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Investigation of Fatalism Tendency and Family Planning Attitude of Married Women in Türkiye: A Cross-sectional Study

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ABSTRACT
Objective: This study aimed to ascertain the connection between fatalistic tendencies and family planning attitudes of married women living in Türkiye. **Materials and Methods:** The study was cross-sectional and correlational and was conducted from January to December 2023 with 329 online participants. The study used an individual introduction form, Fatalism Tendency Scale, and Family Planning Attitude Scale **Results:** The study found that fatalistic tendencies negatively affect family planning attitudes (β=-0.374, p<0.001), having three or more children negatively affects family planning attitudes (β=-0.141, p=0.004), while the desire to receive family planning education (β=0.109, p=0.029) and the use of modern methods (β=0.137, p=0.006) positively affect family planning attitudes. **Conclusion**: It is believed that increasing family planning attitudes will be effective by expanding family planning education and addressing these trainings not only in terms of information but also by considering individuals' beliefs and evaluating them as a whole.
Keywords: Family Planning, Family Planning Training, Fatalism, Attitude.

Türkiye'deki Evli Kadınların Kadercilik Eğilimi ve Aile Planlaması Tutumunun İncelenmesi: Kesitsel Araştırma

ÖZ
Amaç: Bu çalışma, Türkiye'de yaşayan evli kadınların kadercilik eğilimleri ile aile planlaması tutumları arasındaki ilişkiyi belirlemek amacıyla yapıldı. **Gereç ve yöntem:** Çalışma kesitsel ve korelasyonel tipte olup, Ocak-Aralık 2023 tarihleri arasında 329 çevrimiçi katılımcı ile yürütülmüştür. Çalışmada bireysel tanıtım formu, Kadercilik Eğilimi Ölçeği ve Aile Planlaması Tutum Ölçeği kullanılmıştır. **Bulgular:** Araştırmada kadercilik eğiliminin aile planlaması tutumu üzerinde negatif etkisinin olduğu (β=-0.374, p<0.001), üç ve üzeri çocuğa sahip olmanın aile planlaması tutumunu olumsuz etkilediği (β=-0.141, p=0.004), aile planlaması eğitimi alma isteğinin (β=0.109, p=0.029) ve modern yöntem kullanımının (β=0.137, p=0.006) ise aile planlaması tutumunu olumlu etkilediği belirlenmiştir. **Sonuç:** Aile planlaması tutumunun artırılmasında aile planlaması eğitimlerinin yaygınlaştırılması ve bu eğitimlerin sadece bilgi yönü ile değil, kişilerin sahip olduğu inançların da gözönünde bulundurularak kişilerin bütün olarak değerlendirilmesi şekli ile ele alınmasının etkili olacağını düşünülmüştür.
Anahtar Kelimeler: Aile Planlaması, Aile Planlaması Eğitimi, Kadercilik, Tutum.

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INTRODUCTION

Family planning (FP) is the decision of all couples and individuals to have as many children as they want, at the time they like, and at healthy intervals, and to have information, education, and tools for this purpose. Family planning is all of the practices that help individuals protect themselves from unwanted pregnancies, regulate the time between two births, decide when and how many children to have, considering their age and socioeconomic status, and realize the desire for childless families to have children (Çölgeçen & Çölgeçen, 2022).

According to data from the 2018 Türkiye Demographic and Health Survey (TDHS), 30% of women of reproductive age do not utilize any form of family planning, and 63% of them do not wish to have any more children. Of these women, 21% employ conventional techniques (TDHS, 2018). According to the same survey, when asked whether the women participating in the survey had a pregnancy/birth at the desired time (planned birth) regarding the pregnancies of their children born in the previous five years and their current pregnancies, 15% stated that it was not desired and 11% stated that they would prefer it to happen later. This shows the gap in family planning (Çölgeçen & Çölgeçen, 2022). Today, most maternal deaths can be prevented by simple, easy, and inexpensive methods such as sexual and reproductive health education, providing access to contraception methods, effective use of contraceptive methods, providing safe abortion services, and intervening in complications at an early stage (Çalikoğlu et al., 2018).

