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The Relationship Between Interpersonal Style, Communication Skills and Moral Maturity in University Students

Üniversite Öğrencilerinde Kişilerarası Tarz, İletişim Becerileri ve Ahlaki Olgunluk İlişkisi

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ÖZET

Amaç: Sağlık Hizmetleri Meslek Yüksekokulu öğrencilerinin kişilerarası tarz ve iletişim becerileri ile ahlaki olgunluk düzeyleri arasındaki ilişkinin incelenmesidir.

Gereç ve Yöntemler: Araştırmanın evrenini, bir üniversitenin Sağlık Hizmetleri Meslek Yüksekokulunda öğrenim gören 507 öğrenci oluşturmuştur. Araştırmanın örneklemini 269 öğrenciden oluşmaktadır. Araştırmanın verileri 'Tanıtıcı Özellikler Formu', 'Kişilerarası Tarz Ölçeği', 'İletişim Becerileri Değerlendirme Ölçeği' ve 'Ahlaki Olgunluk Ölçeği' kullanılarak toplanmıştır. Ölçek toplam puanları ile tanımlayıcı özellikler arasındaki karşılaştırmalarda independent samples t testi ve ANOVA, ölçek puanları arasındaki nedenselliğin incelenmesinde Path Analizi kullanılmıştır ($p<0.05$).

Bulgular: Bu çalışmada kişilerarası tarz ölçeği toplam puanı (108.37 ± 32.91), iletişim becerileri değerlendirme ölçeği (99.34 ± 20.88) toplam puanı ve ahlaki olgunluk ölçeği (278.74 ± 42.83) toplam puanı anlamlı derecede yüksek bulunmuştur. Ayrıca Ahlaki olgunluk ölçeği puanı 0.13 birim azaldığında, kişilerarası tarz ölçeği puanı bir birim artmaktadır. Ahlaki olgunluk ölçeği 0.70 birim arttığında ise iletişim becerileri değerlendirme ölçeği puanı bir birim artmaktadır ($p<0.001$).

Sonuç: Çalışma sonucunda, öğrencilerin ahlaki olgunluk düzeyi ve iletişim becerileri yüksek bulunmuştur. Ayrıca öğrencilerin olumlu iletişim tarzına sahip oldukları bulunmuştur. Ahlaki olgunluk düzeyinin azalması ile olumsuz iletişim tarzının arttığı, ahlaki olgunluk düzeyinin artmasıyla ise iletişim becerilerin arttığı sonucuna ulaşılmıştır.

Anahtar Kelimeler: Ahlaki Olgunluk; İletişim Becerileri; Öğrenci; Sağlık Hizmetleri; Kişilerarası Tarz.

ABSTRACT

Objective: The purpose of the study is to examine the relationship between interpersonal style and communication skills and moral maturity levels of health services vocational school students.

Material and Methods: The universe of the study consists of 507 students studying at a Health Services Vocational School of a university. The sample of the study consists of 269 students. The data of the study were collected using the introductory characteristics form, Interpersonal Style Scale, Communication Skills Assessment Scale and Moral Maturity Scale. Independent samples t test and ANOVA were used for comparisons between the total scale scores and descriptive characteristics, and Path Analysis was used to examine the causality between the scale scores ($p<0.05$).

Results: In this study, the total score of the interpersonal style scale (108.37 ± 32.91), the total score of the Communication Skills Assessment Scale (99.34 ± 20.88) and the total score of the moral maturity scale (278.74 ± 42.83) were found to be significantly high. In addition, when the moral maturity scale score decreases by 0.13 units, the interpersonal style scale score increases by one unit. When the moral maturity scale increases by 0.70 units, the communication skills assessment scale score increases by one unit ($p<0.001$).

Conclusion: As a result of the study, the students' moral maturity level and communication skills were found to be high. It was also found that the students had a positive communication style. It was concluded that as the moral maturity level decreased, the negative communication style increased, and as the moral maturity level increased, communication skills increased.

Keywords: Communication Skills; Health Services; Interpersonal style; Moral Maturity;

INTRODUCTION

Healthcare services represent not merely a field grounded in technical knowledge and skills but encompass a profession deeply intertwined with human relationships, communication processes, and heightened ethical responsibility (1). In this context, the foundation of healthcare professionals' occupational competence lies in their ability to manage interpersonal relationships, establish effective communication, and cultivate a high level of moral maturity (1,2).

