



Family influence and gender role perceptions in career choice among Turkish midwifery students: A cross-sectional study

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Abstract

Background: Career choice is a critical decision that influences an individual's future and social role. In this process, family factors may be associated with career choice by shaping perceptions of traditional gender roles, particularly in sociocultural contexts where traditional values coexist with modern social structures, including Türkiye. This study aimed to evaluate family influence and gender roles in the career choices of midwifery students.

Methods: A cross-sectional study was conducted between November 2023 and February 2024 with 337 midwifery students at a state university in Samsun, Türkiye, using a census (Total population) sampling approach. Research data were collected using the "Student Information Form", "Gender Roles in Career Choice Scale (GRCCS)", and "Family Influence on Career Choice Scale (FICCS)." Data were analyzed using independent-samples t-tests, one-way ANOVA with Tukey's post hoc comparisons, Pearson correlation, and multiple linear regression in SPSS v.25. Statistical significance was set at $p < 0.05$.

Results: The mean total GRCCS score of the students was 44.53 ± 6.69 (Obtained score range: 21-85), while the mean total FICCS score was 67.82 ± 8.15 (Obtained score range: 43-105). A weak but statistically significant positive correlation was found between the students' GRCCS and FICCS total scores ($r = 0.265$, $p < 0.001$), and between GRCCS scores and the FICCS sub-dimensions of Information Support ($r = 0.125$, $p = 0.021$), Financial Support ($r = 0.234$, $p < 0.001$), Family Expectations ($r = 0.143$, $p = 0.009$), and Values and Beliefs ($r = 0.164$, $p = 0.002$). In the regression analyses, career counselling ($B = 2.77$, 95% CI: 0.70 to 4.84), family relationship quality ($B = 1.83$, 95% CI: 0.70 to 2.96), and year of study ($B = -1.31$, 95% CI: -2.26 to -0.36) were independently associated with FICCS scores, while desiring midwifery as a profession ($B = 1.62$, 95% CI: 0.18 to 3.05) and income level ($B = -2.29$, 95% CI: -3.60 to -0.98) were associated with GRCCS scores.

Conclusion: The findings suggest that family influence and gender-role perceptions may be related to career-choice attitudes among midwifery students. Therefore, career guidance practices should consider family expectations and gender-based role perceptions. Educational programs that promote independent decision-making and gender awareness may support students in making informed career decisions.

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Highlights

What is current knowledge?

The existing literature suggests that family dynamics and gender roles are associated with career decision-making, particularly in female-dominated professions such as midwifery.

What is new here?

This study provides new insights into the associations between family influence, gender role perceptions, and career choice-related attitudes among midwifery students—an area that has been relatively underexplored.

Introduction

Choosing an occupation and pursuing a career are complex, multilayered decisions influenced by various personal, social, economic, and environmental factors. Career choices not only shape individuals' professional lives but also affect their family, employment, and socioeconomic outcomes (1). For young people transitioning to higher education, occupational decisions are guided by individual interests, social expectations, psychological factors, and economic considerations. Additionally, parents and teachers play a crucial role in shaping students' career choices (2). However, family influence can sometimes create difficulties in decision-making, preventing young individuals from making autonomous and informed career choices (3,4). In various sociocultural contexts, the decisive influence of families on

individuals' career preferences is closely associated with prevailing gender norms.

Families may transmit traditional expectations regarding roles considered socially appropriate for women and men across generations. In this respect, gender emerges as one of the key factors shaping occupational choice (5,6).

Gender is another significant factor influencing occupational choice. Traditional gender roles assign certain professions to men or women, often reflecting societal expectations and domestic responsibilities. Professions traditionally associated with men typically include management, policing, and driving, whereas those associated with women commonly include teaching, nursing, and midwifery (5-8). Midwifery, one of the oldest professions, was historically learned through a master-apprentice model. Today, it is taught scientifically in higher education, and demand for the profession has increased, making it an attractive career choice for students (9). Previous research indicates that students often choose midwifery because of their academic proficiency scores, ease of employment, and guidance from themselves or their families (10-12).

Gender roles, defined as social norms dictating behaviors and expectations based on one's gender, further influence career choices. Professions such as nursing and midwifery are generally regarded as female-dominated fields (13). Studies on midwifery students' perceptions of gender roles show that students tend to hold traditional attitudes initially, but these attitudes shift toward egalitarianism as they progress in their education (14).

In Türkiye, midwifery is historically and structurally a female profession: undergraduate midwifery programs admit only female students, and the profession is almost exclusively practiced by women. This makes midwifery a particularly relevant setting for examining gender-role perceptions, since students enter a field that is itself strongly gendered. Even within an all-female population, gender-role attitudes remain meaningful, as they may shape whether young women perceive midwifery as a socially appropriate or expected career and how they negotiate family expectations when making this choice. Examining these perceptions therefore helps clarify how gendered assumptions are reproduced or challenged among women entering a female-dominated health profession.

When individuals choose careers based on personal interests and abilities rather than family expectations or gender norms, they experience higher academic success, professional satisfaction, and career fulfillment (15). Internationally, studies conducted in diverse sociocultural settings have documented the strong role of family and the wider social environment in shaping students' orientation toward nursing and midwifery as careers (16,17). In parallel, research from several countries has shown that gender-role attitudes influence how students perceive and relate to these female-dominated professions, including among female-only student populations (18-21).