Research indicates that one of the elements influencing the adoption of family planning techniques is the attitude toward family planning (Apay et al., 2010; Tezel et al., 2015). While physicians and nurses, especially midwives, who play a role in primary care services for women, provide family planning education and counseling services, knowing the attitudes of service users towards method selection will ensure the maintenance of counseling services in the direction of behavior change (Örsal & Kubilay, 2007).

The role of health professionals in effectively providing family planning services is indisputable. For this reason, the knowledge and attitudes of health professionals regarding family planning are important. In a study conducted in Manisa, Türkiye, the average score of midwifery students on the Family Planning Attitude Scale was 130.07±17.60. The study indicated that students had more knowledge about modern methods and that more emphasis should be placed on family planning education to bring their knowledge levels up to the desired standard (Şen et al., 2019). In another study conducted with healthcare personnel in Muğla on contraceptive methods that are not widely used, it was concluded that their knowledge and counseling on this subject were insufficient, and it was recommended that training be provided to healthcare personnel on this topic (Akdolun-Balkaya et al., 2021).

Fatalism is the belief that one cannot change what is determined by making an effort or taking action in a planned way and that the situation should be accepted as an inevitable fact of life (Macit, 2007). One of the fundamental ideas covered in many academic fields, including psychology, sociology, religion, anthropology, and others, is fatalism. Fatalism is generally understood to be the belief that everything that occurs or will occur in life is predestined by the will of extraordinary strength, that one cannot change the predetermined destiny, that one cannot overcome this determination by exerting effort, that one should accept this situation as an unavoidable fact of life, that one has no control over one's own life, and that one has no choice. Fatalism tendency is thought to be connected to negative patterns of conduct, including passivity, not taking precautions, and taking chances (Kaya & Bozkur, 2017). It should be noted that even if it is theoretically known or believed that behaviour and events are predestined, it is not known what is predestined. This uncertainty also allows people to act freely (Macit, 2007).

Preventing unwanted pregnancies worldwide is important. In this regard, identifying the factors that influence family planning attitudes is also important, as it is one of the key factors in increasing family planning use. When literatüre examined, it seen that fatalism is associated with lower use of birth control methods (Jones et al., 2015; Frost et al., 2012). However, some studies report that birth control methods are used even among those with a fatalistic perspective. They also stated that the final decision on pregnancy was made by God (Woodsong et al., 2004). Fatalism is also expressed in terms of the ability to conceive (Aiken et al., 2015).

Based on this information, the study aims to investigate the relationship between fatalistic tendencies and family planning attitudes among married women in Türkiye.

Research questions

1. What are the participants' levels of fatalism and family planning attitudes?
2. Is there a difference between the participants' demographic information and their fatalism?
3. Is there a difference between the participants' demographic information and their family planning attitudes?
4. Is there a relationship between participants' fatalistic tendencies and family planning attitudes?
5. To what extent does fatalistic tendency influence family planning attitudes?

MATERIALS AND METHODS

Population and sample of the research

The cross-sectional and correlational study was conducted online on social media platforms between

01/01/2023 and 01/12/2023 with married women aged 18-49 living in Türkiye via Google Form. To determnine the sample in the study, number of individuals in the population was chosen as 323 with the unknown sampling method, taking into account the frequency of family planning use of 70% (TDHS, 2018) at a 95% confidence Interval (1-1.96, p-0.7, q-0.3, d-0.05).

$n = [t^2X(Pq)/d^2]$ (Sümbüloğlu & Sümbüloğlı, 2016).

p=Frequency (probability) of the event being examined (0.7)

q=Frequency of non-occurrence of the event examined (1-p) (0.3)

t = The theoretical value in the t table at a certain degree of freedom and margin of error level (is 1.96)

d^2 = The desired deviation according to the requency of the incident (%5 deviation in 0.05).

Married women who offered to participate in the research and were between the ages of 18 and 49 who volunteered to take part in the study and were not undergoing infertility treatment were included.

Data collection tools

The study used an individual introduction form to determine sociodemographic data, the Fatalism Tendency Scale, and the Family Planning Attitude Scale.