Interpersonal style refers to the behavioral patterns individuals display in their interactions with others. This style determines how individuals engage in social environments, perceive the emotional and psychological states of others, and respond accordingly. Interpersonal styles are generally categorized into three main types: dominant, submissive, and balanced. These styles reflect the strategies and behavioral patterns individuals adopt in their relationships with others (3). In healthcare services, interpersonal style can influence communication and collaboration among employees, which in turn indirectly affects the quality of patient care (4). The literature contains various studies examining how interpersonal styles shape healthcare professionals' relationships with patients. These studies highlight the positive effects of an empathic and understanding interpersonal style on patient satisfaction and the effectiveness of treatment processes (4,5,6). Communication skills refer to the ability of individuals to effectively convey their thoughts, emotions, needs, and desires. These skills encompass verbal and nonverbal communication, active listening, empathy, and cultural awareness (7,8). For healthcare professionals, communication is vital not only for building strong relationships with patients but also for engaging effectively with colleagues and family members. Good communication helps prevent misunderstandings, facilitates treatment processes, and enhances patient satisfaction (8,9). The literature frequently examines the impact of healthcare workers' communication skills on patient satisfaction and treatment success. Furthermore, findings indicate that communication skills are also associated with healthcare workers' stress levels (10,11).

Moral maturity refers to individuals' capacity to distinguish right from wrong and to make decisions accordingly, guided by ethical values, responsibilities, and social norms (12). It can be defined as the ability to establish a balance between personal values and the ethical norms of society and to integrate this balance into one's life (13). In healthcare services, moral maturity plays a crucial role in areas such as adherence to professional ethical standards, respect for patient rights, and collaboration with colleagues. Individuals with high levels of moral maturity are more likely to exhibit responsible and ethical behaviors, thereby enhancing both individual and collective success within healthcare settings (1). The literature presents various findings on the influence of healthcare professionals' moral maturity on their decision-making processes and ethical judgments related to patient care (14,15). As nurses and midwives' professional self-esteem increases, they tend to consider moral principles more in ethical decision-making, and the influence of morality and ethical values on the decision-making process in resolving ethical dilemmas has been explained in the literature. Moreover, it is emphasized that healthcare students' abilities to cope with ethical dilemmas encountered in their professional lives are closely tied to the level of moral maturity they develop during their education (16).

Health Services Vocational School students form the core members of the healthcare system, undertaking roles such as healthcare technicians and medical secretaries, all of whom are directly involved in patient care (17). These students typically enter the workforce earlier than bachelor's-level healthcare professionals and are required to establish multifaceted relationships involving direct patient communication, interactions with patients' relatives, and teamwork. Therefore, assessing their competencies in balancing interpersonal relationships, conducting effective communication, and making decisions aligned with ethical values – alongside their professional knowledge and skills – is of great importance at this early stage. Therefore, in

addition to professional knowledge and skills, it is of great importance to assess interpersonal balance, effective communication, and the ability to make decisions in accordance with ethical values during this early period. However, to date, the literature lacks a comprehensive study that simultaneously examines these three critical constructs specifically among students of vocational school of health services. Accordingly, this study, which we think will make a significant contribution to the literature, aims to examine the relationship between interpersonal style, communication skills, and moral maturity among students of vocational school of health services.

The research questions of the study are as follows:

1. Is there a relationship between the socio-demographic characteristics (e.g., age, gender, educational background) of Vocational School of Health Services students and their interpersonal styles, communication skills, and moral maturity levels?
2. Is there a relationship between interpersonal styles and communication skills as well as moral maturity levels?
3. Is there a relationship between communication skills and moral maturity levels?
4. What is the nature of the relationship among interpersonal styles, communication skills, and moral maturity levels?

MATERIAL AND METHOD

Study Design

This study was conducted using a descriptive, correlational and structural equation modeling research design.

Study Setting and Duration

The research was carried out between October 2023 and April 2024 at the Vocational School of Health Services of a public university.

Data Collection Tools

Personal Information Form

Developed by the researchers, this form consists of 10 questions (gender, department, class, income level, family type, place of residence, geographical region of birth and upbringing, siblings, parents' education level and occupation, perceived parental attitudes). The first eight questions gather information on students' socio-demographic characteristics, while the remaining two assess students' perceptions of parental attitudes.

