



Research Article

Life Satisfaction, Psychological Resilience, and Spiritual Well-Being Levels of Pregnant Women

Elif Keten Edis¹
Amasya University

Sümeyye Bal²
Ondokuz Mayıs University

¹ Asst. Prof., Department of Nursing, Faculty of Health Sciences, Amasya University, Amasya, Türkiye. E-mail: elifketen05@gmail.com

² Dr. Lecturer, Department of Midwifery, Faculty of Health Sciences, Ondokuz Mayıs University, Samsun, Türkiye. E-mail: sumeyyebal@gmail.com

Abstract

Pregnancy is a period in a woman's life with physical, psychological, and social changes. This study aimed to examine the resilience, life satisfaction, and spiritual well-being levels in pregnant women. This descriptive and cross-sectional study was conducted on 380 pregnant women who applied to the obstetrics and gynecology outpatient clinics of a hospital Black Sea region of Türkiye between June and August 2023. The data were collected using an Introductory Information Form, Brief Resilience Scale, Satisfaction with Life Scale, and Spirituality Index of Well-Being. Data analysis was done in the SPSS program. Results showed that the mean resilience and life satisfaction scores of pregnant women were moderate, whereas the mean spiritual well-being scores were at good levels. There was a weak positive correlation between resilience and life satisfaction and a weak negative correlation between spiritual well-being and resilience. Additionally, resilience was higher in first-time pregnant women than those experiencing their second or subsequent pregnancies. Moreover, life satisfaction was higher in women with planned pregnancies and those whose income was equal to their expenses. Finally, spiritual well-being was lower for women older, those with lower education levels, and those with more income than expenses. Resilience, life satisfaction, and spiritual well-being should be evaluated in prenatal follow-ups.

Keywords:

Pregnancy • Psychological resilience • Life satisfaction • Spirituality well-being

Corresponding author:

Elif Keten Edis

E-mail: elifketen05@gmail.com

eISSN: 2458-9675

Received: 08.03.2024

Revision: 22.05.2024

Accepted: 27.05.2024

©Copyright 2024 by Author(s)

Citation: Edis, E. K. & Bal, S. (2024). Life satisfaction, psychological resilience, and spiritual well-being levels of pregnant women. *Spiritual Psychology and Counseling*, 9(3), 241–257. <http://doi.org/10.37898/spiritualpc.1449307>



Introduction

Pregnancy is a unique and important life experience for women and causes many biopsychosocial changes. Although pregnancy is recognized as a pleasant and developmental period in a woman's life, the physical, psychological, and social changes, and stressful and challenging life events during this period can make women vulnerable (Kazemi et al., 2017). Therefore, pregnancy is a period that requires adaptation, and requiring good resilience, life satisfaction, and spiritual well-being in pregnant women.

Resilience is a concept tightly connected with maintaining overall well-being throughout life and can be a potent factor in effectively managing pregnancy-related challenges. Resilience, on the other hand, refers to the ability to adapt to life's challenges and encompasses qualities such as inner strength, competence, and flexibility (Alves et al., 2021). Higher resilience in the face of challenges supports individuals in realizing their potential and exhibiting positive, desired, and harmonious behaviors in their lives (Ölmez & Karadağ, 2022). Therefore, maintaining high resilience during pregnancy which is an important psychosocial adjustment period becomes crucial for adapting to the changes that naturally arise from pregnancy and motherhood (Alves et al., 2021).

Life satisfaction is an integral component of resilience and is an overall assessment of one's life conditions over a certain period. The changes that occur during pregnancy can be challenging for some pregnant women and may affect their life satisfaction (Kazemi et al., 2017). Several factors, including social support, having a planned pregnancy, mother's age, education level, economic status, and number of children affect life satisfaction (Abujilban et al., 2017; Gebuza et al., 2014; Kumcağız, 2016). Social support, meeting material and spiritual needs, and maintaining a positive perspective during pregnancy can enhance life satisfaction. However, negative emotions, thoughts, and unfavorable pregnancy experiences can diminish life satisfaction (Gebuza et al., 2014). Pregnancy is a period characterized by stress and anxiety (Isaacs & Andipatin, 2020). However, individuals with higher levels of life satisfaction were reported to experience lower levels of stress and anxiety (Oosterveer et al., 2014).

