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**Original Research Article**

# Determining the factors affecting attitudes towards family planning among university students

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## ABSTRACT

**Background:** Within the scope of reproductive health, family planning services play a key role in gender equality and empowerment of women. It is considered a human right to have access to these services. The literature has no study aimed at determining the impact of sociodemographic characteristics and gender roles of young people on their family planning attitudes. In Turkiye where the impacts of the patriarchal structure continue to be seen, studies on family planning are only conducted with married people or women.
**Methods:** The sample of the descriptive correlational study comprised 1288 students receiving education in undergraduate programs in a university in Turkiye. In collection of the study data, the researchers used the Student Identification Form, the Gender Roles Attitude Scale and the Family Planning Attitude Scale. In order to determine the independent factors affecting attitudes towards family planning among the students, the researchers created a linear regression model.
**Results:** Examining the Beta coefficient of the regression model used, the gender, faculty and grade of the students and their gender roles scores affected their attitudes towards family planning in a positive direction ($F=40.097$, $p<0.005$). Ordering the degree of independent variables to affect the attitudes towards family planning in the regression model according to the Beta coefficient, the independent variable that most affected the attitudes towards family planning was gender roles attitude.
**Conclusions:** The study revealed that the gender roles attitude affected the family planning attitude.

**Keywords:** Gender roles, Gender, Family planning, University

## INTRODUCTION

Within the scope of reproductive health, family planning services play a key role in gender equality and empowerment of women. It is considered a human right to have access to these services. However, approximately 218 million individuals in developing countries are unable to utilize safe and effective family planning methods due to a lack of information or access to services.[1] One of the groups that most needs family planning services is adolescents and young people. World Health Organization (WHO) standardizes the definitions of adolescent and young people. Accordingly, "adolescents" are people aged 10 to 19 years. "Youth" comprises of people aged 15 to 24 years. "Young people" are those aged 10 to 24 years.[2] As youth also includes adolescence, WHO recommends to combine approaches related to adolescents and young people in general.[2] Today more than 1.8 billion of the world population are young people (aged 10 to 24 years). Of these young people, 70% live in low-income countries.[3] Examining the rate of young population aged 15 to 24 years among total population of countries, the country with the highest rate of young population is the Central African Republic with 22.6%, which is followed by Afghanistan with

22.1% and Nepal with 21.5%. The country with the lowest rate of young population is Latvia with 8.3%, which is followed by Bulgaria, Lithuania and Czechia with 9.0%, and Slovenia and Estonia with 9.1%.[4] In Turkiye, 15.3% of the population are young people.[5]

As youth is a period when health habits and sexual behaviors begin to shape, it is to be approached principally regarding reproductive health issues. Therefore, the policies and statistics of countries, and the International Conference on Population and Development (ICPD) decisions have been reviewed and evaluated every five years since 1994. The 25th year evaluation which took place in Nairobi in 2019 determined that the present situation was not adequate despite all improvements, countries still had inequalities, the rate of unmet needs concerning the arrangement of fertility especially among young women and adolescents was about 30%, there were not adequate improvements in the termination of unintended pregnancies, gynecologic cancers or sexually transmitted diseases were not prevented adequately and issues related to adolescent marriages or sexual identity inequality continued.[6]

World Health Organization has reported that 585.000 women die every year due to reasons related to pregnancy. Of these deaths, 90% occur in developing countries. The possibility for a girl aged 15 to 19 years to die while giving birth is two times greater than those in their 20s and this possibility is five times greater in those younger than 15 years.[7] 218 million women continue to face the difficulties of unmet family planning. 35 million abortions occur under unsafe conditions. 133 million women have to live with at least one of curable sexually transmitted infections.[8] Women aged 15 to 19 years who want to avoid pregnancies are in greater unmet need of modern birth control than all women in childbearing age who want to avoid pregnancies (24% vs 43%). Half of adolescent pregnancies which have reached 21 million are unintended pregnancies.[8]

