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Professional values and factors affecting these values in midwifery students

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Abstract

This study investigated the professional values of midwifery students and the factors influencing these values. Conducted from January 6 to March 6, 2021, it involved 715 midwifery students who participated voluntarily. Data was collected using a Descriptive Data Sheet and the Professional Values of Midwives Scale. Statistical analysis included descriptive statistics, two-way ANOVA, Independent Samples T Test, and Bonferroni Correction. The mean age of participants was 20.63 years; 99.2% were single, and 29.7% were second-year students. Participants mostly graduated from the following schools to Anatolian high schools (57.5%) and predominantly lived in cities (55.1%), with 81.1% from nuclear families. A significant number of parents had a primary education (mothers: 50.8%, fathers: 35.4%). The mean score on the Professional Values of Midwives Scale was high. Significant differences in scores were noted based on age, high school type, long-term residence, family type, parental education, and interest in midwifery. However, the difference was not significant found. related to academic year, willingness to choose midwifery, preference ranking, self-suitability for the profession, or shifts in perspective before and after education. These findings emphasize the multifaceted nature of professional values in midwifery students and the various factors shaping their attitudes. *(Afr J Reprod Health 2024; 28 [12]: 116-126).*

Keywords: Midwifery; student; professionalism; professional values; Professional Values of Midwives Scale

Résumé

Cette étude a porté sur les valeurs professionnelles des étudiantes sages-femmes et sur les facteurs influençant ces valeurs. Menée du 6 janvier au 6 mars 2021, elle a impliqué 715 étudiantes sages-femmes qui ont participé volontairement. Les données ont été recueillies à l'aide d'une feuille de données descriptives et de l'échelle des valeurs professionnelles des sages-femmes.L'analyse statistique comprenait des statistiques descriptives, une ANOVA à deux voies, un test T des échantillons indépendants et une correction de Bonferroni. L'âge moyen des participantes était de 20,63 ans ; 99,2 % étaient célibataires et 29,7 % étaient des étudiantes de deuxième année. La plupart des participants étaient diplômés d'écoles secondaires d'Anatolie (57,5 %) et vivaient principalement en ville (55,1 %), 81,1 % d'entre eux étant issus de familles nucléaires. Un nombre important de parents avaient suivi l'enseignement primaire (mères : 50,8 %, pères : 35,4 %). Le score moyen sur l'échelle des valeurs professionnelles des sages-femmes était élevé. Des différences significatives dans les scores ont été notées en fonction de l'âge, du type d'école secondaire, de la résidence à long terme, du type de famille, de l'éducation des parents et de l'intérêt pour la profession de sage-femme. Cependant, aucune différence significative n'a été constatée en ce qui concerne l'année scolaire, la volonté de choisir la profession de sage-femme, le classement des préférences, l'aptitude personnelle à la profession ou les changements de perspective avant et après les études. Ces résultats soulignent la nature multidimensionnelle des valeurs professionnelles chez les étudiantes en pratique sage-femme et les divers facteurs qui façonnent leurs attitudes. *(Afr J Reprod Health 2024; 28 [12]: 116-126).*

Mots-clés: : Sages-femmes ; étudiantes ; professionnalisme ; valeurs professionnelles ; échelle des valeurs professionnelles des sages-femmes.

Introduction

In the last years, technological developments have made it necessary to provide quality and professional service in the health system. Professionalism requires a person to receive the highest level of education, to have ethical values, and to assume responsibility[1].

Altıok and Üstün defined professionalism as follows: "The process in which the individual internalizes some values necessary for professional identity based on positive personal qualities such as conscience, honesty, respect, and sincerity, and during which all these become visible in the individual's behaviors"[2]. Professionalism plays a significant role in establishing the standards of the

profession and providing quality care[3]. For midwives who asume a key role in reproductive health, maternal health and newborn health included in the third (a healthy start in life) of the 21 goals (health for all) established by the World Health Organisation (WHO), the concept of professionalism has an important place in providing qualified and high-quality care[4]. The concept of professionalism should be acquired during school years. Therefore, training given to midwifery students should be structured in a way that professional behaviors are acquired[1].

