ARAŞTIRMA / *Research Articles*

Investigation of the Relationship Between Pre-Pregnancy Fear of Childbirth and Quality of Life and Psychological Resilience

Gebelik Öncesi Doğum Korkusunun Yaşam Kalitesi ve Psikolojik Sağlamlık ile ilişkisinin İncelenmesi

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ABSTRACT

Aim: This study aims to examine the effects of childbirth fear experienced before pregnancy on individuals' quality of life and psychological resilience levels.
Method: This descriptive study collected data from 696 participants using the Personal Information Form, the Childbirth Fear Prior to Pregnancy Scale, the Brief Resilience Scale, and WHOQOL-BREF.
Results: The participants' mean age was 20.74 ± 1.81. The mean score of the Childbirth Fear Prior to Pregnancy Scale was 37.81 ± 11.48, while the mean score of the Brief Resilience Scale was 17.76 ± 2.89. A significant positive correlation was found between the Childbirth Fear Prior to Pregnancy Scale and the Brief Resilience Scale ($r = .128$, $p < .01$). A weak negative correlation was observed between the Childbirth Fear Prior to Pregnancy Scale and WHOQOL-BREF Psychological Health subdomain ($r = -.060$, $p < .05$).
Conclusion: The findings show that fear of childbirth can develop not only during pregnancy but also in earlier periods, emphasizing the importance of early intervention and education programs to reduce this fear.

Keywords: *Pregnancy, childbirth fear, quality of life, psychological resilience*

ÖZ

Amaç: Bu çalışmanın amacı, gebelik öncesi doğum korkusunun bireylerin yaşam kalitesi ve psikolojik sağlamlık düzeyleri üzerindeki etkisini incelemektir.
Yöntem: Tanımlayıcı nitelikteki araştırmada veriler, Kişisel Bilgi Formu, Gebelik Öncesi Doğum Korkusu Ölçeği, Kısa Psikolojik Sağlamlık Ölçeği ve WHOQOL-BREF ile 696 katılımcıdan toplanmıştır.
Bulgular: Çalışmaya katılan bireylerin yaş ortalaması 20,74 ± 1,81 olarak tespit edilmiştir. Gebelik Öncesi Doğum Korkusu Ölçeği puan ortalaması 37,81±11,48, Kısa Psikolojik Sağlamlık Ölçeği puan ortalaması ise 17,76 ± 2,89 olarak belirlenmiştir. Gebelik Öncesi Doğum Korkusu Ölçeği ile Kısa Psikolojik Sağlamlık Ölçeği arasında pozitif yönde anlamlı bir ilişki ($r = .128$, $p < .01$), Gebelik Öncesi Doğum Korkusu Ölçeği ile WHOQOL-BREF - Psikolojik Sağlık arasında düşük düzeyde negatif anlamlı bir ilişki ($r = -.060$, $p < .05$) bulunmuştur.
Sonuç: Bulgular, doğum korkusunun yalnızca gebelik sürecinde değil, daha erken dönemlerde de gelişebileceğini göstererek, bu korkunun azaltılmasına yönelik erken müdahale ve eğitim programlarının önemini vurgulamaktadır.

Anahtar Kelimeler: *Gebelik, doğum korkusu, yaşam kalitesi, psikolojik sağlamlık*

1. Introduction

Birth is a natural process that involves biological, psychological, and cultural variables and is an experience that brings excitement, happiness, and fear to women at the same time (1). Fear of childbirth is a fear that affects women's health in pre-pregnancy, pregnancy, birth, and postpartum periods and can cause problems in women's relationships with their babies, partners, and families (2). Uncertainties about the birth process and negative birth experiences are considered among the important causes of fear of childbirth (3).

The perception of the birth event varies from person to person (1). Birth-related experiences are known to have potential short- and long-term physical and psychological impacts on women's lives (4). Adverse birth experiences influence women's future reproductive decisions by causing them to refuse or postpone pregnancy (5). Fear of childbirth is also seen in young single people considering a future pregnancy (6). Fear of childbirth can also occur before pregnancy and 13% of women postpone their pregnancy plans or

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avoid becoming pregnant due to fear of childbirth (7).

Pre-pregnancy fear of childbirth is an important psychological factor affecting women's birth experiences. The negative effects of this fear on quality of life and psychological resilience have been demonstrated by many studies (8, 9). Psychological resilience is a factor that determines individuals' ability to cope with stressful situations, and individuals with high levels of psychological resilience are better able to cope with negative emotional states such as fear of childbirth. The levels of stress and anxiety experienced during pregnancy are directly related to these psychological characteristics (10). In addition, fear of childbirth before pregnancy can affect women's mental health, leading to psychological problems such as depression and anxiety (11). In this context, it can be said that preconception education programs can help reduce the fear of childbirth and increase psychological resilience (9).