Interpersonal Style Scale (ISS)

Developed by Şahin et al. (2007), this scale aims to determine the interpersonal styles individuals employ in their relationships. The scale consists of 60 items rated on a five-point Likert scale and comprises six subscales: dominant (14 items), avoidant (11 items), angry (9 items), affect-avoidant/insensitive (11 items), manipulative (10 items), and contemptuous/mockingly sarcastic (5 items). The total score ranges between 60 and 300. Higher scores indicate a negative communication style, whereas lower scores indicate a positive communication style. The Cronbach's alpha coefficients for the subscales and the overall scale are 0.86, 0.76, 0.80, 0.72, 0.75, 0.65, and 0.92, respectively (18). In the present study, the overall Cronbach's alpha was 0.95.

Communication Skills Scale (CSS)

Developed by Owen and Bugay (2014), this scale aims to assess how individuals evaluate their own communication skills. It consists of 25 items reflecting behaviors, approaches, thoughts, and feelings related to positive communication skills, organized under four subscales: communication principles and basic skills (10 items), self-expression (4 items), nonverbal communication (6 items), and willingness to communicate and active listening (5 items). The scale uses a five-point Likert format (always = 5 points; never = 1 point), with total scores ranging from 25 to 125. Higher scores indicate more advanced communication skills. The

Cronbach's alpha coefficients for the subscales and the overall scale are 0.79, 0.72, 0.64, 0.71, and 0.88, respectively (19). In the present study, the overall Cronbach's alpha was 0.97.

Moral Maturity Scale (MMS)

Originally developed by Kohlberg (1964) to measure individuals' levels of moral maturity, the scale's validity and reliability for Turkish samples were established by Şengün and Kaya (2007). The scale consists of 66 items using a five-point Likert format (never = 1 point; always = 5 points). Items 4, 7, 15, 16, 17, 18, 29, 33, 37, 38, 45, 62, 65, and 66 are reverse coded. Total scores range from 66 to 330, with higher scores indicating higher levels of moral maturity and lower scores indicating lower levels. The Cronbach's alpha coefficient of the original scale was reported as 0.93 (20); in the present study, it was calculated as 0.97.

Statistical Analysis

Population and Sample

The population of the study consists of a total of 507 students studying at the Health Services Vocational School of a public university in the 2023-2024 academic year (110 in the elderly care program, 119 in the medical laboratory program, 124 in the first aid and emergency program, and 154 in the physiotherapy program). The sample size was calculated using G*Power software, based on the study titled Investigation of Vocational School Students' Communication Skills in Terms of Various Variables (21), with parameters set at $\alpha = 0.05$, $1-\beta = 0.95$, and effect size $d = 0.69$, resulting in a minimum required sample of 112 students. Descriptive statistics in the analysis of data in the sample study, one-way analysis of variance (ANOVA) and bonferroni significance analysis test has been used (21). To enhance the generalizability and statistical power of the study results, a total of 269 students (212 female, 57 male) were included. Participation was limited to students enrolled in the Vocational School of Health Services who volunteered to take part in the research.

Data Collection Procedure

The study data were collected online between October 2023 and April 2024. The data were collected using the online tool. Data collection link was distributed to the students via the WhatsApp application, accompanied by an explanation outlining the study's aim and an invitation to participate. Those students who selected the "I want to participate" option proceeded to complete the form, while those who did not wish to participate exited without completing it.

Data Analysis

The data obtained from the study were analyzed using the Statistical Package for the Social Sciences (SPSS) and Analysis of Moment Structures (AMOS) version 24.0 (IBM Corp., Armonk, NY, USA). Descriptive statistics (number, percentage, and frequency) were used to assess descriptive characteristics, while means and standard deviations were calculated for total scale scores. For comparing two independent groups with normally distributed data (as determined by the Kolmogorov-Smirnov test, $p > 0.05$), independent samples t-tests were used; for comparisons among more than two groups, analysis of variance (ANOVA) was applied. Path analysis was employed to examine causality among scale scores (22). The significance level was set at $p < 0.05$.

RESULT

Among the students who participated in the study, 78.8% were female, 34.2% were enrolled in the Elderly Care Program, and 62.5% were first-year students. Nearly half (47.6%) reported that their income matched their expenses. The majority of students (72.1%) were from nuclear families, with an equal proportion (72.1%) living with their parents at the time of the study. Regarding parental education, 44.2% of the students' mothers and 37.2% of their fathers had completed primary school. Furthermore, 43.1% of the students thought their mothers and 46.5% of their fathers exhibited an authoritarian parenting style. (Table 1).