In Turkiye, the adolescent fertility rate is 13 births per woman in every one thousand women aged 15 to 19 years.[9] However, according to a study conducted among nearly 3.6 million registered Syrian immigrants in Turkiye, 39 out of every 100 adolescents (aged 15 to 19 years) are either a mother or pregnant.[6] In Turkiye, the rate of young people who use a modern method is 2.1% for the age group of 15 to 19 years and 24.9% for the age group of 20 to 24 years.[10] Besides adolescent and youth health, other defenseless groups, handicapped young people and women, gypsy women and young people, LGBTI+s and those suffering from HIV are deprived of all sexual health and reproductive health rights. Service delivery is not planned specifically for them.[6] In Turkiye, the rate of women who use no contraceptive methods despite intending to have a break before the next pregnancy or not intending to have another baby, in other words women who have unmet need of family planning is 12%.[10] In Turkiye where patriarchal family structure and traditional culture are common, statistical data related to fertility of young people is usually obtained through those who are married.[10-12] Therefore, statistical data related to reproductive health such as fertility rate and use of contraceptive methods does not reflect unmarried young people. It is recommended that the rate of young people in Turkiye using family planning methods be examined on the basis of this limitation. In Madagascar where, as in Turkiye, patriarchal and traditional culture is prevalent, child marriage is common and half of women aged 15 to 49 years get married before the age of 18. Nearly 12% of the female population get married before the age of 15. The most common negative outcomes of early marriage are difficulty in family management, dropping out of school, risky pregnancy, birth complications and issues occurring in maternal health.[13] In Ethiopia, there are more than 15 million young people aged 15 to 24 years. They constitute 20.6% of the population. This extensive and productive age group is subjected to sexual health and reproductive health risks such as sexual pressure, early marriage, polygamy, female circumcision, unintended pregnancy, frequent pregnancy, abortion and sexually transmitted infections.[14] In the United States, nearly half of unintended pregnancies result in abortion. In continuing unintended pregnancies, expectant mothers may display behaviors such as smoking and drinking alcohol. A study conducted in Malawi found that 15% of women seeking FP services were rejected before they began to use any method. It was mainly related with the structure and management of health facility.[15] According to studies conducted in the Sub-saharan Africa, women face obstacles such as absence of desired method in health facilities, getting an appointment for FP and then being rejected, refusal without explanation, not getting FP service without a pregnancy test and absence of pregnancy tests, being unable to decide on the method, absence of medical books, long waiting in the organization and difficult and expensive access to the organization.[15,16]

Cultural characteristics of society affect individuals. In a study conducted in Van province in the Eastern Anatolia Region in Turkiye, reasons why individuals did not use family planning methods were because they believed it was a sin, the family elders did not want it, the patriarchal structure was dominant and they believed that the methods caused infertility or cancer.[17] Religion encourages birth and affects the use of family planning.[18] A study performed with Muslim women in Australia found that both religion and culture had impacts on the sexuality of young women.[19] People in conservative countries consider sexuality a taboo and avoid talking about sexuality.[20]

In order to achieve the goals of family planning, men are to take responsibility. However, men do not participate in family planning adequately due to the social status difference between women and men.[21,22] Recent studies have found that men's lack of knowledge and understanding increases the stigma related to family

planning and the perception that men want more children increases the possibility for women to become a secret user of family planning.[23,24] In countries, especially like Turkiye where a patriarchal and traditional structure exists, knowledge and attitudes of young people related to family planning methods are noteworthy.[25,26]

## METHODS

### *Type of the study*

The researchers conducted the current study in a descriptive correlational design.

### *Target population and sample of the study*

The target population of the study comprised students receiving education in 15 faculties in a university in the west of Turkiye (N=28.429). In determination of the sample size, the researchers used the design effect approach to disperse the difference and have a correction meeting the deviation, based on the assumption that a random selection might provide better data than cluster sampling in terms of the speeds to be reached in the data.[27] Because there was a limited number of units in the clusters, the researchers specified the sample size to have at least 927 university students with 50% prevalence, 97% confidence level and 5% deviation by calculating with 2.0 design effect. The study sample comprised 1288 students above the minimum sample size. In determination of the faculties and departments to be included in the study sample, the researchers used the multiple cluster sampling, stratified sampling and simple random sampling methods. In the first phase, the researchers created ten clusters as Faculty of Engineering, Faculty of Science, Faculty of Education, Faculty of Economics and Administrative Sciences, Faculty of Literature, Faculty of Communication, Faculty of Aquaculture, Faculty of Sports Sciences, Faculty of Agriculture and Faculty of Health Sciences. Among the faculties in each cluster, the researchers chose a faculty by lot. Among the departments of each faculty chosen, the researchers chose a department to be included in the sample by lot.