Individual Introduction Form: It was improved by the investigators by reviewing the field literature (Nazik et al., 2021, Tekgündüz et al, 2021) to determine sociodemographic, obstetric, and contraceptive information (at what age, educational status, income status, owned children, family planning, racial and ethnic use status).

Fatalism Tendency Scales: The scale includes 2 items and four sub-dimensions and was improved by Kaya and Bozkur in 2015. The sub-dimensions of the scale are Prodetermination, Personal control, Superstition, and Luck. In the five-point Likert-type scale, one of the options, such as strongly disagree (1), disagree (2), undecided (3), agree (41, or strongly agree (5), should be marked. While scoring the items constituting the Personal Control dimension, the scale is reversed; scoring the other three sub-dimensions is done directly. The highest score that can be acquired from the predetermination sub-dimension is 40, and the minimum score is 8. A high score in this dimension indicates a high belief that everything is predetermined. The highest score that can be acquired from the Personal Control dimension is 30, and the lowest score is 6. A high score in this dimension indicates a low perception of personal control. Superstitious belief sub-dimension scores vary between 6 and 30 points. High scores in this sub-dimension indicate a high tendency to believe in superstitious beliefs. Luck dimension scores range between 4 and 20 points. A high score in this dimension indicates a high tendency to believe in luck. The scale's total score is calculated by summing the scores obtained from all sub-dimensions. Total scores vary between 24 and 120. A rise in the score defines a rise in the tendency towards fatalism. In the validity and reliability study of the scale, Cronbach's Alpha reliability coefficient was calculated as 0.72 (Kaya & Bozkur, 2017). In this study, the Cronbach's alpha value of the scale was established to be 0.85.

Family Planning Attitude Scale (FPAS): FPAS was introduced by Örsal and Kubilay in 2007. The scale consists of three sub-dimensions and 34 items: "Attitudes of the society towards family planning," "Attitudes towards family planning methods," and "Attitudes towards pregnancy." The attitudes of the society towards the FP sub-dimension of the scale contains of 14 items (1st, 2nd, 3rd, 2, 13th, and 14th items), attitudes towards the methods sub-dimension consists of 12 items (15th, 16th, ..., 25th, and 26th items) and attitudes towards pregnancy sub-dimension consists of 8 items (27th, 28th, 33rd and 34th items). The five-point Likert scale is graded on a scale ranging from "I= Completely Agree" to "5= Completely Disagree". The total score of the subset is obtained by summing the item scores in each subgroup, and by calculating the subgroup scores, the total score of FPAS is obtained. The minimum and maximum scores received on the scale are 34 and 170. High scores indicate positive attitudes towards FP. The cut-off point of the scale is reported as 119 points. It has been noted that women with an FPAS total score higher than 119 points have likelihood of using adequate contraceptive techniques (Örsal & Kubilay, 2007). The Cronbach's alpha value of the scale was found to be 0.90. In this research, the Cronbach's alpha value of the scale was established to be 0.92.

Statistical analysis

The Statistical Package for Social Sciences for Windows 22.0 was used to analyze the research data. Frequency and percentage values, which are descriptive statistics, were used for the information obtained, t-test was used in comparing two group averages showing normal distribution to determine the relationship between two variables, and a one-way ANOVA test was used in comparing multiple group averages. Mann-Whitney-U and Kruskall Wallis tests were used to match data that did not appear normal distribution. Spearman correlation analysis was used to determine the relationship between the two scale scores. Advanced statistics such as linear regression analysis were used, the significance level was accepted as $p<0.05$.

Ethical considerations

In the questionnaires sent to the women who volunteered to participate in the study, information was given about the research, and written consent was obtained from the authors for their consent and the scales used in the study. Ethics committee permission (Document date and number:23.12.2022-E.209931) was received from the Health Sciences Non-Interventional Research Ethics Committee of a state university in Türkiye before the study. The principles of the Declaration of Helsinki were followed in the research.