In a study, it was determined that women who experienced fear of childbirth felt more stress and anxiety during pregnancy, which negatively affected their general health status (12). When the literature was examined, it was observed that nursing students had fears about childbirth (1, 13), cesarean section preferences of young individuals were associated with fear of childbirth (14) and fear of childbirth was higher in nursing students exposed to information about childbirth from the media (13). Nystedt and Hildingsson (15) found that both men and women described the birth process as "painful." There are a limited number of studies in the literature examining the perceptions of single women and men about childbirth (16).

Fear of childbirth has a significant impact on women's psychological resilience and quality of life, making it difficult for them to have a healthy experience during pregnancy. The literature shows that this fear negatively affects the mental state of individuals and that education, social support, and psychological services can be effective in the management of this fear. It has been determined that there are limited studies in the literature on the fear of childbirth in adolescents in the pre-pregnancy period. In this study, the effects of fear of childbirth experienced before pregnancy on individuals' quality of life and psychological resilience were examined. This study aims to fill the gap in the literature by examining the effects of fear of childbirth experienced in the pre-pregnancy period on individuals' quality of life and psychological resilience. The findings obtained will contribute to the development of education, psychosocial support, and awareness programs by revealing that fear of childbirth should be addressed not only during pregnancy but also from an early age. Thus, it aims to help women manage the birth process in a more conscious, controlled, and healthy way and to support them in having more positive birth experiences in the future.

2. MATERIALS AND METHODS

2.1. Type of Research

The research is descriptive study.

2.2. Study Population and Sample

The population of the study consisted of individuals over the age of 18 studying at a foundation university in Konya province. The sample size of the study was determined as 696 people with an effect size of 0.12, 95% power, and 5% margin of error, based on the "Brief Resilience Scale" score in the study conducted by Alibekiroğlu, Akbaş (17) with university students with the G*Power 3.1 package program. People who voluntarily agreed to participate in the study, who were at least primary school graduates, who had no communication problems, who did not have a systemic/chronic diagnosed psychiatric disease, who had not experienced pregnancy before, and who did not have children, were included in the study. Data were collected by the purposive sampling method between March 1, 2024, and September 20, 2024.

2.3. Data Collection Tools

The Personal Information Form, the Fear of

Childbirth Before Pregnancy Scale (CFPPS), the Brief Resilience Scale, and WHOQOL-BREF (Tr) (World Health Organization Quality of Life Scale-Short Form) were used to collect the data.

2.3.1. Personal Information Form: The personal information form, which the researchers created by reviewing the literature (16, 18), included 8 questions about the sociodemographic characteristics of the participants (age, gender, employment status, income level, place of residence) and their views on pregnancy/ childbirth (the thought of having a child in the future, the type of birth they thought to prefer in the future, and having negative birth memories).

2.3.2. Childbirth Fear-Prior to Pregnancy Scale (CFPPS): Preconception Fear of Childbirth Scale is a measurement tool developed by Stoll, Hauck Stoll, Hauck (19) to assess the fear of childbirth in young women and men before pregnancy. The scale includes 5 dimensions that most commonly cause fear of childbirth in young women and men: birth pain, loss of control, inability to cope with birth pain and labor, complications, and irreversible physical damage. The measurement tool consists of ten items, and each item is a 6-point Likert-type scale scored from 1 to 6. The scale is scored as ‘’strongly disagree (1)’’, ‘’disagree (2)’’, ‘’partially disagree (3)’’, ‘’partially agree (4)’’, ‘’agree (5)’’, ‘’strongly agree (6)’’. The minimum score that can be obtained from the measurement tool is 10 and the maximum score is 60. A high score on the scale indicates a high level of fear. Cronbach’s alpha value of the scale was reported as 0.86. The validity and reliability study of the scale for Turkey was conducted by Uçar and Taşhan (20) with 543 female and 557 male university students (1100 in total). The Turkish version of the scale was divided into two parts women and male forms, and was presented as the Women Childbirth Fear – Prior to Pregnancy Scale (WCF-PPS) with 10 items and a 6-point Likert scale for women gender and the Men Childbirth Fear – Prior to Pregnancy Scale (MCF-PPS) with 10 items and a 6-point Likert scale for male gender. Although the female and male forms of the scale contain the same questions, the items in the male form include the term “spouse”. In the Turkish validity and reliability study of the scale, Cronbach’s alpha internal consistency coefficients were reported as 0.89 for the WCF-PPS and 0.84 for the MCF-PPS. In this study, the total scale Cronbach’s alpha internal consistency coefficients was calculated as 0.90 for WCF-PPS and 0.86 for the MCF-PPS.