The researchers specified the student number to be included in the sample from each department by determining the student number in the departments included in the study sample on the basis of the department group via the stratified sampling method. Then the researchers enumerated the grades in the departments as 1, 2, 3, 4 and specified the grades by lot. They continued the lot procedure until they reached the student number specified previously.

### *Data collection tools*

In collection of the study data, the researchers used the Student Identification Form, Gender Roles Attitude Scale (GRAS) and the Family Planning Attitude Scale (FPAS).

### *Student identification form*

Prepared by the researcher, this form had questions about demographic characteristics of the students such as faculty, department, grade info, gender, age, longest place of residence, present residence and maternal-paternal educational status.

### *Gender roles attitude scale*

Zeyneloğlu and Terzioğlu (2011) prepared the Turkish scale to determine the attitudes of university students towards gender roles. The scale had 38 items and five subscales. The Cronbach's Alpha value of the scale was 0.79.[28] The researchers graded the five point likert scale according to agreement of the participants with the equalitarian attitude statements related to gender roles. The agreement statements were "strongly agree, agree, undecided, disagree, strongly disagree". The statements had 5, 4, 3, 2 points and 1 point, respectively. Accordingly, the highest and lowest possible scores obtainable from the scale were 190 and 38, respectively. The highest obtainable score indicated the "equalitarian attitude" opinion of the participants related to gender roles. The lowest obtainable score indicated the "traditional attitude" opinion.[28] The present study evaluated the score obtained from the scale below 95 in the regression analyis to be "traditional attitude" and the score obtained at 95 and above to be "equalitarian attitude". The researchers performed the analyses on the basis of this classification.[28]

### *Family planning attitude scale*

Örsal and Kubilay (2007) prepared the scale in Turkish. The Cronbach's Alpha value of the scale was 0.90. The scale had 34 items and three subscales as "attitudes towards society, attitudes towards family planning methods and attitudes towards pregnancy". It was a five point likert self-evaluation scale. The study asked the participants to evaluate the items from 1 to 5 (strongly disagree-strongly agree) and choose any answer. The lowest and highest possible scores obtainable from the scale were 34 and 170, respectively. Higher obtainable score indicated a more positive attitude towards family planning.[18]

### *Data collection method and time*

The researchers collected the study data via the paper-and-pencil method in the classroom environment in a time interval specified by the managers of the faculties where the study was conducted between February and June 2018. During data collection, the researchers was present in the classroom and answered the questions of the students without providing any guidance related to the questions on the survey form. It took 20 minutes to complete the survey form. This time may vary from student to student.

### *Analysis of the data*

In analysis of the data, the researchers used the SPSS 21.0 program. In evaluation of the data, the researchers specified the family planning attitude scores to be the dependent variable and gender, family type, faculty, grade and gender role attitudes of the students to be the independent variables. As the Family Planning Attitude Scale was not normally distributed (KS=0.135; p=0.00), the researchers used nonparametric tests in the comparison of the variables. The researchers determined the factors that were effective on the Family Planning Attitude Scale via the logistic regression model.

### *Study ethics*

In order to conduct the study, the researchers received permission from the Presidency of Ege University Scientific Research and Publication Ethical Committees. In order to use the Gender Roles Attitude Scale and the Family Planning Attitude Scale in the study, the researchers received written permission from the authors of the scales via e-mail. In order to collect the study data, the researchers received written permission from the faculties included in the sample. The researchers informed the participant students about the study and assured them that their personal information was to be kept confidential. The researchers received informed consent from the students..