Despite growing evidence that family expectations and gender norms are associated with career decision-making, empirical evidence addressing their combined role among midwifery students remains limited. The existing literature has predominantly focused on general student populations or nursing students, thereby leaving midwifery students-particularly within the Turkish sociocultural context-underexplored. Although family influence and gender-role attitudes have each been studied separately, few studies have examined the relationship between family influence and gender-role perceptions in relation to career choice among midwifery students. Considering the inherently gendered nature of the midwifery profession and the central role of family influence, this study addresses this gap. The study aimed to examine the associations of family influence and gender-role perceptions with career choice among midwifery students and to explore the relationship between these two constructs.

Methods

Study design and participants

This cross-sectional study was conducted from November 2023 to February 2024 among 337 midwifery students enrolled in the Department of Midwifery at a state university in Samsun, located in the Black Sea region of Türkiye.

The study population comprised 402 students enrolled in the Department of Midwifery during the 2023-2024 academic year. A census sampling approach was applied because the entire population was accessible. All eligible students were invited to participate, and those who voluntarily agreed were included in the study.

Consequently, 337 students completed the study, yielding a response rate of 83%. Although a priori sample size estimation was not required due to the use of a census approach, a post hoc power analysis was conducted to assess the statistical adequacy of the sample. Using G*Power (Version 3.1), the statistical power for a two-tailed Pearson correlation analysis with an observed effect size of $r = 0.265$, $\alpha = 0.05$, and a sample size of $n = 337$ was calculated as 0.999, indicating that the sample was sufficient to detect the observed association.

Inclusion Criteria: (i) being enrolled as a midwifery student and actively attending courses during the 2023-2024 academic year, (ii) voluntarily agreeing to participate in the study, and (iii) being able to read and understand Turkish.

Exclusion Criteria: (i) midwifery students who were on a leave of absence during the data collection period, (ii) those who declined to participate, and (iii) those with incomplete questionnaire responses.

The study data were collected using the 'Student Information Form (SIF)', 'Gender Roles in Career Choice Scale (GRCCS)', and 'Family Influence on Career Choice Scale (FICCS)'.

Student Information Form (SIF): Developed by the researchers, this form included a total of 15 items assessing the sociodemographic characteristics of the students, including age, grade level, mother's education level, father's education level, mother's employment status,

father's employment status, income status, place of long-term residence, and reason for choosing the profession.

Gender Roles in Career Choice Scale (GRCCS): This scale was developed in Türkiye by Gökcan and Büyükgöze-Kavas in 2018 (5). The scale consists of 17 items and two sub-dimensions: Traditional Attitude (10 items) and Egalitarian Attitude (7 items). It is a five-point Likert-type scale with response options ranging from 1 (Strongly disagree) to 5 (Strongly agree). Total scores range from 17 to 85. As the scale does not provide standardized, reference-based cut-off points, scores were reported only as means and standard deviations, without qualitative categorization. The original study reported a Cronbach's alpha coefficient of 0.89 for the total scale (5); in the present study, Cronbach's alpha was 0.70 for the total scale, 0.87 for the Traditional Attitude subscale and 0.79 for the Egalitarian Attitude subscale.

Family Influence on Career Choice Scale (FICCS): The scale was developed by Fouad et al. in 2010 (22), and its Turkish validity and reliability study was conducted by Özünlü and Bacanlı in 2015 (23). The validity and reliability of the scale for university students were later examined by Aşık and Akgül (2022) (4). The scale consists of 21 items and four sub-dimensions: Information Support (8 items), Financial Support (6 items), Family Expectations (4 items), and Values and Beliefs (3 items). Items are rated on a five-point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). Items 10 and 11 in the Financial Support sub-dimension are reverse-scored. Total scores range from 21 to 105. As the scale does not provide standardized, reference-based cut-off points, scores were reported only as means and standard deviations, without qualitative categorization. Sub-dimension scores were additionally summarized using mean item scores. The Cronbach's alpha coefficient for the total scale was reported as 0.80 (4); in the present study, Cronbach's alpha was 0.76 for the total scale, 0.88 for the Information Support subscale, 0.72 for the Financial Support subscale, 0.70 for the Family Expectations subscale and 0.84 for the Values and Beliefs subscale.

Data collection

Eligible students were approached in a quiet classroom environment outside of scheduled lecture hours to ensure privacy and minimize disruptions. Before data collection, the researchers explained the study's purpose and procedures, obtained written informed consent, and assured participants that all collected information would remain confidential and be used solely for research purposes. Participants completed the printed questionnaires during face-to-face sessions conducted by the researchers, who remained available to answer any questions. Completion of the questionnaires required approximately 8-10 minutes per participant. All questionnaires were reviewed immediately for completeness, and those with missing responses were excluded from the analysis to ensure data quality.

Data analysis

The collected data were analyzed using the Statistical Package for the Social Sciences (SPSS), Version 25.0. The assumption of normality was tested using the Kolmogorov-Smirnov test. Skewness values across all total and subscale scores ranged from -1.402 to 1.185, and kurtosis values ranged from -1.301 to 1.432, all within the acceptable threshold of ± 1.5 , supporting the use of parametric statistical tests. The descriptive characteristics of the students were presented as numbers (n), percentages (%), and means ($\pm$ Standard deviations).