2.3.3. Brief Resilience Scale (BRS): The Brief Resilience Scale is a scale that aims to measure the ability of individuals to recover, heal, return to their former functionality, and re-adapt. The scale developed by Smith, Dalen (21) was adapted into Turkish by, Doğan (22), and Cronbach’s alpha coefficient was determined as 0.83. The BRS is a 5-point Likert-type unidimensional scale consisting of 6 items. The scale items are graded from “Not at all appropriate” (1) to “Completely appropriate” (5) and items 2, 4, and 6 are reverse coded. The higher the score obtained from the scale, the higher the level of psychological resilience. In this study, the Cronbach’s alpha coefficient of the scale was calculated as 0.78.

2.3.4. World Health Organization Quality of Life Scale-Short Form (WHOQOL-BREF): The WHOQOL-BREF scale consists of a total of 26 questions, including two questions about the general perceived quality of life and two questions about perceived health status, and 4 domains: physical, psychological, social relations and environmental domains. The scale consists of 5 sub-dimensions. These sub-dimensions are General Health (1, 2), Physical Health (3, 4, 10, 15, 16, 17, 18), Psychological Health (5, 6, 7, 11, 19, 26), Social Relations (20, 21, 22) and Environment (8, 9, 12, 13, 14, 23, 24, 25). This scale has no total score. Each section and domain scores a maximum of 20 points or 100 points. Since the development of the WHOQOL-BREF was a multinational project based on a cross-culturally sensitive concept, it is suitable for use by different nationalities (23). Turkish adaptation studies of WHOQOL-BREF were conducted by Eser, Fidaner (24). In the Turkish adaptation of the scale, there is one more question about the environment, and it includes 27 questions in total. Cronbach Alpha internal consistency coefficients

of the scale were obtained as 0.76 for physical quality of life, 0.67 for psychological quality of life, 0.56 for social quality of life, and 0.74 for environmental quality of life (24). In this study, Cronbach's alpha internal consistency coefficients of the scale were obtained as general health (0.58), physical quality of life 0.71, psychological quality of life 0.73, social quality of life 0.54, and environmental quality of life 0.79.

2.4. Data Evaluation

Statistical analysis of the data obtained was performed with the SPSS 25.0 program. In descriptive analyses, frequency, percentage distribution, and mean ± standard deviation were calculated to provide information about the general characteristics of the participants. Whether the scale score

s, which are quantitative variables, have a normal distribution was evaluated using the Kolmogorov-Smirnov test. Independent samples t-test was used for comparisons between groups. Analysis of Variance (ANOVA) was used to analyze variables with more than two categories. The relationship between the CFPPS, Brief Resilience Scale, and WHOQOL-BREF (Tr) (World Health Organization Quality of Life Scale-Short Form) was calculated by correlation analysis. Significance was evaluated at the $p < .05$ level.

2.5. Ethic

Permission dated 2022/09 and numbered 2022/040 was obtained from ***** University Drug and Non-Medical Device Research Ethics Committee for the conduct of the research. Individuals who agreed to participate in the study were given detailed information about the study and their written informed consent was obtained. Permission was obtained from the authors of CFPPS (20), BRS (22), and WHOQOL-BREF (Tr) (24) via e-mail.

3. RESULTS

Table 1 shows the relationship between the socio-demographic characteristics of the participants and their mean CFPPS scores. The mean age of the individuals participating in the study was 20.74 ± 1.81 years. In terms of gender, the mean CFPPS score of female participants (**X**=39.62, SD=11.50) was significantly higher than that of males (**X**=34.75, SD=10.80) ($p<0.001$). No significant difference was found in terms of employment status, income level, and place of residence ($p > 0.05$). No significant relationship was observed between the desire to have children in the future and CFPPS scores ($p > 0.05$). The mean score of those who preferred vaginal delivery (X = 37.07, SD = 11.24) was significantly lower than that of those who preferred cesarean section (X = 41.42, SD = 11.96) ($p<0.001$). Participants who heard negative birth memories (X = 39.19, SD = 11.59) scored higher than those who did not (X = 37.16, SD = 11.38) ($p = 0.029$). These findings suggest that socio-demographic characteristics may have significant effects on CFPPS scores (Table 1).