## RESULTS

Mean age of the students was 21.10±0.05 (min.17-max.40 years). Of the students, 64.4% were female, 55.3% lived in a metropolis as longest place of residence and 34.3% stayed in a dormitory, 34% stayed with their family and first degree relatives and 25% shared a house with their friends. Of the students, 80.9% had nuclear family, 1.5% had nonliterate mother and 0.3% had nonliterate father.

**Table 1: Distribution of the family planning attitude scale and subscale scores of the university students.**

| | | Total FPAS score | | | | Item score | |
|---|---|---|---|---|---|---|---|
| | | Median | Interquartile values | | | Median | Min-Max. |
| | | | 25% | 50% | 75% | | |
| **FPAS** | | 138.00 | 125.0000 | 138.0000 | 153.0000 | 4.06 | 1.26-5.00 |
| **Subscale** | Attitude towards society | 68.00 | 61.0000 | 68.0000 | 71.0000 | 4.53 | 1.13-5.00 |
| | Attitude towards methods | 38.00 | 33.0000 | 38.0000 | 49.0000 | 4.22 | 1.78-6.11 |
| | Attitude towards pregnancy | 32.00 | 28.0000 | 32.0000 | 37.0000 | 3.20 | 0.80-4.00 |

FPAS: Family Planning Attitude Scale

**Table 2: Comparison of the family planning attitude scores of the students according to their family type, faculty, grade and attitudes towards gender roles.**

| | | N | Mean rank | $X^2$ | Sd | P |
|---|---|---|---|---|---|---|
| **Family type** | Nuclear family | 1042 | 651.20 | 12.01 | 2 | 0.002* |
| | Fragmented family | 158 | 559.50 | | | |
| | Extended family | 88 | 717.81 | | | |
| **Grade** | Freshman | 525 | 620.95 | 35.25 | 3 | 0.000* |
| | Sophomore | 244 | 550.76 | | | |
| | Junior | 303 | 720.58 | | | |
| | Senior | 216 | 700.90 | | | |
| **Faculty cluster** | Health | 103 | 627.29 | 139.54 | 9 | 0.000* |
| | Aquaculture | 37 | 466.24 | | | |
| | Literature | 153 | 851.24 | | | |
| | Agriculture | 99 | 400.43 | | | |
| | Engineering | 246 | 670.56 | | | |
| | Communication | 192 | 687.04 | | | |
| | Science | 130 | 725.35 | | | |
| | Sports | 142 | 472.25 | | | |
| | Economics and administrative sciences | 103 | 664.36 | | | |
| | Education | 83 | 623.09 | | | |
| **Attitude towards gender roles** | Traditional perspective | 4 | 518.88 | 686.04 | 4 | 0.000* |
| | Equalitarian perspective | 1284 | 644.89 | | | |

* Level of significance according to p<0.05, FPAS: Family Planning Attitude Scale

**Table 3: Logistic regression models of the factors which were effective on the family planning attitude scale.**

| Variables in the model | Non-standardized coefficient | | Standardized coefficient | t | p |
|---|---|---|---|---|---|
| | Beta | Standard error | | | |
| **Constant** | 62.927 | 18.308 | | 3.437 | 0.001 |
| **Gender** | 12.093 | 1.071 | 0.299 | 11.294 | 0.000 |
| **Family type** | 0.490 | 0.886 | 0.14 | 0.553 | 0.580 |
| **Grade** | 1.995 | 0.455 | 0.117 | 4.384 | 0.000 |
| **Faculty** | 4.210 | 0.685 | 0.161 | 6.148 | 0.000 |
| **GRAS** | 38.780 | 9.090 | 0.111 | 4.266 | 0.000 |

Dependent Variable: Family Planning Attitude Scale Score

Of the students, 8% received education in the area of health sciences, 2.9% in the area of aquaculture, 11.9% in the area of literary sciences, 7.7% in the area of agricultural sciences, 19.1% in the area of engineering sciences, 14.9% in the area of communication sciences, 10.1% in the area of sciences, 11% in the area of sports sciences, 8% in the area of economics and administrative sciences and 6.4% in the area of educational sciences. Of the students who took part in the study, 40.8% were freshman students, 18.9% were sophomore students, 23.5% were junior students and 16.8% were senior students.