There are very few studies on the professionalism of midwifery students in the literature in this field. This study was conducted to determine the professionalism of students studying midwifery in Turkey in the 2020-2021 academic year and the factors affecting this professionalism.

Methods

Study concept and participants

Study population comprised 17,631 midwifery students receiving undergraduate education in Turkey. In the analysis, the minimum Number of students to be accepted included in the research sample calculated as 376 (confidence interval: 95% and margin of error: 5%)[5]. However, considering that withdrawals and/or losses may occur at work it was decided to involve more participants. The sample of the research consisted of 715 midwifery students who consented to participate in the study. Participating midwives were invited to the research via social media platforms of midwifery associations, social media communities of midwifery students and whatsapp groups using convenience sampling method. The data were collected by the following methods a questionnaire prepared in Google Forms. The Google Form consisted of two parts. In First one episode, the Descriptive Data Sheet was included. Secondly part, the Professional Values of Midwives Scale (PVMS) was included.

Data collection

Descriptive Data Sheet: The form, developed in line with the literature by the researchers, consists of 14 questions questioning the sociodemographic characteristics characteristics of the respondents and their perspectives on midwifery.

Professional Values of Midwives Scale (PVMS): The PVMS includes 30 items whose answers are evaluated on a 5-point Likert-type scale1 to 5 (1: not important, 2: somewhat important, 3: important, 4: very important and 5: extremely important).
No items are reverse- scored. Possible minimum and maximum points that can existing the PVMS are 30 and 150, respectively.
Points total is as follows calculated using the following formula:

$$PVMS\ Score\ obtained\ by\ the\ respondent = \frac{Total\ Raw\ Score\ obtained\ from\ the\ PVMS\ *\ 100}{PVMS\ Maximum\ Raw\ Score}$$

Higher the score on the PVMS, the more positive the respondent's professional values are[6].

Data analytics

Analyses were carried out using IBM SPSS (Statistical Package for the Social Sciences) v23. The Skewness and Kurtosis values of the data within the ±2.0 range, which indicated that the data were normally distributed. To perform the basic analyses (correlation, frequency) of the study data, a computer-aided data analysis program was used. The changes in average points received from the PVMS by the participants and in the mean scores for the factors such as type of family, place of residence, year at school and high school participants graduated from based on the groups and application were analyzed using the two-way analysis of variance. Bonferroni correction was implemented in multiple comparisons. Analysis results were stated as mean ± standard deviation. P values less than 0.05 are considered significant. The results of the analyses were shown as arithmetic meaning ± standard deviation as follows. The data obtained were analyzed at a of 95% confidence interval and the significance level of $p<0.05$.

Ethical approval

Data for the study were collected between the following dates 06 January 2021 and 06 March 2021. Ethical received was obtained from the following institutions before the study was carried out Karabük University Social Sciences and Humanities Research Ethics Committee (Decision Date: December 24, 2020; Decision Number: 2020/13).

Results

In the present situation**,** Cronbach's Alpha value was 0.97 for the overall PVMS, 0.93 for the Midwifery Relations, 0.93 for the Midwifery Practices, 0.89 for the Improvement in Midwifery Knowledge and Practices, and 0.65 for the Professional Responsibilities of Midwives sub-dimensions of the PVMS. Average age participants was 20.63±1.84 years. Of them, 23.2% were first year students, 29.7% were second year students, 21.4% were third year students, 25.7% were fourth year students, 57.5% Anatolian high school graduated, 55.1% lived in a city longest, 81.1% had a nuclear family, 50.8% whose mothers have primary school graduates, and 35.4% had fathers who graduated from primary school (Table 1). From the participants, 80.3% chose the profession of midwifery willingly, 59.2% placed midwifery the first one five places in the preference list, 95.1% considered that midwifery was right for them, 66.6% had a positive perspective of midwifery before choosing it, 93.3% had a positive perspective of midwifery after midwifery trainings started, 95.5% wanted to practice midwifery after graduation and 90.5% liked midwifery (Table 1).