RESULTS

The participants' average age was 33.32±7.18 years, with 1.29±1.19 pregnancies on average. 88.1% of the participants were university graduates or higher, 69.6% were employed, 81.2% had spouses who were university graduates or higher, 58.4% had incomes equal to their expenses, 57.8% had 1 or 2 children, 89.4% had planned pregnancies, 14.3% had involuntary abortion, and 7% had voluntary termination of pregnancy. When the family planning responses of the participants were analyzed, 59.5% wanted to receive education about family planning, and 62.9% used modern family planning methods (Table 1).

The mean total score of the fatalism tendency scale was 61.82±11.55, and the mean score of the family planning attitude scale was 142.47±17.72 (Table 2).

Table 1. Distribution of sociodemographic-obstetric and contraceptive data of the participants

Variables	**Mean±Sd**	**Min-Max**
Age	33.32±7.18	19.00-49.00
Number of pregnancies	1.29±1.19	0.00-5.00
	n	**%**
Education status		
Primary and high school graduates	39	11.9
Bachelor's degree and above	299	88.1
Employment status		
Working	229	69.6
Not working	100	30.4
Education status of spouse		
Primary and high school graduates	62	18.8
Bachelor's degree and above	267	81.2
Income status		
Income less than expenditure	37	11.2
Income equal to expenditure	192	58.4
Income more than expenditure	100	30.4
Status of having a planned pregnancy		
Planned pregnancy	294	89.4
Unplanned pregnancy	35	10.6
Experiencing an involuntary miscarriage		
Yes	282	85.7
No.	47	14.3
Experiencing an induced abortion		
Yes	306	93.0
No	23	7.0
Number of children		
No children	115	35.0
1 and 2	190	57.8
Three and above	24	7.3
Willingness to receive training on family planning		
Those who want to receive training	196	59.6
Those who do not want to receive training	133	40.4
The family planning method used		
Not using any family planning method	44	13.4
Modern method	207	62.9
Traditional method	78	23.7
Total	329	100.0

Sd: Standard deviation , **Min-Max:**Minimum-Maximum

When the participants', obstetric, contraceptive characteristics, and sociodemographic characteristics were compared, it was found that the average Fatalism tendency scale was lower in women with a bachelor's degree and above ($p<0.05$). When average value of Family Planning attitude was examined, it was found that women who graduated from high school and above had a high FPAS score ($p<0.05$), the mean score of Fatalism tendency did not change with the working status ($p>0.05$), but the

mean score of Family Planning Attitude was high in the working participants, the mean score of Family Planning Attitude was high in those whose spouses graduated from undergraduate and above ($p<0.05$), and there was no difference between the mean score of Fatalism tendency ($p>0.05$). Income level, number of children, planned pregnancy, spontaneous abortion, voluntary pregnancy termination, the fatalism tendency scale, and family planning attitude scales did not significantly differ from one another ($p>0.05$).While the mean of the family planning attitude scale was higher in those who wanted to receive family planning education and those who use modern methods as a contraceptive method ($p<0.05$), no difference was discovered between the means of the fatalism tendency scale ($p>0.05$). (Table 3).

The study found a negative moderate correlation ($r=-0.386$, $p<0.05$) between the fatalism tendency scale and the family planning attitude scale (Table 4).

This study conducted a multivariate linear regression analysis to identify the variables influencing family planning attitudes among married individuals. The analysis was conducted using a two-stage model. In the first model, only fatalistic tendency was considered the independent variable, and it was found to have a negative and statistically significant effect on family planning attitudes ($\beta=-0.421$, $p<0.001$). The explanatory power of the model ($R^2=0.174$) was found to be moderate, and the model was generally significant ($F=70.280$, $p < 0.001$).

In the second model, in addition to fatalistic tendencies, the variables of education level, employment status, spouse's education level, number of children, desire to receive family planning education and type of method used were also included in the model. In this model, fatalistic tendencies' negative and significant effect of on family planning attitudes continued ($\beta=-0.374$, $p<0.001$). Additionally, having three or more children negatively affected the attitude ($\beta=-0.141$, $p=0.004$). In contrast, the desire to receive family planning education ($\beta=0.109$, $p=0.029$) and modern methods ($\beta=0.137$, $p=0.006$) positively affected the attitude. However, variables such as the individual's and spouse's education level, employment status, and use of traditional methods were not found to significantly affect family planning attitudes ($p>0.05$). The explanatory power of Model 2 has increased ($R^2=0.224$), and the model was found to be generally significant ($F=11.532$, $p<0.001$) (Table 5).

