and give more importance to ethical values in this field. In addition, the lowest mean score for "values towards society" may reflect that academics show a lower ethical sensitivity in their relations with the society. This may indicate that academics generally focus on students and the teaching process, but they need to make more effort in community relations. The fact that these findings are in line with previous studies shows that the sensitivity of the academic community to values towards the teaching process is a general trend.[7,24] Programmes aimed at increasing academics' awareness of ethical values, especially including the dimension of "values towards society", can help them develop more sensitivity in this area.

In the study, no statistically significant difference was found in the academic ethical values score according to the variables of gender, whether or not to work in the clinic, whether or not to complain about unethical behaviour and making international publications. However, a statistically significant difference was found according to the variables of title, having knowledge about academic ethical values and making national publications. On the other hand, Yalçinkaya and Yildirim reported that there was no statistically significant difference between academicians' duration of experience, titles, age, gender, duration of clinical experience, publishing national and international articles and having knowledge about critical thinking and academic ethics perception scores.[21] These differences between the studies show that the perception of academic ethical values is complex and multifaceted. It appears that multiple factors should be taken into consideration to understand the awareness and practices of ethical values in the academic community.

The age groups of the academicians participating in the study were compared with their perceptions of academic ethics. When the results of the literature similar to the study are analysed, it is seen that it is not clear whether age has an effect on the perception of academic ethics. In some studies, it was stated that there was no statistically significant difference between age groups.[20,21] In some studies, it was determined that the mean scores of academicians in some age groups were affected by the age variable.[19,25,26] In our study, there is a statistically significant positive relationship between the sub-dimension of values towards scientific research and age. The values for scientific research sub-dimension score will increase with increasing age. However, there is a statistically significant negative relationship between the sub-dimension of "ethical values towards teaching process" and age. As the age increases, the score of ethical values towards the teaching process will decrease. This finding suggests that age does not affect academics' sensitivity to ethical values and how they approach these values in a single direction and may cause changes in different dimensions.

The academic ethics perceptions of the academics participating in the study were compared with their titles. In Akçam's study, it was stated that there was no relationship between the academic staff's

TABLE 4: Comparison of variables based on scale total scores.

Variables	Groups		Total mean of academic ethical values $\bar{X}$±SD	M (Minimum-maximum)
Gender		Female	205.39±17.63	212 (150-227)
		Male	206.55±24.08	212 (164-243)
		Mann-Whitney	1800.000	
		p value	0.663	
Title		Research asisstants and lecturer	196.59±21.04	201 (164-229)
		Dr. Faculty member	215.32±9.83	221 (190-227)
		Assoc. Prof.	213.4±26.11	219.5 (150-243)
		Kruskal-Wallis	**23.243**	
		p value	**0.001***	
		Difference	Research Assistants. Lecturer. Dr Lect. Member and Assoc. Prof.	
Academic ethics about sufficient knowledge		Yes	203.6±16.64	209 (150-243)
		Partially	209.02±26.34	221 (164-237)
		Mann-Whitney	**1443.000**	
		p value	**0.009***	
Clinic duty doing		No	205.47±22.85	209 (164-237)
		Yes	208.29±17.41	212 (150-243)
		Mann-Whitney	1323.500	
		p value	0.775	
Unethical behaviour complaint		No	204.88±15.14	202 (190-221)
		Yes	205.28±24.58	209 (164-243)
		Undecided	208.08±16.01	212 (150-229)
		Kruskal-Wallis	0.230	
		p value	0.891	
International article		No	203.98±15.21	209 (181-229)
		Yes	207.08±24.19	212 (150-243)
		Mann-Whitney	1405.000	
		p value	0.097	
National article		No	175.19±20.92	164 (164-220)
		Yes	210.59±17.91	212 (150-243)
		Mann-Whitney	**205.000**	
		p value	**0.001***	

*p<0.05; There is a statistically significant difference between the groups; SD: Standard deviation.