For inferential analyses, the independent-samples t-test was used to compare two independent groups when the data were normally distributed. One-way analysis of variance (ANOVA) was employed to compare more than two groups. When a significant F-statistic was obtained from ANOVA, Tukey's post hoc test was used to identify specific pairwise differences between group means. Pearson correlation analysis was performed to determine relationships between variables. To identify factors independently associated with family influence (FICCS) and gender-role perceptions (GRCCS) while controlling for potential confounders, two multiple linear regression analyses were performed. Variables considered relevant in the univariate analyses, together with sociodemographic characteristics (Career counselling, whether midwifery was the desired profession, presence of a midwife/nurse in the family, relationship with family, age, year of study, and income level), were entered simultaneously using the enter method. Categorical variables were dummy-coded, and multicollinearity was

assessed using variance inflation factors (All VIF < 1.6). Unstandardized coefficients (B) with 95% confidence intervals, standardized coefficients (β), and p-values were reported. Statistical significance was accepted at a p-value of less than 0.05. Although Tukey's post hoc test was applied for pairwise comparisons following ANOVA, no correction for multiple comparisons was applied across the overall set of analyses; therefore, significant findings are presented as exploratory and should be interpreted with caution.

Results

A total of 337 midwifery students completed the survey. All participants were female, and their mean age was 20.48 years (SD = 1.87; range: 18-34). Approximately 56.6% of the students had lived in a province before

attending university. Regarding parental education, 56.7% of the mothers and 44.2% of the fathers had completed primary school. In addition, 72.7% of the mothers were unemployed, whereas 33.2% of the fathers were unemployed. Most students (70.6%) reported that their family income was equal to their expenses (Table 1).

Table 2 shows the distribution of students' characteristics regarding their career choices. Regarding career choice, 24.9% of the students had a midwife or nurse in their family, but only 7.4% stated that this relative influenced their choice of midwifery. Almost one in five (22.0%) reported receiving career counselling, while more than half (58.7%) decided on the profession independently. Midwifery was the desired career for 48.1% of the students, and 61.7% indicated they would choose the same profession again. Relationships with families were mostly rated as good (49.0%) or very good (33.5%) (Table 2).

Table 1. Distribution of some descriptive characteristics of students (n=337)

Characteristics		Mean $\pm$ SD	Min-Max
Age (Years)		20.48 $\pm$ 1.87	18-34
Characteristics		Frequency	Percentage
Grade	Grade 1	85	25.2
	Grade 2	83	24.6
	Grade 3	93	27.6
	Grade 4	76	22.6
Place of residence before university education	Province	191	56.6
	Town	102	30.3
	Rural	44	13.1
Mother's education	Illiterate	12	3.6
	Primary education	191	56.7
	High school	91	27.0
	University	43	12.7
Father's education	Illiterate	9	2.7
	Primary education	149	44.2
	High school	115	34.1
	University	64	19.0
Mother's employment status	Yes	92	27.3
	No	245	72.7
Father's employment status	Yes	225	66.8
	No	112	33.2
Family income status	Income is lower than expenses	57	16.9
	Income equals expenses	238	70.6
	Income is higher than expenses	42	12.5

Table 2. Distribution of students' career choice characteristics (n=337)

Characteristics		Frequency	Percentage
Is there anyone in your family who is a midwife or nurse?	Yes	84	24.9
	No	253	75.1
Is your reason for choosing midwifery related to the fact that there are midwives or nurses in your family?	Yes	25	7.4
	No	312	92.6
Did you receive any career counselling before choosing the midwifery department?	Yes	74	22.0
	No	263	78.0
What influenced the choice of the midwifery profession?	Family/ Relative	82	24.3
	School / Course teacher	44	13.1
	Friend	13	3.9
	Myself	198	58.7
Was midwifery the career you wanted to choose?	Yes	162	48.1
	No	175	51.9
If you had the chance to choose a career again, would you choose the profession of midwifery?	Yes	208	61.7
	No	129	38.3
What is your relationship with your family like?	Bad	8	2.4
	Middle	51	15.1
	Good	165	49.0
	Very good	113	33.5

The distribution of midwifery students' mean scores on the GRCCS and FICCS is presented in Table 3. The mean total score was 44.53 ± 6.69 on the GRCCS and 67.82 ± 8.15 on the FICCS. Detailed descriptive statistics for the total and sub-dimension scores, including means, standard deviations, item means, and obtained score ranges, are presented in Table 3 and are therefore not repeated in the text.

A comparison of the students' career choices and mean scores on the GRCCS and FICCS is presented in Table 4. For most of the familial and occupational characteristics, no statistically significant differences were observed in the GRCCS and FICCS mean scores ($p > 0.05$). However, statistically significant differences were found only for receiving career counselling (FICCS, $p = 0.005$), whether midwifery was the desired profession (GRCCS, $p = 0.021$; FICCS, $p = 0.026$), and perceived relationship with family (FICCS, $p = 0.007$); given the exploratory nature of the analyses, these findings should be interpreted with caution.

Students who reported having received vocational counselling before choosing the midwifery profession had higher FICCS mean scores than those who did not. Similarly, students who stated that midwifery was the profession they had wanted to choose had higher mean scores on both the GRCCS and the FICCS than those who did not. In addition, Tukey's post hoc test following one-way ANOVA indicated that students reporting a "very good" or "good" relationship with their

family scored higher on the FICCS than those reporting a "bad" relationship (Table 4).

Correlation analysis revealed a weak but significant positive relationship between GRCCS and FICCS total scores ($r = 0.265$, $p < 0.001$). GRCCS scores were also weakly and positively correlated with the FICCS sub-dimensions of Information Support ($r = 0.125$, $p = 0.021$), Financial Support ($r = 0.234$, $p < 0.001$), Family Expectations ($r = 0.143$, $p = 0.009$), and Values and Beliefs ($r = 0.164$, $p = 0.002$) (Table 5).