Table 2. Mean scores of the fatalism tendency scale and FPAS

	Mean±Sd	Min-Max	Cronbach Alpha
Predetermination	24.48±5.85	8.00-40.00	0.84
Personal control	12.92±3.10	6-00-30.00	0.68
Superstition	13.21±4.78	6.00-30.00	0.82
Luck	11.21±2.69	6.00-30.00	0.59
Fatalism tendency total score	61.82±11.55	24.00-108.00	0.85
Society's attitudes towards family planning	60.76±6.86	18.00-70.00	0.83
Attitudes towards family planning methods	48.46±8.53	15.00-60.00	0.90
Attitudes towards pregnancy	33.26±4.87	4.00-40.00	0.76
FPAS total score	142.47±17.72	42.00-170.00	0.92

Sd: Standard deviation, **Min-Max:** Minimum-Maximum

Table 3. Comparison of avarage scores Fatalism tendency scale and FPAS based on sociodemographic, obstetric and gynecologic characteristics of participant

	Fatalism tendency scale	**Family planning attitude scale**
	Mean±SD Median±Min -Max.	**Mean±SD Median±Min -Max.**
Education status		
Primary school-high school graduate	67.64±13.01	131.00(42.00-167.00)
Bachelor's degree and above	61.04±11.14	145.00(80.00-170.00)
t test - MWU/p	3.398/**0.000**	3724.50/**0.001**
Employment status		
Working	61.17±11.39	145.00±16.76(80.00-125.00)
Not working	63.34±11.82	139.00±19.25(42.00-168)
t test-MWU/p	-1.570/0.117	9422.00/**0.011**
Education status of spouse		
Primary school and high school graduate	67.64±13.01	134.00(42.00-169.00)
Bachelor's degree and above	61.04±11.14	146.00(80.00-170.00)
t test-MWU/p	3.398/**0.001**	6303.50/**0.001**
Income status		
Income less than expenditure	62.75±14.69	142.00(42.00-175.00)
Income matches expenditure	62.49±10.43	142.00(100.00-170.00)
Income more than expenditure	60.21±12.24	145.00(80.00-168.00)
ANOVA-KW/p	1.423/0.242	1.066/0.587
Status of having a planned pregnancy		
Planned pregnancy	62.02±11.39	143.00(80.00-170.00)
Unplanned pregnancy	60.17±12.92	145.00(42.00-170.00)
t test-MWU/p	0.813/0.421	5026.50/0.824
Experiencing an involuntary miscarriage		
Yes	61.67±11.75	143.00(42.00-170.00)
No.	62.76±10.38	143.00(110.00-170.00)
t test-MWU/p	-0.655/0.515	6015.50/0.311
Experiencing an induced abortion		
Yes	62.50(24.00-108.00)	143.00(42.00-170.00)
No.	63.00(42.00-79.00)	143.00(96.00-170.00)
MWU/p	3495.00/0.956	-0.80/0.42
Number of children		
No children	61.00(24.00-82.00)	146.00(96.00-170)
1 and 2	63.00(33.00-93.00)	143.00(80.00-170)
3 and above	61.00(43.00-108.00)	133.00(42.00-162.00)
KW/p	1.855/0.396	1005.00/**0.05**
The desire for family planning training		
Those who want to receive training	60.98±11.54	145.50(96.00-170.00)
Those who do not want to receive training	63.14±11.49	141.00(42.00-170.00)
t test-MWU/p	-1.703/0.090	10545.50/**0.003**
The family planning method used		
Not using family planning methods[a]	62.86±32.44	135.00(42.00-167.00)
Using modern methods[b]	61.22±11.44	146.00(96.00-170.00)
Using traditional methods[c]	62.85±9.94	141.00(80.00-170.00)
ANOVA test-KW/p	0.770/0.460	9.481/**0.009**
Pairwise comparisions (Bonferroni)		a<b, c<b

Sd: Standard deviation, **Min-Max:** Minimum-Maximum, t test: Independent t test, **KW:** Kruskal-Wallis test, **MWU:** Mann-Whitney U test, $p<0.05$.