TABLE 5: Relationships between age, academic experience, and scale scores.

Points	Age		Academic tenure	
Variable	r value	p value	r value	p value
Values towards scientific research	**0.209**	**0.019***	**0.295**	**0.028***
Values towards colleagues	-0.005	0.957	0.078	0.386
Values towards the institution	0.153	0.087	0.127	0.157
Values towards society	0.047	0.598	**0.319**	**0.001***
Values towards the teaching process	**-0.267**	**0.041***	0.139	0.121
Total mean of academic ethical values	0.048	0.592	**0.278**	**0.046***

r: Spearman rank correlation coefficient; *p<0.05; there is a statistically significant relationship between the variables.

level of compliance with academic ethics and their titles.[20] However, in the study of Kaynak and Karatas, statistically significant differences were found between research assistants and professors.[19] In our study, it was observed that there were significant differences between research assistants and lecturers,

doctoral lecturers, associate professors and professors according to titles. These differences indicate that academic title may have a significant effect on academic ethics perceptions.

The study makes an important contribution by examining the relationship between the tenure of academics and their perceptions of academic ethics. In Yalçinkaya and Yildirim's study, no statistically significant difference was found between the academic ethics perceptions of the participants and their tenure.[21] Similarly, in Akçam's study, no significant change was observed in the level of compliance with academic ethics according to seniority.[20] However, in the study of Kaynak and Karatas, it was stated that especially in the sub-dimension of "ethical values towards colleagues", academics working between 5-10 years scored higher than academics working between 0-1 year.[19] This situation can be interpreted as that ethical values towards colleagues are more important and adopted as the tenure increases. In our study, a statistically significant positive relationship was found between the total score of the scale and the sub-dimensions of "values towards scientific research" and "values towards society". In other words, the scores in these sub-dimensions increase as the duration of academic experience increases. This result shows that the duration of academic experience may increase sensitivity to ethical values towards scientific research and society.

The study makes an important contribution to understanding the relationship between academicians' clinical experiences and their perceptions of academic ethics. According to the results of the study, it is seen that clinical experience has a more significant effect on ethical values towards the teaching process. In previous studies in this field, the effect of clinical experience on the perceptions of values towards the institution and values towards the teaching process was determined.[21] It was observed that academicians with clinical experience had lower scores in some specific ethical dimensions (values towards scientific studies).[19] This finding may indicate that clinical experience brings a different perspective or sensitivity towards certain ethical values.

Our study reveals that there are significant differences in the sub-dimensions of "values towards scientific research" according to the variables of gender, title, having knowledge of academic ethical values, complaining about unethical behaviour, making international and national publications. In Akçam's study, the finding that academic staff showed a high level of ethical compliance in the dimension of responsibility towards science was repeated in our study and this was associated with a strong sense of responsibility towards science.[20]

In the study, it is seen that there are statistically significant differences between the variables of title, having academic ethical values and making national publications according to the "values towards colleagues" sub-dimension score. In the study of Kaynak and Karatas, statistically significant differences were found between variables such as age, title, tenure and number of international articles.[19] This shows the diversity of factors affecting academic ethical values. Akçam's study showed that the level of lecturers' behaviour towards their colleagues in accordance with academic ethical values was at a moderate level, but they thought that this behaviour was not fully appropriate.[20] This may indicate that although academic staff have academic ethical values, there is some kind of incompatibility or lack of awareness about behaviour in accordance with these values.

The results of our study show that there are statistically significant differences in the sub-dimension score of "ethical values towards the institution" depending on the variables of title and national publication. Similarly, in the study of Kaynak and Karatas, differences were found between variables such as title, ethical knowledge, complaining about unethical behaviour, number of national and international articles.[19] On the other hand, Akçam's study emphasises that academic staff show a high level of compliance with academic ethics in the dimension of responsibility towards their profession.[20] These findings provide a positive evaluation of the academic staff in terms of fulfilling their responsibilities towards the institution they work for. At the same time, it is also possible to say that there is a level of trust that academic ethical rules are followed in the institutions where they work.