Another method to cope with substantial life changes is spirituality (Kazemi et al., 2017; Piccinini et al., 2021). Spirituality motivates individuals to seek out elements they consider sacred in their lives as well as to make sense of or transform their lives (Toledo et al., 2021). Spiritual well-being is a dimension of individual well-being that can be regarded as an indicator of a person's quality of life. High spirituality helps individuals overcome life's inconsistencies, which in turn can enhance life satisfaction (Niaghiha et al., 2019). One of the most important functions of spiritual well-being is to mitigate physical and psychological damages caused by stressful life events

encountered throughout one's lifespan (Ölmez & Karadağ, 2022). Spiritual well-being helps in coping with stress, has a positive impact on mental health, and contributes to increased physiological well-being (Bilgiç & Bilgin, 2021; Piccinini et al., 2021). This is why spirituality is considered one of the important resources for coping with challenges and anxiety experienced during pregnancy (Bilgiç & Bilgin, 2021; Kazemi et al., 2017). Furthermore, spiritual well-being creates psychological experiences such as inner peace, happiness, hope, and a sense of purpose, thereby contributing to increased life satisfaction (Niaghiha et al., 2019). It was indicated that negative spiritual well-being during pregnancy is associated with higher levels of depressive symptoms, anxiety, stress, and lower life quality; whereas, positive spiritual well-being is linked to higher life quality (Piccinini et al., 2021).

Present Study

During pregnancy, concerns are mostly focused on physical problems and other aspects of health might be neglected. However, previous studies have reported that problems including stress, anxiety, and depression experienced during pregnancy are associated with negative pregnancy outcomes (Isaacs & Andipatin, 2020). Therefore, it is important to maintain the psychological and spiritual well-being of pregnant women as well as their physical well-being. Resilience and spiritual well-being have a protective effect against challenging life experiences and significantly influence the preservation of women's overall well-being (Armans et al., 2020; Bilgiç & Bilgin, 2021).

Previous studies examined different aspects of resilience, life satisfaction, and spiritual well-being of pregnant women. In many studies, resilience, life satisfaction, and spiritual well-being were examined regarding variables such as quality of life, health promotion behaviour, social support, perceived stress, anxiety, prenatal depression, religious coping, prenatal attachment, and fear of birth (Chehrizi et al., 2021; Gebuza et al., 2014; Karagöz, 2022; Piccinini et al., 2021; Sade & Özkan, 2020; Tuxunjiang et al., 2023; Yaylaoğlu & Zengin, 2023). Rafati et al. (2023) observed a negative correlation with spiritual well-being in pregnant women exposed to domestic violence. Tuxunjiang et al. (2023) determined a negative correlation between resilience and anxiety in pregnant women. Another research investigated the relationship between religious and spiritual beliefs and symptoms of depression, anxiety, stress, and quality of life (Piccinini et al., 2021). However, only a limited number of studies in the literature have examined the relationship between these concepts (Afrashteh et al., 2024; Niaghiha et al., 2019; Ruseckienė et al., 2021). It is critical to investigate these concepts, given their impact on pregnancy outcomes.

Although women experience psychosocial changes during pregnancy that can be stressful, prenatal care services primarily concentrate on physical well-being and routine follow-ups, but there is a need for incorporating psychosocial assessments.

Increasing knowledge about resilience, life satisfaction, and spiritual well-being in pregnant women can enable effective interventions to improve women's psychosocial health and provide better quality care.

Purpose

In this study, we aimed to investigate the levels of resilience, life satisfaction, and spiritual well-being among pregnant women and to explore the relationship between these concepts. To address the aims of the research, we sought answers to the following questions:

- i. What are the levels of resilience, life satisfaction, and spiritual well-being among pregnant women?
- ii. Is there a correlation between resilience, life satisfaction, and spiritual well-being in pregnant women?
- iii. Do descriptive variables among pregnant women differ in relation to their resilience, life satisfaction, and spiritual well-being levels?

Method

Research Design

Descriptive studies aim to describe a situation, reveal the meaning of a phenomenon, and generate new information. Also, cross-sectional studies, which analyze data at a single point in time, are appropriate for describing phenomena or relationships among phenomena (Polit & Beck, 2004). In this study, we adopted a descriptive cross-sectional design to determine the levels of resilience, life satisfaction, and spiritual well-being among pregnant women and to explain the relationship between these concepts.

Universe and Sampling

The population of this study consisted of pregnant women who attended the obstetrics and gynecology outpatient clinics of a hospital in Samsun, Türkiye. We established the sample size in this study as 377, with a margin of error of 0.05 and a confidence interval of 95% (<http://www.raosoft.com/samplesize.html>). The inclusion criteria were being 18 years or older, having sufficient Turkish proficiency for communication, being beyond 12th weeks of gestation, having no psychiatric health issues, and having psychological and mental health. We excluded women who did not meet the inclusion criteria. We invited 400 pregnant women to participate in the study, and 20 declined or did not fully complete the questionnaires. Consequently, the final sample size comprised 380 pregnant women.