The average scores of the participants from the overall PVMS and its sub-dimensions are as follows: 80.93±18.92 (min: 22.67- max: 100.00) for the overall PVMS, 44.29±10.98 (min: 15.00- max: 55.00) for the Midwifery Relations sub-dimension, 37.20±9.20 (min: 9.00- max: 45.00) for the Midwifery Practices sub-dimension, 28.31±6.98 (min: 7.00- max: 35.00) for the Improvement in Midwifery Knowledge and Practices sub-dimension and 11.58±3.01 (min: 9.00- max: 45.00) for the Professional Responsibilities of Midwives sub-dimension. The primary school graduate mothers obtained a higher mean score from the PVMS than did junior high school, senior high school and university graduate mothers. The difference between primary school graduate mothers' scores, and the scores of the junior high school and senior high school graduate mothers was statistically significant. As for the fathers, the primary school graduate fathers obtained a higher mean score from the PVMS than did the fathers who could read and write, but graduated from any school and fathers who were university graduates. The difference between primary school graduate fathers' scores, and the university graduate fathers was statistically significant (Table 2).

The analysis investigated the effects of participants' year at school and the type of high school they graduated from on their PVMS (Point Value Mean Score) points. According to the test statistics, the year at school showed no statistically significant effect on PVMS points ($F = 2.391$; $p = 0.068$; partial $\eta^2 = 0.01$; $R^2 = 0.079$). However, the type of high school participants graduated from demonstrated a significant effect ($F = 13.898$; $p < 0.001$; partial $\eta^2 = 0.074$). The interaction between the year at school and the kind of high school was not statistically significant ($F = 1.114$; $p = 0.345$; partial $\eta^2 = 0.019$). Descriptive statistics revealed that participants from science high schools scored the highest PVMS mean overall (84.16 ± 17.38), followed by those from vocational high schools (84.53 ± 18.91) and Anatolian high schools (82.93 ± 17.91). In contrast, participants from General Public High Schools had the lowest scores (69.4 ± 19.17), indicating a notable gap compared to other groups. Participants from other types of high schools scored slightly higher than General Public High Schools (72.09 ± 18.88). When examining scores across years at school, science high school participants consistently performed well, especially in their second year, where they achieved the maximum possible score (100 ± 0). Vocational high school participants showed a steady increase, peaking in their fourth year (89.6 ± 17.89). Anatolian high school participants exhibited consistent scores across all years. Conversely, eneral public high school participants demonstrated lower scores, with minimal variation across years, suggesting relatively less improvement or consistency.

The findings indicate that the type of high school participants graduated from has a significant effect on PVMS scores, with participants from science high schools and vocational high schools consistently achieving higher mean scores compared to their peers from public and other types of high schools.

Table 1: Sociodemographic characteristics of the participants and their views on vocational preferences

Characteristics	**X±SD**	
Age (years)	20.63±1.84	
	n	**%**
Year at school		
1	166	23.2
2	212	29.7
3	153	21.4
4	184	25.7
The participants' type of high school graduation		
Anatolian High School	411	57.5
General public high school	52	7.3
Science High School	21	2.9
Vocational High School	141	19.7
Other kinds of high schools	90	12.6
The house where the participants spent the most time		
City	394	55.1
District	190	26.6
Small Town	23	3.2
Village	108	15.1
Family Kind		
Nuclear family	580	81.1
Extended family	135	18.9
Mother's educational history		
Literate yet lacking a formal education	66	9.2
Primary school	363	50.8
Middle school	121	16.9
High school seniors	111	15.5
University	54	7.6
Father's educational history		
Literate yet lacking a formal education	15	2.1
Primary school	253	35.4
Middle school	155	21.7
High school seniors	185	25.9
University	107	15.0
Total	715	100.0
Characteristics	n	%
Did you choose midwifery willingly?		
Yes	574	80.3
No	141	19.7
What was the place of midwifery in your preference list?		
1-5	423	59.2
≥10	146	20.4
6-10	146	20.4
Do you think that midwifery is suitable for you?		
Yes	680	95.1
No	35	4.9
What was your view of midwifery before starting education?		
I had no idea.	108	15.1
I had a positive perception.	476	66.6
I had a negative perception.	131	18.3
What was your view of midwifery after starting education?		
I had no idea.	15	2.1
I had a positive perception.	667	93.3