The results of the multiple linear regression analyses are presented in Table 6. The model for FICCS was statistically significant ($F(7,329) = 4.62$, $p < 0.001$) and explained 7.0% of the variance (Adjusted $R^2 = 0.070$). After adjusting for the other variables, having received career counselling ($\beta = 0.141$, $p = 0.009$), a better relationship with the family ($\beta = 0.169$, $p = 0.002$), and a lower year of study ($\beta = -0.177$, $p = 0.007$) were independently associated with higher FICCS scores. Notably, whether midwifery was the desired profession was no longer significantly associated with FICCS after adjustment ($p = 0.117$). The model for GRCCS was also significant ($F(7,329) = 3.57$, $p = 0.001$; adjusted $R^2 = 0.051$); having chosen midwifery as the desired profession ($\beta = 0.121$, $p = 0.027$) and a lower income level ($\beta = -0.185$, $p = 0.001$) were independently associated with GRCCS scores (Table 6).

Table 3. Distribution of midwifery students' mean scores on the GRCCS and FICCS

Scales	Sub-dimensions	Mean $\pm$ SD	Item mean	Acceptable score range (Min-Max)	Obtained score range (Min-Max)	Skewness (Statistic)	Skewness SE	Kurtosis (Statistic)	Kurtosis SE
GRCCS	Traditional attitude	15.54 $\pm$ 6.53	1.55	10-50	10-50	0.283	0.120	1.301	0.240
	Egalitarian attitude	28.98 $\pm$ 5.70	4.14	7-35	9-35	0.735	0.120	1.110	0.240
	Scale total	44.53 $\pm$ 6.69	2.62	17-85	21-85	1.390	0.120	0.445	0.240
FICCS	Information support	30.33 $\pm$ 5.40	3.79	8-40	9-40	1.185	0.120	0.642	0.240
	Financial support	18.06 $\pm$ 2.38	3.01	6-30	9-30	1.177	0.120	0.804	0.240
	Family expectations	11.04 $\pm$ 2.86	2.76	4-20	4-20	-1.402	0.120	1.432	0.240
	Values and beliefs	8.37 $\pm$ 3.16	2.79	3-15	3-15	-1.175	0.120	0.624	0.240
	Scale total	67.82 $\pm$ 8.15	3.23	21-105	43-105	-1.183	0.120	0.854	0.240

GRCCS, Gender Roles in Career Choice Scale; FICCS, Family Influence on Career Choice Scale; SD, Standard Deviation; SE, Standard Error. Item mean = Total score / Number of items

Table 4. Comparison of students' career choices and mean GRCCS and FICCS scores

Characteristics		GRCCS Mean $\pm$ SD	P-Value	FICCS Mean $\pm$ SD	P-Value
Is there anyone in your family who is a midwife or nurse?	Yes	44.17 $\pm$ 7.20	0.575*	68.41 $\pm$ 8.09	0.446*
	No	44.65 $\pm$ 6.53		67.63 $\pm$ 8.18	
Is your reason for choosing midwifery related to the fact that there are midwives or nurses in your family?	Yes	45.20 $\pm$ 5.50	0.606*	70.44 $\pm$ 8.26	0.096*
	No	44.48 $\pm$ 6.78		67.61 $\pm$ 8.12	
Did you receive any career counselling before choosing the midwifery department?	Yes	44.54 $\pm$ 5.18	0.993*	70.16 $\pm$ 6.59	0.005*
	No	44.53 $\pm$ 7.07		67.17 $\pm$ 8.43	
What influenced the choice of the midwifery profession?	Family/ Relative	44.53 $\pm$ 6.54	0.836**	69.13 $\pm$ 7.90	0.174**
	School / Course teacher	43.97 $\pm$ 5.92		66.86 $\pm$ 9.09	
	Friend	43.38 $\pm$ 5.81		64.46 $\pm$ 6.25	
	Myself	44.73 $\pm$ 6.99		67.72 $\pm$ 8.10	
Was midwifery the career you wanted to choose?	Yes	45.40 $\pm$ 7.48	0.021*	68.85 $\pm$ 8.48	0.026*
	No	43.72 $\pm$ 5.77		66.88 $\pm$ 7.37	
If you had the chance to choose a career again, would you choose the profession of midwifery?	Yes	44.81 $\pm$ 6.55	0.325*	68.43 $\pm$ 8.12	0.084*
	No	44.07 $\pm$ 6.92		66.85 $\pm$ 8.13	
What is your relationship with your family like?	Bad	47.75 $\pm$ 7.10	0.071**	66.62 $\pm$ 8.71	0.007**
	Middle	45.90 $\pm$ 7.46		65.13 $\pm$ 10.41	
	Good	43.68 $\pm$ 6.43		67.43 $\pm$ 7.07	
	Very good	44.92 $\pm$ 6.56		69.69 $\pm$ 8.11	

SD, Standard Deviation; *, Independent Samples T-Test; **, One-Way Analysis of Variance (ANOVA).