The total Interpersonal Style Scale score was found to be significantly higher among those living with their families (152.00 ± 21.37), those who perceived their mothers (112.45 ± 33.10) and fathers (111.62 ± 33.19) as democratic, and those who evaluated their mothers as attentive (127.92 ± 40.82) ($p < 0.05$) (Table 1).

The total Communication Skills Scale score was significantly higher among the students whose fathers were illiterate (101.84 ± 24.15) ($p < 0.05$).

The total Moral Maturity Scale score was significantly higher among the first-year students (283.02 ± 38.63) and among those who perceived their mothers (285.43 ± 38.12) and fathers (288.12 ± 34.59) as overly protective ($p < 0.05$).

The mean total scores obtained by the students participating in the study were 108.37 ± 32.91 for the Interpersonal Style Scale (range: 60–219), 91.34 ± 20.88 for the Communication Skills Scale (range: 30–125), and 278.74 ± 42.83 for the Moral Maturity Scale (range: 122–330).

Table 1. Total mean scores of the ISS Scale, CSS Scale and MMS Scale according to the descriptive characteristics of the students (n=269)

Descriptive Characteristics	n (%)	ISS (60–300 points)	CSS (25–125 points)	MMS (66–330 points)
Gender				
Female	212 (78.8)	106.28±30.85	99.66±21.00	280.45±40.97
Male	57 (21.2)	116.15±38.99	98.19±20.58	272.38±49.00
Statistical Analysis t/p		-1.77/0.08	0.46/0.64	1.26/0.20
Program				
Physiotherapy	68 (25.3)	100.94±32.81	103.47±19.99	281.01±42.87
Elderly Care	92 (34.2)	108.70±33.30	94.83±24.12	274.14±50.47
First Aid and Emergency	45 (16.7)	111.51±31.33	102.22±17.18	277.86±34.65
Medical Laboratory Techniques	64 (23.8)	113.60±32.87	99.43±18.16	283.57±35.64
Statistical Analysis F/p		1.91/0.12	2.62/0.05	0.69/0.55
Year of Study				
First Year	168 (62.5)	109.67±34.29	100.79±19.61	283.02±38.63
Second Year	101 (37.5)	106.22±30.52	96.95±22.73	271.62±48.39
Statistical Analysis t/p		0.84/0.39	1.46/0.14	2.01/0.04
Income Status				
Income less than expenses	122 (45.4)	111.27±36.64	97.20±23.71	274.97±46.08
Income equal to expenses	128 (47.6)	106.46±28.08	101.85±17.22	282.72±37.92
Income greater than expenses	19 (7.1)	102.68±37.68	96.21±23.13	276.15±51.74
Statistical Analysis F/p		0.97/0.37	1.80/0.16	1.06/0.34
Family Type				
Nuclear family	194 (72.1)	108.50±32.03	99.08±21.25	276.64±43.28
Extended family	64 (23.8)	106.15±33.04	101.01±20.05	284.50±42.54
Divorced family	11 (4.1)	119.09±46.84	94.27±19.77	282.36±35.98
Statistical Analysis F/p		0.70/0.49	0.54/0.58	0.84/0.42