Table 2 shows the participants' mean scores for the CFPPS, BRS, and WHOQOL-BREF scale sub-dimensions. The mean CFPPS score of the participants was 37.81 (SD = 11.48). The mean score of the participants on the Brief Resilience Scale was 19.45 (SD = 4.83). Considering the sub-dimensions of the WHOQOL-BREF scale, the mean score for general health was 61.67 (SD = 19.46), the mean score for physical health was 64.72 (SD = 16.53), and the mean score for psychological health was 59.65 (SD = 17.55). The mean score was 64.30 (SD = 21.11) in the social relations sub-dimension and 63.68 (SD = 17.19) in the environment sub-dimension (Table 2).

When Table 3 is examined, a significant difference was observed in the brief resilience scale scores between male and female participants in terms of gender ($p= 0.669$). The mean score of female participants ($\bar{X}$ = 17.73 ± 2.82) was lower than the mean score of male participants ($\bar{X}$ = 17.82 ± 3.00). In terms of employment status, there was a significant difference in psychological resilience scores between employed and unemployed participants ($p =0.605$). The score of the employed participants ($\bar{X}$ =17.88±2.94) was higher than the score of the non-employed participants ($\bar{X}$ =17.74 ±2.87). In terms of income level, there was no significant difference in psychological

resilience scores between low, middle, and high income groups (p = .060). No significant difference was observed in the comparison made in terms of place of residence (province or district) (p = .717). There was no significant difference between the psychological resilience scores in terms of the thought of having children in the future (p = .932). No significant difference was found between the psychological resilience scores in terms of the type of birth of the future spouse (vaginal delivery or cesarean section) (p = .392). A significant relationship was observed between having negative birth memories and psychological resilience scores (p = .076). Having negative birth memories was determined as an effective factor in the psychological resilience scores of the participants (Table 3).

Table 1. Comparison of participants' sociodemographic characteristics and mean CFPPS scores (n=696), Konya-2020

Sociodemographic characteristics	**n (%)**	**X±SD**	**Test-p**
Sex			
Female	438 (62.9)	39.62±11.50	**t=5.511**
Male	258 (37.1)	34.75±10.80	**p<0.001**
Employment status			
Yes	126 (18.1)	36.62±10.73	t=1.287
No	570 (81.9)	38.08±11.63	p=0.199
Income level			
Low	102 (14.7)	36.16±11.85	F=1.792
Middle	444 (63.8)	37.81±11.14	P=0.167
High	150 (21.6)	38.95±12.14	
Place of residence			
Province	609(87.5)	37.50±11.59	t=1.899
District	87 (12.5)	40.00±10.45	p=0.58
Having children in the future			
Yes	601 (86.4)	37.70±11.09	t=0.647
No	95 (13.6)	38.52±13.72	p= 0.518
Future partner's/own mode of delivery			
Vaginal Birth	577 (82.9)	37.07±11.24	**t=3.795**
Cesarean section	119 (17.1)	41.42±11.96	**p<0.001**
Hearing negative birth memories			
Yes	224 (32.2)	39.19±11.59	**t=2.188**
No	472 (67.8)	37.16±11.38	**p=0.029**

**N: Number; %: Percentage; X: Mean; SD: Standard Deviation; t: Independent t test; F: Anova F-test*

Table 2. Mean scores of participants in CFPPS, BRS, and WHOQOL-BREF subscales (n=696),Konya-2020

Scale	X±SD	Min-Max score values that can be obtained	Min-Max score values received
CFPPS	37.81±11.48	10-60	10-60
BRS	17.76±2.89	6-30	6-30
WHOQOL-BREF-General Health	61.67±19.46	2-10	2-10
WHOQOL-BREF-Physical Health	64.72±16.53	7-35	7-35
WHOQOL-BREF-Psychological Health	59.65±17.55	6-30	7-30
WHOQOL-BREF-Social Relationships	64.30±21.11	3-15	3-15
WHOQOL-BREF-Environment	63.68±17.19	8-40	8-40

**X: Mean; SD: Standard Deviation*

Table 3. Comparison of participants' socio-demographic characteristics and mean BRS scores (n=696, Konya-2020)

Sociodemographic characteristics	n (%)	X±SD	Test-p
Sex			
Female	438(62.9)	17.73±2.82	t:0.428
Male	258(37.1)	17.82±3.00	p=0.669
Employment status			
Yes	12618.1)	17.88±2.94	t:0.517
No	570(81.9)	17.74±2.87	p=0.605
Income level			
Low	102(14.7)	17.43±3.01	F:2.818
Middle	444(63.8)	17.68±2.79	p=0.060
High	150(21.6)	18.23±3.03	
Place of residence			
Province	609(87.5)	17.75±2.94	t:0.363
District	87(%12.5)	17.87±2.47	p=0.717
Having children in the future			
Yes	601(86.4)	17.77±2.90	t:0.085
No	95(13.6)	17.74±2.77	p=0.932
Future partner's/own mode of delivery	577(82.9)	17.72±2.88	t:0.856
Vaginal Birth	119(17.1)	17.97±2.91	p=0.392
Cesarean section			
Hearing negative birth memories			
Yes	224(32.2)	17.48±2.60	t:1.775
No	472(67.8)	17.90±3.00	p=0.076