I had a negative perception.	33	4.6
Are you willing to practice midwifery after graduation?		
Yes	683	95.5
No	32	4.5
Do you like midwifery?		
I am undecided.	62	8.7
Yes, I like it	647	90.5
No, I do not like it	6	0.8

Table 2: Effect of socio-demographic variables on points from the overall evaluation PVMS

Characteristics	**PVMS Total Score**		**Test Statistics**	**p**
	r*	p		
Age (years)	-0.082	0.03		
	Mean±SD			
Mother's Status of Education				
Literate yet lacking a formal education	80.97 ± 17.98[ab]		2.93**	**0.02**
Primary school	83.17 ± 17.94[a]			
Middle school	78.19 ± 20.15[b]			
High school seniors	78.75 ± 20.14[b]			
University	76.51 ± 19.69[b]			
Father's Status of Education				
Literate yet lacking a formal education	75.24 ± 21.65[ab]		2.98**	**0.02**
Primary school	83.82 ± 17.41[a]			
Middle school	79.92 ± 18.9[ab]			
High school seniors	80.58 ± 19.18[ab]			
University	76.99 ± 20.75[b]			
Did you choose midwifery willingly?				
Yes	81.00 ± 18.99		0.19***	0.85
No	80.67 ± 18.71			
What was the place of midwifery in your preference list?				
1-5	81.47 ± 18.83		0.52**	0.59
≥10	80.67 ± 18.77			
6-10	79.64 ± 19.42			
Do you think that midwifery is suitable for you?				
Yes	81.15 ± 18.9		1.36***	0.17
No	76.67 ± 19.24			
What was your view of midwifery before starting education?			0.31**	0.73
I had no idea.	81.38 ± 17.6			
I had a positive perception.	81.16 ± 19.24			
I had a negative perception.	79.76 ± 18.94			
What was your view of midwifery after starting education?			1.32**	0.36
I had no idea.	75.16 ± 17.88			
I had a positive perception.	81.18 ± 18.92			
I had a negative perception.	78.53 ± 19.43			

*One Way ANOVA, **Independent Samples T Test, a-b: Among them is no difference at all the values with the same letter

Table 3: Descriptive statistics results by the effects of variables such as year at school and the kind of the high school the participants graduated from on the mean PVMS points

	Year at school				
Kind of the high school	First year	Second year	Third year	Fourth years	Total
Anatolian high schools	79.72 ± 18.73	18.73 ± 108	83.51 ± 17.05	85.09 ± 17.23	82.93 ± 17.91[a]
General Public High Schools	55.17 ± 4.37	4.37 ± 4	77.26 ± 18.55	73.03 ± 19.8	69.4 ± 19.17[b]
Science high schools	83.85 ± 19.43	19.43 ± 13	100 ± 0	76.67 ± 19.47	84.16 ± 17.38[a]
Vocational high schools	78.84 ± 19.42	19.42 ± 19	82.55 ± 19.48	89.6 ± 17.89	84.53 ± 18.91[a]
Other types of high schools	65.94 ± 21.3	21.3 ± 22	71.74 ± 20.29	76.51 ± 16.62	72.09 ± 18.88[ab]
Total	77.53 ± 19.76	19.76 ± 166	81.93 ± 18.41	82.37 ± 18.42	80.93 ± 18.93

a-b: No difference between the interactions given the same letter in the total column regarding Year at school * Kind of the high school the participants graduated from.