Table 1. Continued

Descriptive Characteristics	n (%)	ISS (60–300 points)	CSS (25–125 points)	MMS (66–330 points)	
Living Arrangement					
With family	194 (72.1)	152.00±21.37	99.26±20.63	278.92±43.11	
Dormitory	75 (27.9)	108.71±34.22	79.00±29.20	260.66±54.41	
Statistical Analysis t/p		-2.18/0.03	1.68/0.09	0.72/0.46	
Mother's Education					
Illiterate	42 (15.6)	108.26±35.68	96.54±22.89	272.97±47.40	
Literate	24 (8.9)	109.33±24.56	90.91±27.15	273.58±56.18	
Primary school	119 (44.2)	105.42±32.94	101.35±18.75	283.92±40.81	
Middle school	50 (18.6)	112.00±31.52	98.64±21.43	274.54±40.08	
High school or above	34 (12.6)	112.85±36.97	102.79±18.66	277.58±37.11	
Statistical Analysis F/p		0.54/0.70	1.70/0.14	0.83/0.50	
Father's Education					
Illiterate	13 (4.8)	108.07±29.36	101.84±24.15	287.07±41.20	
Literate	12 (4.5)	106.58±31.77	81.16±32.15	253.66±70.38	
Primary school	100 (37.2)	111.07±34.02	99.85±19.89	279.43±44.76	
Middle school	66 (24.5)	104.12±32.63	99.62±20.86	276.36±42.63	
High school or above	78 (29.0)	108.85±32.85	100.85±18.65	282.35±34.26	
Statistical Analysis F/p		0.46/0.76	2.51/0.04	1.35/0.25	
Perceived Mother's Attitude*					
Authoritarian Mother	Yes	116 (43.1)	111.18±30.31	99.42±21.44	277.10±43.54
	No	153 (56.9)	106.24±34.70	99.29±20.52	279.99±42.38
Statistical Analysis t/p		1.21/0.22	0.05/0.95	-0.54/0.58	
Democratic Mother	Yes	82 (30.5)	112.45±33.10	101.68±20.25	282.42±43.12
	No	187 (69.5)	99.07±30.69	98.32±21.12	277.13±42.71
Statistical Analysis t/p		-3.09/0.00	1.20/0.22	0.93/0.35	
Overprotective Mother	Yes	104 (38.7)	109.23±32.32	101.56±19.09	285.43±38.12
	No	165(61.3)	107.84±33.36	97.95±21.87	274.53±45.15
Statistical Analysis t/p		0.36/0.71	1.37/0.16	2.12/0.03	
Neglectful Mother	Yes	14 (5.2)	107.30±32.18	97.00±21.61	278.85±33.16
	No	255 (94.8)	127.92±40.82	99.47±20.88	278.74±43.35
Statistical Analysis t/p		2.28/0.02	-0.43/0.66	0.01/0.99	
Perceived Father's Attitude*					
Authoritarian Father	Yes	125 (46.5)	109.48±33.19	101.10±19.72	277.97±44.32
	No	144 (53.5)	107.42±32.75	97.82±21.79	279.41±41.64
Statistical Analysis t/p		0.51/0.61	1.28/0.20	-0.27/0.78	
Democratic Father	Yes	93 (34.6)	111.62±33.19	101.17±19.90	281.70±41.86
	No	176 (65.4)	102.23±31.64	98.38±21.37	277.18±43.37
Statistical Analysis t/p		-2.19/0.02	1.03/0.30	0.82/0.41	
Overprotective Father	Yes	71 (26.4)	108.97±30.77	102.19±19.32	288.12±34.59
	No	198 (73.6)	108.16±33.72	98.32±21.37	275.38±45.02
Statistical Analysis t/p		0.20/0.83	1.33/0.18	2.44/0.01	
Neglectful Father	Yes	31 (11.5)	117.22±33.91	94.22±23.48	273.80±36.24
	No	238 (88.5)	107.22±32.68	100.01±20.48	279.39±43.64
Statistical Analysis t/p		1.57/0.11	-1.44/0.15	-0.68/0.49	
X±SD		108.37±32.91	91.34±20.88	278.74±42.83	
(Min-Max)		(60-219)	(30-125)	(122-330)	

* Multiple responses were allowed. Notes: X ± SD = Mean ± Standard Deviation (Minimum–Maximum); t/p = Independent samples t test and significance value; F/p = Analysis of Variance (ANOVA) and significance value; ISS= Interpersonal Style Scale. CSS= Communication Skills Scale. MMS= Moral Maturity Scale.

The correlation analysis revealed a strong negative and significant relationship between the Interpersonal Style Scale and the Communication Skills Scale ($r = -0.754$) and a moderate negative and significant relationship between the Interpersonal Style Scale and the Moral Maturity Scale ($r = -0.507$) ($p < 0.05$). Additionally there was a strong positive and significant relationship between the Moral Maturity Scale and the Communication Skills Scale ($r = 0.731$) ($p < 0.05$) (Table 2).

Table 2. Correlation Between Scales

Scales	MMS	CSS
ISS	-.507**	-.754**
MMS		.731**

Note: r = Pearson correlation coefficient; ISS= Interpersonal Style Scale. CSS= Communication Skills Scale. MMS= Moral Maturity Scale. ** Correlation is significant at the 0.01 level (2-tailed)

The path analysis indicated that all path coefficients in the model were significant ($p < 0.05$). Examination of the model fit indices showed the following: SRMR = 0.05. RMSEA = 0.09. GFI = 0.91. CFI = 0.96. and CMIN/DF = 3.18. Specifically. When the Moral Maturity Scale score decreased by 0.87 units. The Interpersonal Style Scale score increased by one unit ($p = 0.003$). Furthermore. When the Moral Maturity Scale score increased by 3.64 units. The Communication Skills Scale score increased by one unit ($p < 0.001$) (Table 3).