**N: Number; %: Percentage; X: Mean; SD: Standard Deviation; t: Independent t test; F: Anova F-test*

Table 4 compares the sociodemographic characteristics of the participants and the mean scores of the WHOQOL-BREF scale sub-dimensions. In terms of gender, the general health score of female participants ($\bar{X}$ = 60.38 ± 18.59) was significantly lower than that of male participants ($\bar{X}$ = 63.85 ± 20.73) (p = .023). In the dimensions of physical health, psychological health, and social relationships, male participants scored higher than female participants (p values respectively: p < .001; p < .001; p = .059). In terms of employment status, employed participants had significantly higher scores in general health ($\bar{X}$ = 63.19 ± 22.20), physical health ($\bar{X}$ = 66.41 ± 15.39), psychological health ($\bar{X}$ = 63.22 ± 16.80) and social relationships ($\bar{X}$ = 67.46 ± 21.76) sub-dimensions compared to non-employed participants (p = .333; p = .207; p = .012; p = .064). Significant differences were found between income level and WHOQOL-BREF scale sub-dimensions. The overall health score of the participants in the low-income group ($\bar{X}$ = 55.39 ± 22.83) was significantly lower than that of the middle ($\bar{X}$ = 61.14 ± 17.76) and high-income group ($\bar{X}$ = 67.50 ± 20.37) (p < .001). Similarly, a significant relationship was observed with income level in other sub-dimensions. In terms of place of residence, social relations ($\bar{X}$ = 64.95 ± 21.17) and environment scores ($\bar{X}$ = 64.31 ± 17.02) of participants living in the province were higher than those living in the district ($\bar{X}$ = 59.77 ± 20.34; $\bar{X}$ = 59.26 ± 17.87) (p = .032; p = .010). In terms of the thought of having children in the future, participants who planned to have children had higher levels of general health ($\bar{X}$ = 62.54 ± 19.01), physical health ($\bar{X}$ = 65.49 ± 16.08), psychological health ($\bar{X}$ = 60.31 ± 17.05), social relationships ($\bar{X}$ = 65. 33 ± 20.53) and environment scores ($\bar{X}$ = 64.14 ± 16.76) significantly higher than the participants who did not plan to have children in the future (p values respectively: p = .003; p = .002; p = .013; p = .001; p = .075). There was no significant difference between the scores in terms of the

mode of delivery of the future partner (vaginal delivery or cesarean section) (p>0.05). Finally, a significant difference was observed between having negative birth memories and WHOQOL-BREF scale sub-dimensions. The general health score of the participants who had negative birth memories ($\bar{X}$ = 58.81 ± 18.76) was significantly lower than the participants who did not have negative birth memories ($\bar{X}$ = 63.02 ± 19.67) (p = .008). A significant difference was also observed between physical health scores and environmental scores (p: 0.010; p = .034), (Table 4).

Table 4. Comparison of sociodemographic characteristics of the participants and mean scores of WHOQOL-BREF subscales (n=696), Konya 2020