Table 4. Descriptive statistics results according to the effects of variables such as "family kind" and "place of residence" on the mean PVMS points

	Place of residence				
Family kind	City	District	Small town	Village	Total
Nuclear family	82.28 ± 19.14	80.39 ± 18.07	78.46 ± 17.77	85.89 ± 15.48	82.17 ± 18.43
Extended family	75.22 ± 18.77	68.95 ± 20.1	78.6 ± 24.85	83.09 ± 18.96	75.63 ± 20.13
Total	81.31 ± 19.22	78.1 ± 19	78.52 ± 20.61	85.04 ± 16.58	80.93 ± 18.93

Table 5. Findings of descriptive statistics examining how the mean PVMS scores were affected by variables like "liking midwifery" and "considering practicing midwifery after graduation."

	I am undecided	I like it	I do not like it	Total
Yes	76 ± 20.56[a]	81.7 ± 18.57[a]	62.22 ± 31.67[b]	81.21 ± 18.84
No	63.05 ± 16.43[b]	81.33 ± 18.4[b]	98.89 ± 1.02[a]	74.98 ± 20.13
Total	73.08 ± 20.32	81.69 ± 18.55	80.56 ± 28.37	80.93 ± 18.93

a-b: With the same letter in the lines, there is no differentiation between the interactions of liking midwifery and thinking about becoming a midwife after graduation.

While the year at school did not show a statistically significant effect on PVMS points, descriptive statistics highlighted trends of progression within specific high school types, particularly among science and vocational high school students, who demonstrated improved performance in later years. Additionally, the interaction between year at school and type of high school was not statistically significant, suggesting that the influence of high school type on PVMS scores remained consistent regardless of the participants' year at school. These results emphasize the importance of the high school environment in shaping academic outcomes (Table 3).

Family type showed a statistically significant impact ($F = 4.841$; $p < 0.001$; partial $\eta^2 = 0.02$; $R^2 = 0.03$), indicating that participants from different family structures scored differently on PVMS points. Similarly, the place of residence also had a significant effect ($F = 4.689$; $p = 0.03$; partial $\eta^2 = 0.007$). However, the interaction between family type and place of residence was not statistically significant ($F = 1.239$; $p = 0.29$; partial $\eta^2 = 0.005$), suggesting that the combined effect of these variables did not substantially influence PVMS points. Descriptive statistics showed that participants from nuclear families consistently scored higher PVMS points across all places of residence compared to those from extended families. Nuclear family participants residing in villages achieved the highest scores (85.89 ± 15.48), while those in small towns scored the lowest (78.46 ± 17.77). Conversely, participants from extended families residing in villages also performed well (83.09 ± 18.96), while those in districts had the lowest scores (68.95 ± 20.1). Overall, participants

living in villages had the highest mean PVMS scores (85.04 ± 16.58), regardless of family type, while those in districts had the lowest (78.1 ± 19.0). These findings highlight that both family type and place of residence significantly influence PVMS points, with nuclear family structures and village residency being associated with higher scores. However, the interaction between these variables does not appear to yield additional effects, indicating that their individual influences are independent of each other. (Table 4).

The univariate analysis demonstrated that liking midwifery significantly affects PVMS points ($F = 5.268$; $p = 0.005$; partial $\eta^2 = 0.015$; $R^2 = 0.02$). However, considering practicing midwifery after graduation did not independently have a significant effect ($F = 1.886$; $p = 0.17$; partial $\eta^2 = 0.003$). Notably, the interaction between liking midwifery and considering practicing midwifery after graduation was found to be significant ($F = 5.055$; $p = 0.007$; partial $\eta^2 = 0.014$), indicating that these factors jointly influence PVMS points. Descriptive statistics revealed that participants who liked midwifery and were considering practicing midwifery after graduation scored the highest PVMS points (81.7 ± 18.57) compared to those who were undecided (76 ± 20.56) or did not like midwifery (62.22 ± 31.67). Among participants not considering practicing midwifery after graduation, those who disliked midwifery unexpectedly scored higher (98.89 ± 1.02) than other groups, which could indicate outliers or atypical respon. These findings highlight the importance of intrinsic motivation, such as liking midwifery, in influencing PVMS scores. While the consideration of practicing midwifery after graduation alone did not significantly affect scores, the interaction between these two variables suggests that a positive perception of midwifery, coupled with plans for a future in the field, is associated with higher PVMS points (Table 5).