Table 4. Fatalism tendency scale and FPAS correlation analysis

		Fatalism tendency scale	Predetermination	Personal control	Superstition	Luck	FPAS	Society's attitudes towards family planning	Attitudes towards family planning methods	Attitudes towards marriage and pregnancy
Fatalism tendency scale total score	r p	1.00								
Predetermination	r p	0.761 **0.000**								
Personal control	r p	0.413 **0.000**	0.123 **0.026**							
Superstition	r p	0.762 **0.000**	0.367 **0 .000**	0.144 **0.009**						
Luck	r p	0.633 **0.000**	0.313 **0.000**	0.210 **0.000**	0.403 **0.000**					
FPAS total score	r p	-0.386 **0.000**	-0.343 **0.000**	-0.211 **0.000**	-0.261 **0.000**	-0.207 **0.000**				
Society's attitudes towards family planning	r p	-0.373 **0.000**	-0.344 **0.000**	-0.209 **0.000**	-0.273 **0.000**	-0.156 **0.004**	0.852 **0.000**			
Attitudes towards family planning methods	r p	-0.311 **0.000**	-0.248 **0.000**	-0.202 **0.000**	-0.197 **0.000**	-0.220 **0.000**	0.911 **0.000**	0.639 **0.000**		
Attitudes towards pregnancy	r p	-0.323 **0.000**	-0.310 **0.000**	-0.142 **0.010**	-0.223 **0.000**	-0.120 **0.030**	0.795 **0.000**	0.593 **0.000**	0.600 **0.000**	1.00

r: Spearman correleation analysis, $p<0.05$.

Table 5. Factors influencing family planning attitudes

	Independent Variable	Unstandardized coefficients		Standardized coefficients	t	p	95% confidence interval	
		B	SE	ß			Lower	Upper
Model-1	Constant	182.362	4.840		37.680	0.000	172.841	191.883
	Fatalism Tendency	-0.645	0.077	-0.421	-8.383	**0.000**	-0.796	-0.494
	*Dependent Variable=Family planning attitude, R=0.421; R^2=0.174; F=70.280; p=0.000; Durbin Watson value=1.970							
Model-2	Constant	166.633	6.257		26.631	0.000	154.322	178.943
	Fatalism tendency	-0.573	0.077	-0.374	-7.483	**0.000**	-0.723	-0.422
	Education level - University graduate or higher	2.826	3.320	0.052	0.851	0.395	-3.706	9.359
	Employment status - Employed	1.743	2.027	0.045	0.860	0.390	-2.244	5.730
	Spouse's education - University graduate or higher	2.791	2.648	0.062	1.054	0.293	-2.419	8.000
	Number of children (Ref: Not having children)							
	1 and 2 children	1.442	1.917	0.040	0.752	0.452	-2.329	5.214
	3 and above children	-9.579	3.326	-0.141	-2.880	**0.004**	-16.123	-3.035
	Want to receive family planning education	3.939	1.795	0.109	2.195	**0.029**	0.408	7.469
	FP method used (Ref=Not used)							
	Modern method	5.034	1.819	0.137	2.767	**0.006**	1.455	8.612
	Conventional method	0.110	3.108	0.003	0.036	0.972	-6.004	6.225
	*Dependent Variable=Family planning attitude, R=0.495; R^2=0.224; F=11.532; p=0.000; Durbin Watson Value=1.900							

Linear regression analysis, $p<0.05$

DISCUSSION

This study aimed to identify the connection between participant's opinions on family planning and their propensity for fatalism.

The study's findings indicate that married individuals' family planning attitudes are associated with various sociodemographic and obstetric data.

In the study, women with primary and high school graduates had higher fatalism tendency scores than women with bachelor's degrees and above ($p<0.05$). In the study by Yıldırım et al. (2021), primary school graduates' mean fatalism tendency scores were statistically significantly higher. It was found that the fatalism tendency decreased as the degree of education increased. When the educational level of the spouses of the women was analyzed, it was similarly found that the fatalistic tendency score decreased as the educational level increased. Similarly a study conducted in the United States found that individuals with a high school education or lower had a higher rate of fatalistic attitudes (Jones, 2018).