Table 5. Correlations between GRCCS total scores and FICCS total and sub-dimension scores (N=337)

GRCCS total score vs.	r	p
FICCS total score	0.265	< 0.001
Information support (FICCS)	0.125	0.021
Financial support (FICCS)	0.234	< 0.001
Family expectations (FICCS)	0.143	0.009
Values and beliefs (FICCS)	0.164	0.002

GRCCS, Gender Roles in Career Choice Scale; FICCS, Family Influence on Career Choice Scale; r, Pearson Correlation Coefficient. All correlations are positive and statistically significant ($p < 0.05$).

Table 6. Multiple linear regression analyses of factors associated with FICCS and GRCCS total scores

Variable	B	95% CI	β	p
Model 1: Family Influence on Career Choice (FICCS) - F (7,329) = 4.62, p < 0.001; R² = 0.090, adjusted R² = 0.070				
Career counselling (Yes)	2.77	0.70 to 4.84	0.141	0.009
Midwifery was the desired profession (Yes)	1.38	- 0.35 to 3.11	0.085	0.117
Midwife/Nurse in the family (Yes)	0.25	- 1.73 to 2.22	0.013	0.806
Relationship with family (1-4)	1.83	0.70 to 2.96	0.169	0.002
Age (Years)	0.19	- 0.37 to 0.75	0.043	0.515
Year of study (1-4)	- 1.31	- 2.26 to - 0.36	- 0.177	0.007
Income level (1-3)	- 0.42	- 2.00 to 1.16	- 0.028	0.600
Model 2: Gender Roles in Career Choice (GRCCS) - F (7,329) = 3.57, p = 0.001; R² = 0.071, adjusted R² = 0.051				
Career counselling (Yes)	0.13	- 1.59 to 1.84	0.008	0.883
Midwifery was the desired profession (Yes)	1.62	0.18 to 3.05	0.121	0.027
Midwife/nurse in the family (Yes)	- 0.23	- 1.87 to 1.41	- 0.015	0.783
Relationship with family (1-4)	- 0.47	- 1.41 to 0.47	- 0.053	0.324
Age (Years)	- 0.27	- 0.73 to 0.20	- 0.075	0.261
Year of study (1-4)	- 0.57	- 1.36 to 0.22	- 0.094	0.156
Income level (1-3)	- 2.29	- 3.60 to - 0.98	- 0.185	0.001

B, Unstandardized Regression Coefficient; CI, Confidence Interval; β , Standardized Regression Coefficient. Dichotomous variables were coded as yes = 1, no = 0 (Reference). Relationship with family was coded from 1 (Bad) to 4 (Very good); year of study was coded from 1 (First year) to 4 (Fourth year); income level was coded as 1 = income lower than expenses, 2 = income equal to expenses, 3 = income higher than expenses; age was entered in years.

B, Unstandardized Regression Coefficient; CI, Confidence Interval; β , Standardized Regression Coefficient. Reference categories: no career counselling, midwifery was not the desired profession, no midwife/nurse in the family. Relationship with family, year of study, age, and income level were entered as ordinal/continuous variables. Bold values indicate p < 0.05. Multicollinearity was acceptable (All VIF < 1.6).

Discussion

This study aimed to evaluate family influence and gender roles in the career choices of midwifery students. The findings shed light on the complex interaction between these two factors in the career-choice process. Family plays a crucial role in career decision-making (4). In particular, information support emerged as the sub-dimension with the highest mean item score, whereas financial support, family expectations, and values and beliefs had comparatively lower mean item scores. These results indicate that although families provide general encouragement, their influence on career choice is not absolute.

Previous studies on midwifery and nursing students have highlighted the pivotal role of families in shaping occupational preferences (10-12,24). Similarly, research conducted both in Türkiye and internationally has reported moderate to high levels of family influence on nursing students' career choices (25-28). Consistent with this evidence, the present study suggests that midwifery is increasingly regarded as a socially accepted profession and that families frequently provide encouragement in this regard. Families appear to possess sufficient knowledge about midwifery and nursing, maintain positive attitudes toward these professions, and play a guiding role in their children's career decisions. Nonetheless, the observed pattern of family influence may also indicate that students are gradually gaining greater autonomy in shaping their own career decisions.

In the present study, univariate analyses showed that students who received career counselling, preferred midwifery as their desired profession, and had good or very good family relationships had higher mean FICCS scores. However, in the multivariable model, only career counselling and family relationships remained independently associated with FICCS, whereas the association with desiring midwifery as a profession was attenuated after adjustment. Career counselling provides students with opportunities to understand their potential, interests, abilities, and aspirations regarding a profession and enables them to make informed choices. A deliberate occupational choice is associated with success in academic and professional life (29). In the present study, only 22% of the students received career counselling, and 58.7% chose their profession independently. Only a limited number of studies have addressed this topic. It is well established that most midwifery students choose the midwifery department without prior career counselling (24), and almost half choose the midwifery department voluntarily (10). Most participating students maintained good or very good relationships with their families. These results suggest that students who have good relationships and mutual communication with their families make career decisions while seeking family support. Moreover, through everyday

communication patterns, families contribute to the transmission of gender roles traditionally attributed to men and women, which may influence career choice.