Discussion

The number of studies in which the Professional Values of Midwives Scale administered to midwifery students using is limited. In the present study, average score obtained from the PVMS was 80.93±18.92. A parallel result was found in Yücel et al.'s study conducted with midwifery students in 2018[4]. According to the literature review, the mean score obtained from PVMS in some studies with working midwives were higher than that obtained in this study;[7,8] however, it was close to that obtained in the available study in some other studies[6,9].

Average age of participants in the current study was 20.63±1.84 years. There was an important negative correlation between the age variable and average PVMS score ($p=0.03$); but, this relantionshop was rather weak ($r=-0.082$), shows that the average PVMS point score decreases slightly with increasing age. In the literature, there are a few studies in which the difference between age and the mean PVMS score was not significant[9-18]. In Poorchangizi et al.'s study (2019), there was a significant positive correlation between the age of the participant nurses and their PVMS scores[19]. It is thought that the increase in age and the increase in vocational courses and practical courses will be effective in providing experience that reinforces professional values, but it was different in our study.

In the present study, while "the year at school variable" had no significant effect on the PVMS mean score, there was an important relationship between the PVMS mean point and the variable "kind of high school the participants graduated from". Average point obtained from the PVMS by the participants who graduated from health vocational high schools was higher than was that obtained by the graduating participants other schools. According to the relationship between the variable "place of residence where they lived longest", the mean point obtained from the PVMS by the participants living in villages was higher than was that obtained by the participants living in cities/districts and small towns. In Yücel *et al*.'s study (2018), while the "year at school" variable affected the mean PVMS score, the kind of high school the participants graduated from did not affect the mean PVMS score.[4] Across studies, results varied from one study to another conducted with nursing students. In the studies conducted out by Moon et al. (2014) and Bulut et al. (2015), professional values were stronger in the last years of education than were those in the first years of education[20-24]. There were other studies that found a strong correlation between the progression of the school year and the level of professional behavior[25-28]. In another study carried out by Bimray et al. with nursing students (2023), the first and

fourth year students achieved higher average scores from the PVMS. Bimray et al. stated that the first-year students' correlated with high points scores high levels of pre-existing values that later turned into professional values towards the end of their education, and that the fourth-year participants' being more mature and getting prepared for practice as new graduates can reflect their preparation for practice[29]. Starting with the Basic Principles and Practices course (the name may vary depending on the school), which prepares first-year students for professional life, courses that include specialized knowledge specific to the profession gain weight as the grade level increases. While these courses, which cover theory and practice, are expected to be effective in the development of professionalism, they were not effective in our study.

In Yılmaz and Polatdemir's and Ak *et al.'s* studies, professional behavior levels of health vocational high school graduates were higher than were those of General Public High School graduates[1,30]. In Karadağlı's and Elmalı's studies, the kind of the high school the participants graduated from had no significant effect on their mean PVMS scores[31,32]. It is expected that health vocational high school graduates have higher professional value scores.

Considering the factor of the longest place of residence, the mean score of the students living in the village was found to be higher than the students living in the province/district and town.

Since the students who lived in the village for most of their lives were mostly in contact with midwives in the field of health, this may have improved their professional value perceptions and may have been effective in the high mean scores. In Machul *et al*.'s and Gilvari *et al.'s* researches conducted with nursing students, was found that place of residence did not effect the average PVMS point[10,33].

The average score obtained from the PVMS by the participants with nuclear families is higher than that achieved by participants with extended families. The fact that there is more one-to-one communication in the nuclear family has been effective in the conscious choice of profession and is thought to be effective in the high average professional value score. Unlike the present study, in Elmalı's study conducted with nursing students, the variable "family kind" had no statistically significant effect on the mean PVMS score[32]. In Sökmen and Taşpınar's study conducted with working midwives, the participating midwives who had a nuclear family obtained a higher mean score from the Professional Attitude Inventory, but the difference was not statistically significant[11].