X±SD	General Health	Physical health	Psychological health	Social relations	Environment
Sex					
Female	60.38±18.59	63.20±16.49	57.62±17.18	63.14±20.66	63.25±16.68
Male	63.85±20.73	67.31±16.34	63.09±17.70	66.27±21.80	64.40±18.05
t/p	**t:2.276 p=0.023**	**t:3.190 p<0.001**	**t:4.010 p<0.001**	t:1.892 p:0.059	t:0.848 p:0.397
Employment status					
Yes	63.19±22.20	66.41±15.39	63.22±16.80	67.46±21.76	64.58±17.81
No	61.33±18.82	64.35±16.78	58.86±17.64	63.61±20.94	63.48±17.07
t/p	t:0.968 p:0.333	t:1.263 p:0.207	**t:2.532 p:0.012**	t:1.854 p:0.064	t:0.650 p:0.516
Income level					
Low	55.39±22.83	60.39±17.96	55.43±18.39	60.13±23.53	54.44±20.44
Middle	61.14±17.76	64.51±15.62	59.14±17.05	62.16±20.46	62.72±15.58
High	67.50±20.37	68.28±17.51	64.02±17.67	73.50±18.74	72.79±15.17
F/p	**F:12.586 p<0.001**	**F:7.115 p<0.001**	**F:7.935 p<0.001**	**F:19.453 p<0.001**	**F:40.574 p<0.001**
Place of residence					
Province	61.78±19.44	65.07±16.36	59.72±17.64	64.95±21.17	64.31±17.02
District	60.91±19.79	62.27±17.67	59.19±17.07	59.77±20.34	59.26±17.87
t/p	t:0.386 p:0.700	t:1.479 p:0.140	t:0.262 p:0.794	**t:2.147 p:0.032**	**t:2.568 p:0.010**
Having children in the future					
Yes	62.54±19.01	65.49±16.08	60.31±17.05	65.33±20.53	64.14±16.76
No	56.18±21.48	59.88±18.59	55.48±20.08	57.80±23.65	60.75±19.62
t/p	**t:2.973 p:0.003**	**t:3.086 p:0.002**	**t:2.502 p:0.013**	**t:3.249 p:0.001**	t:1.786 p:0.075
Future partner's/ own mode of delivery					
Vaginal Birth	62.13±19.02	65.26±16.60	59.90±17.57	64.29±20.68	63.62±17.14
Cesarean section	59.45±21.46	62.12±16.08	58.43±17.53	64.35±23.29	63.97±17.54
t/p	t:1.367 p:0.172	t:1.887 p:0.060	t:0.831 p:0.406	t:0.027 p:0.978	t:0.202 p:0.840
Hearing negative birth memories					
Yes	58.81±18.76	62.37±16.68	57.81±17.18	62.46±21.43	61.67±17.50
No	63.02±19.67	65.84±16.38	60.53±17.68	65.18±20.95	64.63±16.99
t/p	**t:2.678 p:0.008**	**t:2.597 p:0.010**	t:1.912 p:0.056	t:1.589 p:0.113	**t:2.122 p:0.034**

**N: Number; %: Percentage; X: Mean; SD: Standard Deviation; t: Independent t test; F: Anova F-test*

Table 5. The relationship between CFPPS, BRS, and WHOQOL-BREF sub-scale mean scores of the participants (n= 696), Konya-2020

Scale	*1*	*2*	*3*	*4*	*5*	*6*	*7*
CFPPS	—						
BRS	*.128***	—					
WHOQOL-BREF-General Health	*.039*	*.141***	—				
WHOQOL-BREF-Physical Health	*-.057*	*.058*	*.478***	—			
WHOQOL-BREF-Psychological Health	*-.060*	*.090***	*.515***	*.600***	—		
WHOQOL-BREF-Social Relationships	*-.029*	*.055*	*.311***	*.469***	*.521***	—	.
WHOQOL-BREF-Environment	*-.009*	*.163***	*.547***	*.602***	*.601***	*.523***	—

**N = 696; p < .01.*

There is a significant positive correlation between CFPPS and BRS (r = .128, p < .01). There is a very low level, positive but non-significant relationship between CFPPS and WHOQOL-BREF - General Health (r = .039, p > .05); a low level, negative but non-significant relationship between WHOQOL-BREF - Physical Health (r = -.057, p > .05); a low level, negative significant relationship between WHOQOL-BREF - Psychological Health (r = -. 060, p < .01); a very low level negative but not significant relationship between WHOQOL-BREF - Social Relationships (r = -.029, p > .05); a very low level negative but not significant relationship between WHOQOL-BREF - Environment (r = -.009, p > .05), (Table 5).

4. DISCUSSION

This study was conducted to evaluate the effects of fear of childbirth experienced before pregnancy on individuals' quality of life and psychological resilience. The findings of the study show that the mean CFPPS scores of the participants are affected by various factors such as gender, future mode of delivery of self/partner, and negative birth memories; the psychological resilience levels of the participants are related to factors such as income level and negative birth memories; and the quality of life of the participants is affected by factors such as gender, employment status, income level, place of residence, future childbearing, and negative birth memories.