Gender roles refer to the roles traditionally attributed to men and women and have historically influenced occupational choices (5). In the present study, students' gender-role perceptions in career choice were evaluated using the GRCCS. It should be noted that all participants were female, as no male students were enrolled in the department during the study period. Therefore, the findings reflect gender-role perceptions within a female-only cohort and do not permit gender-based comparisons. The mean item score for the Traditional Attitude sub-dimension was considerably lower than that for the Egalitarian Attitude sub-dimension, indicating that egalitarian attitudes predominated among the students. Previous studies reported that midwifery students developed more egalitarian attitudes as their grade level increased (14,30-32). In a study involving nursing and midwifery students, female students exhibited more egalitarian attitudes than male students (33). These results are consistent with the findings of the present study. The all-female composition of the sample and the inclusion of a gender course in the midwifery curriculum may have contributed to the students' egalitarian attitudes. Furthermore, the mean GRCCS score of students whose preferred profession was midwifery was higher than that of students who preferred other professions. Accordingly, gender roles influence students' occupational choices.

In the present study, it was found that students' reasons for choosing the midwifery profession were not directly related to having a midwife or nurse in the family. This finding indicates that the presence of a healthcare professional in the family is not a decisive factor in career choice. However, this result contradicts some findings in the literature. For instance, a study conducted in Ethiopia reported that individuals whose mothers worked in the healthcare sector were approximately five times more likely to choose midwifery compared to those without a parent in the field (34). This suggests that the presence of mothers in the healthcare profession may serve as a role model for daughters, influencing their occupational preferences. Such findings imply that, within the framework of gender roles, family members may exert an indirect yet significant influence on career decisions.

The multivariable regression analyses provided further insight into these relationships. After adjustment, career counselling and a better family relationship remained independent predictors of family influence (FICCS), whereas year of study was negatively associated with FICCS, suggesting that perceived family influence tends to decline as students' progress through their education and gain greater autonomy in career-related decisions. For gender-role perceptions (GRCCS), desiring

midwifery as a profession and a lower income level were independent correlates. Importantly, the attenuation of the association between desiring midwifery and FICCS after adjustment illustrates the value of multivariable modelling in distinguishing independent effects from confounded bivariate associations. A significant finding of our study was the weak yet statistically significant positive correlation between the mean scores of the GRCCS and FICCS, indicating a mutual influence between family attitudes and gender role perceptions in shaping midwifery students' career choices. This relationship suggests that families' views on gender roles may directly shape students' occupational preferences, or conversely, students' perceptions of gender roles may affect the nature and extent of familial support received during career decision-making. This bidirectional dynamic aligns with previous studies showing that traditional gender norms within families can strongly impact students' professional orientations, especially in fields like nursing and midwifery, where gender stereotypes are deeply embedded (32,35-37).

Research from patriarchal contexts further emphasizes the dominant role of male family members in delineating which professions are deemed "appropriate" for women (38,39). Such family-driven, gendered career pathways contribute not only to the persistent underrepresentation of men in midwifery but also to the broader perpetuation of gender-based occupational segregation and discrimination (31,40-42).

These findings highlight the urgent need to enhance university-based career counselling services with a gender-sensitive lens, to raise family awareness regarding gender equity, and to embed gender-transformative frameworks into midwifery education. By fostering more supportive and equitable environments, students may be better equipped to make autonomous, informed career choices, potentially improving their long-term job satisfaction and mitigating workplace-related stress.

This study has several limitations. First, because of its cross-sectional design, causal interpretations cannot be made. Second, the use of self-reported measures may have introduced social desirability bias. A further limitation is that, although Tukey's post hoc test was used for pairwise comparisons following ANOVA, no correction for multiple comparisons (e.g., Bonferroni) was applied across the overall set of t-tests and ANOVAs. This may increase the risk of Type I error (False positives); therefore, the significant findings should be interpreted with caution and regarded as exploratory rather than confirmatory, requiring confirmation in future studies. Finally, the study was conducted at a single university in the Black Sea region of Türkiye.

Conclusion

This study examined the associations of family influence and gender roles with the career choices of midwifery students and found that family-related factors were significantly associated with students' decision-making processes. Gender-role perceptions were also related to career choice, with both family influence and gender norms showing meaningful associations with occupational preferences among midwifery students.

These findings emphasize the importance of career guidance programs that support informed and autonomous career decision-making. Furthermore, nursing and midwifery education should promote gender equality while recognizing the role of family support in career development.

Future studies are recommended to examine the associations of family influence and gender roles with career choice by employing diverse research designs, such as longitudinal or qualitative approaches, and by including students from different regions, institutions, and health-related disciplines. Such research would provide a deeper understanding of how sociocultural factors shape career choices.

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Ethical Statement

Approval was obtained from Ondokuz Mayıs University Social and Human Sciences Ethics Committee (Decision Date: 28/07/2023, Decision No: 2023/674). The principles of the Declaration of Helsinki were followed at every stage of the research. It was explicitly stated that participation was completely voluntary, and participants had the right to withdraw at any time without penalty. After ensuring full comprehension, both written and verbal informed consent were obtained from all participants. For those who were literate, written consent was secured via a signed consent form. Verbal consent was additionally confirmed for all participants to ensure understanding and agreement.

Conflicts of Interest

The authors declare that they have no competing interests.

Author Contributions

Conceptualization (N.KY); Formal analysis (N.KY; SD. Y); Investigation (N.KY; SD. Y); Methodology (N.KY; SD. Y); Project Administration (N.KY); Resources (N.KY; SD. Y); Supervision (N.KY); Writing - Original draft (N.KY; SD. Y); Writing - Review and Editing (N.KY).

Data Availability Statement

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Use of Artificial Intelligence

During the preparation of this study, the author(s) used Claude (Anthropic) to improve the language and grammar of the manuscript. After using this tool, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.