In the study, statistically significant differences were found between the variables of title, having

knowledge of academic ethical values, working in the clinic, complaining about unethical behaviour and making national publications according to the "ethical values in the teaching process" sub-dimension scores. This is similar to the study of Kaynak and Karatas, who also found significant differences between variables such as title, complaining about unethical behaviour, and number of international articles.[19] In Başaran et al. study, it was determined that the perceptions of lecturers and students regarding the level of compliance with ethical principles regarding the fulfilment of lecturers' educational responsibilities and responsibilities towards students did not show a significant difference according to the variables compared (gender, title, length of experience for lecturers, gender and achievement for students).[22] Akçam's study suggests that lecturers show a high level of compliance with academic ethical values in the dimension of responsibility towards students.[20] This provides a positive evaluation of lecturers' behaviours towards students in accordance with ethical values.

In the sub-dimension of "ethical values towards society", Akçam's study states that academic staff show a high level of compliance with academic ethical values, especially in the dimension of responsibility towards society.[20] This shows that academic staff believe that they fulfil their responsibilities towards their society in accordance with ethical standards. In our study, statistically significant differences were found between the variables of gender, having knowledge of academic ethical values, making international and national publications according to the "ethical values towards society" sub-dimension scores. The study of Kaynak and Karatas also found a significant difference in terms of the variable of complaining about unethical behaviour.[19] At this point, it is important to understand the reasons for these differences and to develop strategies to increase compliance with ethical values towards society.

CONCLUSION

This study provides a comprehensive understanding of the ethical perceptions of public university academics, revealing their sensitivity to ethical values based on their demographic characteristics and academic experience. The findings show a high level of overall ethical congruence that supports a trustworthy and responsible academic environment.

However, low scores on values towards society indicate that academics' social responsibility in their scientific and teaching duties is insufficient. Encouraging participation in volunteer work and assuming social responsibilities related to scientific developments can strengthen academics' ties with society. Increasing interaction with the society can better utilize the social benefit potential of science. Ethics education and awareness programs focusing on societal values, including public seminars and social media engagement, can improve academics' community engagement.

Age-specific strategies are needed as age positively affects research ethics, but negatively affects teaching ethics, possibly due to depersonalization and burnout. Collaboration between older and younger academics may help to maintain sensitivity to ethical values.

Title influences ethical perceptions, with differences observed across various academic ranks. Title-specific ethics training programs can promote continuous ethical development by addressing unique ethical issues at different academic levels.

The study's examination of the relationship between clinical experience and perceptions of academic ethics is important as it addresses a perspective that is often less prominent in the literature. The findings suggest that academics with clinical experience may have a different perspective on ethical values for the teaching process. This suggests that clinical experience may develop a special awareness of ethical issues related to teaching.

Overall, the study suggests a high level of academic ethical values but identifies areas for improvement. The development of targeted training programs and institutional policies can help academics increase their ethical sensitivity and fulfill their social responsibilities more effectively.

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Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: *Gamze Özbek Güven, Sibel Kaynak, Mehmet Karataş;* ***Design:*** *Gamze Özbek Güven, Mehmet Karataş;* ***Control/Supervision:*** *Gamze Özbek Güven, Mehmet Karataş;* ***Data Collection and/or Processing:*** *Gamze Özbek Güven, Sibel Kaynak;* ***Analysis and/or Interpretation:*** *Gamze Özbek Güven, Mehmet Karataş;* ***Literature Review:*** *Gamze Özbek Güven, Mehmet Karataş, Sibel Kaynak;* ***Writing the Article:*** *Gamze Özbek Güven, Sibel Kaynak;* ***Critical Review:*** *Mehmet Karataş.*

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