In the present research, the level of parental education was low. This result was consistent with what was reported in other studies conducted with midwifery and nursing students[4,34-36].

The participants whose mothers and fathers were primary school graduates received higher scores from the PVMS.

In Yücel *et al.*'s study, no important relationship identified among the mean PVMS point and the parental education status[4].

Students who participated in the current study, 80.3% preferred midwifery of their own free will. As a result of the investigation of related studies in the literature fifty percent of the participating students chose midwifery willingly[4,34]. In the current study, there were no important differences between the mean PVMS score obtained by the participants who preferred midwifery with their own free will and that obtained by the participants who did not prefer midwifery of their own free will. In Balçık Çolak and İçke's study conducted with working midwives, choosing the profession willingly did not lead to a significant difference between the mean PVMS scores. In Yücel et al.'s study conducted with student midwives, choosing the profession willingly did not lead to a significant difference in the mean PVMS scores[4,8]. In the literature, in several studies in which scales designed to compare professional values of midwives and nurses who chose the profession of their own free will with those who did not ability no choose one's the profession with one's own free will were used, those who chose the profession willingly obtained higher mean scores[1,30,37,38]. While it is expected that the mean PVMS score would be higher in students who chose the profession willingly, it did not make a difference in our study.

In the present study, the rate of those who placed midwifery in the first five places in the preference list was 59.2%; however, this rate dropped to 30% in some studies[35,39]. The variable regarding the place of midwifery in the preference list did not lead to an important difference between the participants' mean PVMS points. The results of Yücel et al.'s study are consistent with those of the present study[4].

In the current study, the difference among the mean PVMS score obtained by the participants who considered midwifery as a suitable profession for them and the mean PVMS score obtained by the participants who did not consider midwifery as a suitable career for them was not significant.

While the results of Yücel et al.'s study (2018) were consistent with the findings of this study, in the study conducted by Ertekin Pınar et al. (2013), the participants who considered midwifery suitable for them obtained higher mean scores from the PVMS[4,39].

In the current study, the rate of those who had a positive view of the profession was 66.6% before the education and 93.3% after the education. In Ertekin Pınar et al.'s (2013) and Yücel et al.'s (2018) studies, while the rate of those who perceived midwifery partially positive was higher before the education (57.9% and 50.0%, respectively), the rate of those who perceived midwifery positive was higher after the education (74.5% and 64.8%, respectively)[4,39]. In the current study, no significant difference was found between the mean PVMS scores before and after the training in terms of the participants' perceptions of midwifery. In Yücel et al.'s study (2018), There were no significant changes between the participants' mean PVMS points in terms of the their perceptions of midwifery before they started the education; however, after the training, the participants who had a positive opinion about midwifery obtained a higher mean score from the PVMS than did the participants who had a partially positive or negative opinion about midwifery[4].

In the present study, there was no significant difference determined between the participants' mean PVMS scores in terms of their willing to practice midwifery after graduation. Conclusions of Yücel et al.'s study (2018) are consistent with those of the present study[4].

In this study, the participants, those who liked midwifery obtained higher mean points from the PVMS than did those who did not like midwifery. It is possible to say that liking the profession positively affects professional values. In many studies where different scales were used to assess levels of professional value, participants who loved their professions had higher mean scale scores[1,3,40-42].

Conclusion

In the current study, it was found that the participants obtained high average scores from the PVMS. There was an important relationship among the average points they achieved from the PVMS and variables such as age, kind of the high school the participants graduated from, place of residence where the participants lived longest, family type, parental education level and liking the profession. Courses aimed at enabling students to discuss professionalism must be added the course programs and they must be encouraged to think about this issue. It should be kept in mind that students who like their profession will try hard to develop their profession and to improve the society's positive perspective of their profession. Before students make a career choice, collaborating with high schools to bring them closer to the profession is important in terms of them developing a positive perspective towards the profession

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