References

- Goh M, Jamaluddin H. Influencers of university students' career decision. *Issues Perspect Bus Soc Sci*. 2021;1(1):28-44. [View at Publisher] [DOI] [Google Scholar]
- Hadiyati MA, Astuti B. Student careers: What factors influence career choice? *J Educ Res Eval*. 2023;7(4):608-14. [View at Publisher] [DOI] [Google Scholar]
- Dursun A, Kara A. Career decision making self-efficacy and family influence in the choice of career as a predictor of career decision making difficulties in secondary school students. *J Turk Educ Sci*. 2019;17(1):39-55. [View at Publisher] [Google Scholar]
- Aşık G, Akgül H. Üniversite Öğrencilerinin Kariyer Stresleri, Kariyer Kararında Ailenin Etkisi ve Kariyer Kararı Verme Yetkinlik Algıları Arasındaki İlişkinin İncelenmesi. *Van Yüzüncü Yıl Univ J Educ Fac*. 2022;19(1):192-212. [View at Publisher] [DOI] [Google Scholar]
- Gökcan M, Büyükgöze Kavas A. Meslek Seçiminde Toplumsal Cinsiyetin Rolü: Bir Ölçek Geliştirme Çalışması. *J Career Couns*. 2018;1(1):48-67. [View at Publisher] [Google Scholar]
- Block K, Croft A, Schmader T. Worth less?: Why men (and women) devalue care-oriented careers. *Front Psychol*. 2018;9:1353. [View at Publisher] [DOI] [PMID] [Google Scholar]
- Gedik E, Çakır H. The effect of gender on occupational choice of university students: Case study of Yozgat Bozok University Sociology Department. *Woman*. 2019;20(1):43-58. [View at Publisher] [DOI] [Google Scholar]
- Demirezen E, Bilgiç FŞ, Akduman NG. Ebelik Öğrencilerinin Erkek Ebeye İlişkin Görüşlerinin İncelenmesi. *Fenerbahçe Univ J Health Sci*. 2022;2(3):559-67. [View at Publisher] [DOI] [Google Scholar]