In particular, fatalism emerged as one of the strongest determinants negatively influencing family planning attitudes. This finding suggests that individuals' beliefs that they have no control over events also shape their fertility decisions. In the research by Yıldırım et al. (2021), a negative correlation was discovered between FPAS and Fatalism Tendency Scale scores. Upon reviewing the literature, there is not enough research on the tendency toward fatalism. In the research by Gonie et al. (2018) in Ethiopia, religious beliefs are among the explanations for not utilizing family planning techniques. Frost et al. (2007) found that fatalistic women experienced more unprotected periods than non-fatalistic women. Similarly, Jones (2018) found that those with high pregnancy fatalism were more likely not to use birth control and have a higher desire to become pregnant (Frost et al., 2007; Jones, 2018). In this respect, the study is similar to the studies in the literature.

Another important finding is that having three or more children significantly negatively affects family planning attitudes. This result can be explained by the fact that individuals with high fertility levels no longer consider family planning necessary or interpret the current number of children as "fate." After reviewing the literature, similar to this research, there are studies in which family planning attitudes decrease as the number of children increases (Gözükara et al., 2015; Nazik, 2021). In this context, it can be argued that high fertility has physical, cognitive, and attitudinal effects. Studies have also found that those with more children have higher FPAS scores than those with fewer children (Egelioğlu-Çetişli et al., 2020). A study conducted in Ethiopia found that those with a higher number of children were more likely to use family planning methods (Gizaw & Regessa, 2011). Different results across studies may be due to different characteristics of the participants in the sample group.

Another noteworthy finding is that the desire to receive family planning education significantly positively affects individuals' attitudes. This indicates that individuals can make more informed decisions as their knowledge increases. In particular, it is noted that individual counseling and education programs on family planning encourage using methods (Naçar et al., 2003; Şengül et al., 2004). In a study conducted in the United States, birth control knowledge was found to be inversely related to unprotected sexual intercourse and positively related to the use of effective birth control methods (Frost et al., 2012).

Additionally, the study found that individuals who use modern family planning methods have more positive attitudes. Similarly, another study conducted in the United States found that those who underestimate the importance of birth control use riskier birth control methods (Frost et al., 2012). A study in the literature also shows that women who use modern methods do not have altered attitudes toward family planning (Uzunçakmak & Hepokur, 2024).

It was determined that 89.4% of pregnancies were planned. Abortions may occur as a result of ineffective FP use. According to TDHS (2018) data, the rate of voluntary abortion is 6%, and the rate of spontaneous abortion is 13%. The rate of spontaneous abortion among the participants was 14.3%, similar to the data for Türkiye. The rate of induced abortion was similarly found to be 7%.

Of the 1.9 billion women in the world who are of reproductive age (15–49), 1.1 billion are known to require family planning. Regarding contraceptive use, 842 million women (44%) use modern FP methods, while 80 million women (4%) use traditional FP methods (United Nations, 2019). According to TDHS (2018) data, 70% of married women aged 15-49 in Türkiye use any contraceptive method, and 49% of them prefer modern methods (TDHS, 2018). In our study, 86.6% of women used any method, and 62.9% preferred modern methods, which is higher than the average in Türkiye. Pekince and Yılmazer (2012) observed that as the use of modern methods by the participants increased, the number of abortions and undesired pregnancies reduced.

Study Limitations and Strengths

The reliability of the data is reduced by the fact that this study was conducted online. One of the study's key strengths is the way it highlights fatalism as a significant factor influencing attitudes towards family planning.

CONCLUSION

In conclusion, the research findings indicate that fatalistic tendencies and fertility behaviors are decisive in shaping family planning attitudes. While variables such as modern methods and demand for education can positively shape attitudes, factors such as having many children and a high level of fatalism create negative effects. These findings highlight the importance of addressing education in family planning services from both an informational and individual belief perspective. This aspect should not be overlooked in this field.

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Conflict of Interest

The author declares no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Author Contributions

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Ethical Approval

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