Table 3. Path Analysis Results

Scales	β_0 (Standardized Path Coefficient)	β_1 (Unstandardized Path Coefficient)	Standard Error	Test Statistic	p-value
ISS	-0.533	-0.87	0.29	-2.97	0.003
CSS	0.703	3.646	0.23	15.86	<0.001

Note: B = Regression coefficient; β = Standardized coefficient; Std. Error = Standard error; t = t-test value; Sig. = Significance level (p value). ISS= Interpersonal Style Scale. CSS= Communication Skills Scale. MMS= Moral Maturity Scale.

DISCUSSION

Examining the relationship between interpersonal style, communication skills, and moral maturity among students of vocational school of health services is of considerable importance, as it directly relates to their ability to establish effective communication, make ethically sound decisions, effectively manage patient and team relationships, and constructively cope with the increasing prevalence of violence in healthcare environments during their professional careers. These three constructs constitute fundamental professional competencies that directly influence both the interpersonal success of healthcare professionals and the reliability of service delivery. For this reason, the present study was conducted to investigate the relationships among these three parameters among students of vocational school of health services. The findings obtained were discussed in line with the research questions and relevant literature.

In this study, it was found that the participating first-year students exhibited higher levels of moral maturity. Similar studies in the literature support this finding (16, 23). It is thought that the continued strong influence of familial and social moral values may have contributed to the heightened moral maturity observed among the first-year students. Additionally, the idealism associated with entering university, high levels of professional motivation, and the initial awareness generated by first encounters with ethical concepts may be among the factors enhancing their moral maturity. Furthermore, the fact that these students have not yet

engaged in clinical practice or been exposed to professional pressures may be considered other possible reasons for this elevated moral maturity.

The study found that the students living with their families had significantly higher interpersonal style scores compared to those residing in dormitories. This noteworthy result suggests that students' patterns of social interaction may be directly influenced by their living environment and support systems. Living with family may provide individuals with greater emotional security, social support, and value-based guidance, thereby facilitating the development of a more balanced and positive interpersonal style. In contrast, those students living in dormitories often face the need to restructure their social roles within crowded living environments where feelings of belonging may weaken, and personal boundaries are more frequently challenged; as a result, they may display more defensive, distant, or withdrawn behaviors in interpersonal interactions (24-25). This finding contrasts with prior studies in the literature reporting no significant differences between place of residence and communication styles (21,26). It is possible that this divergence stems from various factors, such as the specific university setting, dormitory conditions, sociocultural context, or the nature of students' familial ties. Moreover, psychosocial elements such as the duration of dormitory residence, whether this living arrangement was chosen or imposed, and the quality of students' relationships with their surrounding social environment should not be overlooked as potential influences on interpersonal style.

From an educational perspective, the study also found that those students whose fathers were illiterate exhibited more advanced communication skills. Similarly, another study reported that young people with fathers of low educational attainment demonstrated higher communication skills (27). This phenomenon may arise from the predominance of verbal rather than written communication within such families. Family environments where face-to-face and verbal interactions are emphasized over written exchanges may enrich individuals' social interaction experiences, thereby fostering the development of communication skills (28). This finding highlights the influence of intrafamilial verbal communication patterns on the development of communication skills among students in vocational health services programs. Furthermore, it underscores the importance of considering family structure and social interaction patterns in efforts to strengthen the professional competencies of healthcare providers.

The literature emphasizes that parental attitudes play a critical role in children's moral and personality development (29, 30). In the present study, the students who perceived their mothers and fathers as having a democratic attitude were found to have higher interpersonal style scores. Additionally, the mother's attentive attitude was identified as contributing to the development of students' interpersonal skills. On the other hand, the students who perceived their parents as overly protective were found to exhibit higher levels of moral maturity. Parallel findings in the literature report that democratic and attentive parental attitudes are effective in fostering moral development and enhancing psychological well-being (31, 32). Democratic parents who value their children's opinions, provide guidance, and attend to emotional needs may support the development of social skills (33). The finding that students with democratic parents exhibit higher interpersonal style scores suggests that such parental attitudes may play a role in the development of these competencies. Similarly, the mother's attentive attitude may positively influence students' interpersonal interaction skills. Conversely, overly protective parental attitudes may provide a basis for greater internal reflection, thereby contributing to the development of moral maturity.