9. Aydın-Kartal Y, Aksoy T. Tarihten Günümüze Ebelik Eğitimi VE Mesleğine Kısa Bir Bakış. *J Health Sci.* 2021;30(1):98-102. [View at Publisher] [DOI] [Google Scholar]
10. Demirel G, Kaya N, Doğaner A. Ebelik Öğrencilerinin Kültürlerarası Yaklaşımlarının Merhamet ve Empati Düzeylerine Etkisi. *OPUS Int J Soc Res.* 2020;15(21):282-300. [View at Publisher] [DOI] [Google Scholar]
11. Demir R, Taşpınar A. Ebelik Bölümü Öğrencilerinin Ebelik Mesleğine Bakış Açıkları ve Gelecekte Beklentileri. *J Adnan Menderes Univ Health Sci Fac.* 2021;5(3):466-78. [View at Publisher] [DOI]
12. Balkan E, Caliskan E, Simsek A. Professional values from the perspectives of midwifery students: A cross-sectional study. *J Midwifery Health Sci.* 2023;6(1):30-6. [View at Publisher] [DOI] [Google Scholar]
13. Prosen M. Nursing students' perception of gender-defined roles in nursing: A qualitative descriptive study. *BMC Nurs.* 2022;21(1):104. [View at Publisher] [DOI] [PMID] [Google Scholar]
14. Aymelek-Çakıl N, Demir G. Ebelik Öğrencilerinin Toplumsal Cinsiyet Rollerine Yönelik Tutumları ve Etkileyen Faktörler Öz. *Izmir Katip Celebi Univ Fac Health Sci J.* 2022;7(2):245-51. [View at Publisher]
15. Li C-P, He L-P. A study on the correlation between vocational self-efficacy and ego-identity in midwifery students. *Altern Ther Health Med.* 2022;28(7):153-57. [View at Publisher] [PMID] [Google Scholar]
16. Ait Ali D, Neila O, Ouhhamou S, Rizzo A, Chirico F, Khabbache H. Motivations driving career choices: insights from a study among nursing students. *SAGE Open Nurs.* 2024;10:23779608241255876. [View at Publisher] [DOI] [PMID] [Google Scholar]
17. Sbaih K, Qtait M, Alqaissi N, Farajalla F. Perceptions of the nursing profession among first-year health profession students: a cross-sectional study in Palestine. *PLoS One.* 2025;20(10):e0334933. [View at Publisher] [DOI] [PMID] [Google Scholar]
18. Likis FE, King TL. Gender diversity and inclusion in midwifery. *J Midwifery Womens Health.* 2020;65(2):193-4. [View at Publisher] [DOI] [PMID] [Google Scholar]
19. Szabó RG, Domonkos N. Nursing students in the stranglehold of gender roles: issues of career choice and professionalism. *Cent Eur J Nurs Midw.* 2024;15(3):1148-57. [View at Publisher] [DOI] [Google Scholar]
20. Mayor-Silva LI, Moreno G, Meneses-Monroy A, Martín-Casas P, Hernández-Martín MM, Moreno-Pimentel AG, et al. Influence of gender role on resilience and positive affect in female nursing students: a cross-sectional study. *Healthcare (Basel).* 2025;13(3):336. [View at Publisher] [DOI] [PMID] [Google Scholar]
21. Maurud S, Børøund E, Moen A. Gender and ethnicity's influence on first-year nursing students' educational motivation and career expectations: a cross-sectional study. *Nurs Open.* 2022;9(3):1667-78. [View at Publisher] [DOI] [PMID] [Google Scholar]
22. Fouad NA, Cotter EW, Fitzpatrick ME, Kantamneni N, Carter L, Bernfeld S. Development and validation of the family influence scale. *J Career Assess.* 2010;18(3):276-91. [View at Publisher] [DOI] [Google Scholar]
23. Özünlü MB, Bacanlı F. The adaptation of the family influence scale for high school students: Validity and reliability studies. *J Turk Educ Sci.* 2015;13(1):13-32. [View at Publisher] [Google Scholar]
24. Karaman ÖE, Aygün Y, Korkmaz Yıldız N. Ebelik Öğrencilerinin Meslekleri ile İlgili Sosyal Çevre Görüşlerinden Etkilenme Durumları. *BANU J Health Sci Res.* 2022;4(1):11-20. [View at Publisher] [DOI] [Google Scholar]
25. Bölükbaş N. Occupational selection of nursing students and the effecting factors. *Ordu Univ J Nurs Stud.* 2018;1(1):10-7. [View at Publisher] [Google Scholar]
26. Olğun S, Adıbelli D. Hemşirelik Öğrencilerinin Meslek Seçimini Etkileyen Faktörler. *ACU Sağlık Bil Derg.* 2020;11(1):55-60. [View at Publisher] [DOI]
27. Özcan S, Sarıoğlu-Kemer A. Evaluation of family influence on career choice of nursing students. *MAS J Appl Sci.* 2021;6(4):899-908. [View at Publisher] [DOI]
28. Anieche JE, Standley IB. Influencing factors in the choice of nursing as career: A study of students in nursing training in Anambra State Nigeria. *Int J Med Sci Health Res.* 2022;6(4):113-25. [View at Publisher] [DOI] [Google Scholar]
29. Gönültaş O. Lise Öğrencilerine Yönelik Kariyer Danışmanlığı ve Mesleki Rehberlik Alanında Yapılan Deneysel Çalışmaların İncelenmesi. *Academia J Educ Res.* 2021;6(1):233-44. [View at Publisher] [Google Scholar]
30. Pendleton J. What role does gender have in shaping knowledge that underpins the practice of midwifery? *J Gend Stud.* 2019;28(6):629-34. [View at Publisher] [DOI] [Google Scholar]
31. Bahadır Yılmaz E, Ekin H. The relationship between midwifery students' opinions of male midwives and gender role attitudes. *JAREN.* 2020;6(1):117-24. [View at Publisher] [DOI] [Google Scholar]
32. Yılmaz T, Dinc Kaya H, Gunaydın S. Evaluation of the attitudes of midwifery students towards gender roles. *Soc Work Public Health.* 2021;36(7-8):786-94. [View at Publisher] [DOI] [PMID] [Google Scholar]
33. Çal A, Aydın Avcı İ. Hemsire Ve Ebe Öğrencilerin Toplumsal Cinsiyet Rol Tutumları İle Aile İçi Şiddete Yönelik Tutumları Ve Yasaa Degerleri Arasındaki İlişkinin İncelenmesi. *J Samsun Health Sci.* 2020;5(2):103-12. [View at Publisher] [DOI] [Google Scholar]
34. Tadesse D, Weldemariam S, Hagos H, Sema A, Girma M. Midwifery as a future career: Determinants of motivation among prep students in Harar, eastern Ethiopia. *Adv Med Educ Pract.* 2020;11:1037-44. [View at Publisher] [DOI] [PMID] [Google Scholar]
35. Söğüt S, Cangöl E, Özsezer G. Determination of gender perceptions of nursing and midwifery students. *Int J Health Serv Res Polic.* 2021;6(1):117-27. [View at Publisher] [DOI] [Google Scholar]
36. İçel S. Toplumsal cinsiyet eşitliği bağlamında ebelik öğrencilerinin tutumu: Nitel bir çalışma. *Anatolian J Health Res.* 2025;6(1):42-8. [View at Publisher] [DOI] [Google Scholar]
37. Harmancı P. Attitude of nursing students in the context of societal gender equality: A qualitative study. *J Nursology.* 2023;26(4):238-45. [View at Publisher] [DOI] [Google Scholar]
38. Ashraf, F, Jepsen D. Private patriarchy's impact on women's careers: Through kaleidoscope career model lens. *Group Organ Manage.* 2024;51(2):533-74. [View at Publisher] [DOI] [Google Scholar]
39. Chaulagain A. Gender socialization and its impact on career choices: A sociological analysis. *Int Res J of MMC.* 2025;6(1):233-46. [View at Publisher] [DOI] [Google Scholar]
40. Abdul Hamid Alhassan R, Baumann S, Fapohunda A, Tiah JAY, Laari TT, Narbey L, et al. Men as midwifery professionals: A scoping review. *Birth.* 2025;52(3):376-92. [View at Publisher] [DOI] [PMID] [Google Scholar]
41. Wong MLL. Koh SLS, Teo WZ, Eng KW Shorey S. Discrimination faced by male nurses and male midwives: A systematic review and meta-synthesis. *J Clin Nurs.* 2025;34(6):2431-46. [View at Publisher] [DOI] [PMID] [Google Scholar]
42. Prosen M, Çekada T. Nursing students' views on men in nursing: a gender diversity challenge in the healthcare workforce. *BMC Nurs.* 2025;24(1):820. [View at Publisher] [DOI] [PMID] [Google Scholar]

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