According to our study findings, the mean CFPPS score of female students was 39.62±11.50, the mean CFPPS score of male students was 34.75±10.80 and the difference between the mean scores was statistically significant (p=0.0001). In the literature, studies using the pre-pregnancy fear of childbirth scale to determine fear of childbirth were examined; Hildingsson, Rubertsson (25) reported that the mean total score of the scale was 38.42 ± 28.49 in their study with women of childbearing age, and, Swift, Gottfredsdottir (26) reported that the mean total score of the scale was 35.76 ± 9.53 in their study with female university students. In a study conducted by Gür, Uzun Özer (27), the mean CFPPS total score of women was 40.25±11.04 and that of men was 33.83±9.76, and the difference between the mean CFPPS scores of the participants was reported to be statistically significant (p=0.0001). Yüksel, Kışla (28) in their study, midwifery students reported a mean CFPPS score of 35.03 ± 9.19 (28). In a study by Kaymaz and Aktaş (29), the mean total score of women on the WCF-PPS was 37.86 ± 11.03 and the mean total score of men on the MCF-PPS was 35.54 ± 10.03. Avcıbay, Köroğlu (30) reported that the mean score of the WCF-PPS was 40.58 ± 9.61 and the mean score of the MCF-PPS was 34.89 ± 9.88, that women had higher levels of fear of childbirth and that there was a difference between the mean scale scores according to gender (p = .001). In a study conducted by Güleç Satır (31), the mean total score of the students on the WCF-PPS was reported as 41.7±8.3. In another study conducted with university students, the mean pre-pregnancy

fear of childbirth scores of young people were found to be 36.89 ± 9.26 for females and 31.50 ± 7.26 for males (32). When the mean scores of fear of childbirth before pregnancy were compared, it was stated that the difference between the mean scores of fear of childbirth of young women and men was significant (p<0.001). Žigić Antić, Nakić Radoš (33) 25.9% of the universities operating in the year reported fear of childbirth at a clinical level. It is known that the fear of childbirth kills approximately one in four young female students who have never been pregnant (33). All these results; shows that young women and men who plan to have children in the future experience fear of childbirth even before pregnancy.

Studies have focused on examining the attitudes towards birth of young women and men who want to have children in the future (34-36), and it has been shown that there is a positive relationship between the fear of childbirth experienced by young women and men and the interventions to be performed at their discretion, such as cesarean section during birth (35, 36). It is known that the fear of childbirth experienced during the pre-pregnancy period is effective in individuals' birth type preferences (37). According to our study findings, a statistically significant difference was detected between the participants' future birth preferences and their CFPPS score averages (p = 0.0001). It was determined that the majority of individuals participating in the study considered normal birth. Similar to our study findings, (31) reported in his study that 67.7% of the students stated that they wanted to have a normal birth, and a significant relationship was found between the students' fear of birth and birth preferences (p<0.05). Gür, Uzun Özer (27) reported in their study that there was a statistically significant difference between participants' future birth preferences and CFPPS mean scores (p = 0.0001). It has also been stated that the majority of women and men prefer normal birth in the future. Avcıbay, Köroğlu (30) report in their study that the majority of young people stated that they would prefer vaginal birth in the future. In the study of Aksu and Özsoy (38), 88.1% of nursing and midwifery students, Aydoğdu et al. (2018) study, 80.7%, Tektaş ve ark. (2018) study, 87.7% preferred normal birth. In their study by Kaymaz and Aktaş (29), it was determined that 84.9% of young women wanted to have a normal birth in the future, while 94.0% of young men wanted their husbands to have a normal birth in the future. In his qualitative study, Bilgin (39) reported that the majority of women who are young nurse candidates prefer normal birth.

Fear of childbirth in women is generally common in nulliparous women who will become mothers for the first time (8). It is known that nulliparous women tend to experience a higher level of fear of birth compared to multiparous women (40). According to our study findings, the CFPPS mean score of the participants who had negative birth memories (M=39.19, SD=11.59) was found to be higher (p=0.029) than those who did not (M=37.16, SD=11.38). It has been stated that women who have no birth experience, who hear negative birth stories from their environment, or who have had negative birth experiences in the past have higher levels of fear (41). Avcıbay, Köroğlu (30) listened to negative birth stories and it was determined that women's fear of childbirth was a predictive factors. In the study conducted by Yüksel, Kışla (28), it was stated that there was a significant difference between the negative birth events of midwifery students and CFPPS. Our study findings are similar to the literature.