In this study, the mean interpersonal style score was 108, which is considerably below the scale midpoint of 180 (range: 60–300). Considering that higher scores indicate a more positive interpersonal style, this finding suggests that the participants generally exhibit a lower, more negative interpersonal style. This result contrasts with similar examples reported in the literature (34-38). Factors such as the quality of education in the health field, communication-focused interventions, the development of empathy skills, preparation for

working under stressful conditions, and the increasing importance of teamwork are thought to play a role in shaping students' interpersonal styles. Furthermore, direct interaction with patients during clinical practice provides students with opportunities to apply the communication skills they have learned theoretically. Such experiences can help individuals develop empathetic approaches and cope more flexibly with challenges encountered in healthcare settings, thereby supporting the development of more positive communication styles.

This study also found that the students demonstrated good levels of communication skills and moral maturity. Similarly, previous studies reported high levels of moral maturity and competence among students (16, 39-41). The finding that students possess strong communication skills and moral maturity can be considered a positive indicator of the development of their professional competencies. It is thought that this outcome may be shaped not only by family environments and social values but also by the contributions of ethical education provided at the university and the experiences gained through clinical practice. It was found that the students who displayed a negative interpersonal style also had lower levels of both communication skills and moral maturity, suggesting that these three constructs may mutually influence one another.

This study revealed that students exhibiting a negative interpersonal style demonstrated lower levels of both communication skills and moral maturity suggesting a reciprocal influence among these three constructs. Such an interaction reflects a multidimensional process in which emotional moral and interpersonal development occurs concurrently. Prior research has indicated that emotions and relational bonds play a pivotal role in individuals' moral reasoning processes (42). Individuals unable to cultivate a trust-based open and empathetic interpersonal style may experience challenges in effective communication and in articulating their ethical sensitivity. Furthermore negative interpersonal attitudes may impede the formation of healthy social connections, thereby adversely affecting both communication competencies and moral maturity.

In addition the development of communication skills and social competence is closely associated with moral maturity. Communication abilities and interpersonal problem-solving skills have been identified as robust predictors exerting a significant impact on social self-efficacy (43). These findings imply that morally mature and ethically aware individuals are likely to engage in more effective and functional communication within social contexts. The literature documents evidence of a negative association between interpersonal style and moral maturity (44-46). As well as findings indicating that enhancements in moral maturity are linked to the development of positive communication skills (16, 41, 47-49).

CONCLUSION

This study found that the participating first-year students demonstrated higher levels of moral maturity. Students living with their families exhibited more positive interpersonal styles while those whose fathers were illiterate showed more advanced communication skills. Parental attitudes were also observed to be associated with the students' interpersonal styles communication skills and moral maturity levels. Overall the students displayed a moderately positive interpersonal style along with high levels of communication skills and moral maturity. Among students with a negative interpersonal style both communication skills and moral maturity were lower. These findings are correlational meaning that while associations were observed among interpersonal style communication skills and moral maturity no causal relationships can be inferred from this study.

Based on these results it is important for educational institutions to adopt a comprehensive approach to support students' personal and professional development. Practical training and simulations aimed at strengthening social skills such as empathy and effective communication could be integrated into health curricula to enhance interpersonal competencies. Courses and ethics education designed to foster moral maturity should also form a central part of the curriculum. The influence of social and familial factors should

be considered; thus family support programs and initiatives to strengthen students' familial ties are recommended. Expanding clinical experiences that provide direct patient interaction can further help students develop empathetic approaches and adapt more effectively to challenges in healthcare settings.

Finally training on stress management and teamwork can prepare students for professional pressures and enhance their coping abilities. Collectively these strategies may enable healthcare professionals to cultivate more effective communication styles in clinical practice.

Ethical Considerations

Ethical approval for the study was obtained from the ethics committee of a public university (Protocol No: 2023/286. Decision No: 286.27.17). Institutional permission was also secured from the university where the study was conducted. and informed consent was obtained from all participating students. The research was conducted in accordance with the principles of the Declaration of Helsinki.

Informed Consent: Informed consent was obtained from students participating in the study

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