The mean total FPAS score of the university students who took part in the study was 138.00. The mean scale item score was 4.06. Examining the mean scores obtained by the students from the FPAS subscales, the students obtained 68.00 points from the "Attitude Towards Society" subscale, 38.00 points from the "Attitude Towards Methods" subscale and 32.00 points from the "Attitude Towards Pregnancy" subscale (Table 1).

The mean attitudes towards family planning score of the university students showed a statistically significant difference according to family type ($x2=12.01$, $p<0.05$), grade ($x2=35.25$, $p<0.05$) and faculty ($x2=139.54$, $p<0.05$) (Table 2).

Of the independent variables, gender had two variables as female and male. Family type had three variables as nuclear, fragmented and extended family. Grade had four variables. Faculty type had three variables as health sciences, social sciences and sciences. The Gender Roles Attitude Scale had two variables as traditional and equalitarian. The regression model built was linear and was found to be statistically significant ($F=40.097$, $p<0.005$) (Table 3).

## DISCUSSION

According to studies related to knowledge, views and applications of university students on family planning in Turkiye, a study conducted with university students from different faculties found that 50.7% of the students were not familiar with the definition of family planning.[29] Regarding sexually transmitted infections, 48.8% of the students explained that they did not have adequate knowledge. In parallel with the aforementioned rate, 46.9% stated that they were in need of knowledge.[30] In another study conducted with university students, 86.1% of the students stated that they had not been adequately trained on reproductive health/sexual health in high school.[31] In contradistinction to this situation in Turkiye, 74.2% of students in a research group in which more than 70% of the students comprised of university students in Ireland had received sexual education in secondary school and 84% found the education to be useful.[32] Besides young people who consider virginity essential according to the cultural structure of society and refuse to have a sexual life before marriage, there are also those who have unprotected sexual intercourse, conceive and have miscarriage.[33] In study conducted in different communities, young people suggest that they are sexually active.[34]

Studies on family planning, particularly those conducted in countries with a traditional social structure, usually ignore young people.[35] However, there are studies reporting that young people desire to talk about and obtain information about sexuality regarding family planning.[36]

It is possible to say that the university students in the present study had positive attitudes towards family planning (Table 1). A study conducted by Yıldız & Babacanoğlu (2022) with senior students in the medical faculty of a university in the capital of Turkiye found that the mean FPAS score of the students was higher than the mean FPAS score in the present study.[37] The students studying medicine had better attitudes towards family planning than those from other departments, which was an expected finding. In a study conducted to determine the attitudes of midwifery students towards family planning in Turkiye, the mean total score was close to the mean score obtained as a result of the present study.[38] The aforementioned study was conducted in the same geographical region as the current study. Another study conducted in the same province as the current study by using the FPAS found that the attitudes of the women in the postpartum period towards family planning were less positive than the attitudes of the university students towards family planning in the present study.[39]

In the present study, another variable that might affect family planning attitudes of the students was attitudes towards gender roles. Examining the Beta coefficient of the regression model which was used for determining the variables affecting the FP attitudes of the university students in the current study, the gender, grade, faculty and gender roles scores of the students affected their family planning attitudes in a positive direction (Table 3). In other words, it is possible to state that the female senior students who studied social sciences and had an equalitarian attitude displayed a more positive attitude towards family planning. Ordering the degree of independent variables to affect the attitudes towards family planning in the regression model according to the Beta coefficient, the independent variable that most affected the attitudes towards family planning was gender roles attitude, which was followed by the gender, faculty, grade and family type variables, respectively (Table 3).

The literature has no study examining the impact of gender roles on family planning. As a result of the present study, replacement of inequalities which were imposed by society according to gender, prevented people from accessing fundamental human rights and put women behind in the areas of health, economics, education and politics by gender equality clearly affected the family planning attitude in a positive direction.

## CONCLUSION

The current study helped to handle the viewpoint of society on family planning and factors affecting family planning not only on the basis of married people, but also from the viewpoint of university students. The study revealed that the gender roles attitude affected the family planning attitude.

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