According to our study findings, the mean BRS score of the participants was found to be 19.45 (SD = 4.83) at a moderate level. The mean score of female participants ($\bar{X}$ = 17.73 ± 2.82) was found to be lower than the mean score of male participants ($\bar{X}$ = 17.82 ± 3.00); However, it was observed that the difference was not statistically significant. In addition, characteristics such as income level and negative birth memory were found to be effective in psychological resilience. Similar to our study findings (42) reported that the average BRS score of the students was 15.29 ± 4.00. In the studies of Gezgin Yazıcı and Ökten (43), the mean scores of the BRS were reported as 17.02 ± 4.15. According to the results of different studies conducted with university students in the literature, the psychological resilience score of

the students was found to be above the medium and medium level (44-46). Similar to our study findings, Aydın and Egemberdiyeva (45) found that the mean scores of BRS level of female students ($\bar{X}$= 18.54; SD = 4.39) and the mean scores of the BRS level of male students ($\bar{X}$= 18.96; SD = 5.03) was not statistically significant (t=.57; p>.05). Studies show that there is no significant difference between the mean BRS scores according to the gender variable (45, 47, 48). The findings of the study are similar to the literature. Considering that the responsibilities of men and women are generally at similar levels today, this may eliminate the impact of gender roles on psychological resilience. From this perspective, it can be concluded that gender roles do not have a significant effect on psychological resilience.

According to our study findings, when the sub-dimensions of the WHOQOL-BREF scale were examined, the mean general health score was 61.67 (SD = 19.46), the mean physical health score was 64.72 (SD = 16.53) and the mean psychological health score was 59.65 (SD = 17.55). The mean score was 64.30 (SD = 21.11) in the social relations sub-dimension and 63.68 (SD = 17.19) in the environment sub-dimension. The findings of the study are similar to the literature (49, 50). In our study, the characteristics of the general health and physical health sub-dimension such as gender, income level, thought of having children in the future and negative birth memory, gender, employment status, income level, and the thought of having children in the future, income level of the psychological health sub-dimension, income level of the social relations sub-dimension, place of residence and the thought of having children in the future, and the income level of the environment sub-dimension, It was determined that characteristics such as the place of residence and negative birth memory were related. In a study conducted with the quality of life scale, a significant increase was observed in the physical area, mental area, and environmental area scores as the grade levels of the students increased ($p<0.001$, $p=0.025$, and $p<0.001$, respectively). The gender variable, on the other hand, showed a significant relationship only with environmental area scores; In this context, it was determined that the mean environmental area score of women was higher than that of men ($p=0.002$)(51).

The effects of fear of childbirth on psychological health are frequently examined in the literature. For example, Kılıç and Yılmaz (2022) examined the relationship between fear of childbirth and psychosocial health in primiparous pregnant women and found that decreased fear of childbirth increased psychosocial health levels (52) . This finding suggests that fear of childbirth may have negative effects on psychological resilience. Therefore, managing fear of childbirth may be a supportive factor for women's psychological resilience. On the other hand, the effect of psychological resilience on fear of childbirth should also be considered. Psychological resilience may contribute to the reduction of fear of childbirth by improving individuals' ability to cope with stressful situations. Kaya and Yağan's (2022) study revealed that psychological resilience plays a mediating role in the relationship between coping through humor and psychological well-being (53). This suggests that psychological resilience may be an important factor in coping with stressful experiences such as fear of childbirth. When the study findings were analyzed, it was observed that there was a significant positive correlation between CFPPS and BRS ($r = .128$, $p < .01$). The finding of a significant positive correlation between CFPPS and BRS in our study reveals a different result from previous studies on the relationship between fear of childbirth and psychological resilience. This difference may be primarily due to the sample characteristics; because individuals' sociodemographic structures, pregnancy experiences and psychological characteristics may affect the way they perceive and manage fear of childbirth. In addition, the content of the scales used and how they were understood by the participants may also be determinative of the results; for example, while the BRS assessed only the capacity to cope with stress, psychological resilience may have been addressed in a broader framework in some studies. In addition, fear of childbirth may

be seen not only as a negative experience but also as a process that increases an individual's preparedness and awareness; individuals who are more psychologically resilient may cope more effectively with fear of childbirth by considering it as a manageable source of stress. Cultural and environmental factors may also play an important role in this relationship; in some societies, fear of childbirth may be transformed into an experience that increases psychological resilience through mechanisms such as health services, family support, and educational programs. Therefore, the findings of your study suggest that the effect of fear of childbirth on psychological resilience is not unidirectional and may vary depending on the individual's coping mechanisms and perception.

This study highlights the effects of fear of pre-pregnancy childbirth on women's quality of life and psychological resilience and reveals that more research is needed in this area.

5.CONCLUSIONANDRECOMMENDATIONS

This study makes contributions to the literature by revealing the effects of fear of pre-pregnancy birth on the psychological resilience and quality of life of individuals on birth preferences. In particular, it is recommended to plan training programs to reduce the fear of childbirth and to carry out social awareness activities to reduce negative birth memories. In addition, it is thought that strengthening interventions that increase the level of psychological resilience and strengthening social support will be effective in improving the quality of life of individuals. In future research, the generalizability of the findings can be increased by studying larger samples and different cultural contexts.

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