Data Collection Tools

Introductory information form. The form was prepared by the authors and consisted of seven items designed to determine the descriptive information (age, education level, employment status, income level, gravidity, planned pregnancy status, and hospitalization status during pregnancy) about the participants (Bilgiç & Bilgin, 2021; Niaghiha et al., 2019). In this form, the term “gravity” refers to the number of pregnancies a person has experienced. Accordingly, we used the term “primigravida” for women experiencing their first pregnancy, while “multigravida” was used for those experiencing their second or subsequent pregnancies.

Brief resilience scale (BRS). This scale was developed by Smith et al. (2008). The validity and reliability of the scale’s Turkish version were assessed by Doğan (2015). The instrument consisted of 6 items rated on a 5-point Likert-type scale. Items 2, 4, and 6 of the scale are reverse-scored. Scores ranging from 6 to 30 are taken from the scale. Higher scores indicate higher levels of resilience. The internal consistency coefficient of the scale was reported as 0.83.

Satisfaction with life scale (SWLS). The instrument was developed by Diener et al. (1985). The validity and reliability of the Turkish version were assessed by Dağlı and Baysal (2016). The tool is a 5-point Likert type and consists of 5 items. Scores ranging from 5 to 25 are taken from the scale. Higher scores indicate higher satisfaction with life. The Cronbach’s alfa coefficient of the scale was reported as 0.88.

Spirituality index of well-being (SIWB). The scale was developed by Daaleman and Frey (2004). The validity and reliability studies for the Turkish version of the scale were carried out by Ekşi et al. (2019). The index consists of 12 items on 2 factors (Self-efficacy and Life scheme) rated through a 5-point Likert-type scale. Self-efficacy refers to one’s belief in their own ability and potential. This subscale consists of 6 items. On the other hand, the Life Schema subscale also consists of 6 items measuring a sense of order, meaning, and goal in one’s life. Scores ranging from 12 to 60 are taken from the total scale. Lower scores indicate higher spiritual well-being. The Cronbach’s alfa coefficient of the total scale was 0.75; the Self-efficacy and Life scheme factors were 0.90 and 0.81, respectively.

Data Collection

We collected the study data from pregnant women who applied to the obstetrics and gynecology outpatient clinics of a hospital in Samsun between June and August 2023. We applied data collection forms through face-to-face interviews. It took about 10-20 minutes to fill out the survey forms.

Data Analysis

We analyzed the data using the IBM SPSS (v23.0) program. We assessed the normal distribution of the data by examining skewness and kurtosis values (± 2). We used descriptive statistics (frequency, percentage, mean, standard deviation), Independent Samples t-test, One-way ANOVA (post hoc Tukey HSD), Pearson correlation analysis, and linear regression analysis to examine the data.

Results

The mean age of participants was 28.56 ± 5.55 (18-42) years, and the majority (61.3%) fell within the 18-29 age group. Of the pregnant women, 41.6% were high school graduates, 72.1% were housewives, and 60.5% had an income equal to their expenses. Furthermore, 59.5% were multigravida and 74.5% had planned pregnancies. Descriptive characteristics of pregnant women are presented in Table 1.

Table 1.
Participant demographic characteristics

	N	%
Age		
18-29	233	61.3
30-39	132	34.7
40 and older	15	4.0
Education status		
Literate	10	2.6
Primary school	127	33.4
High school	158	41.6
College	85	22.4
Employment status		
Employed	106	27.9
Housewife	274	72.1
Income level		
Income less than expenses	110	29.0
Income equal to expenses	230	60.5
Income more than expenses	40	10.5
Gravidity		
Primigravida	154	40.5
Multigravida	226	59.5
Planning of pregnancy		
Planned	283	74.5
Unplanned	97	25.5
Hospitalization status during pregnancy		
Yes	67	17.6
No	313	82.4

The pregnant women's mean BRS (18.74 ± 3.11) and SWLS (16.73 ± 4.17) scores were moderate as well as the mean SIWB score was good level (27.37 ± 10.42). Considering the SIWB subscale mean scores, Self-efficacy was 15.05 ± 5.09 Life

scheme was 12.32 ± 6.17 . Also, the Pearson correlation analysis showed a weak negative correlation between SIWB and BRS ($r = -.293, p = .000$) and a weak positive correlation between SWLS and BRS ($r = .254, p < .001$). However, no correlation was observed between SWLS and SIWB ($p > .05$).

Linear regression analysis related to the prediction of the SWLS and SIWB by the BRS is presented in Table 2. Analysis results revealed that resilience positively predicts life satisfaction ($\beta = .254, p = .000$) but negatively predicts spiritual well-being ($\beta = -.293, p = .000$). According to the study results, resilience explained 6.5% of life satisfaction ($F = 26.141, p = .000$) and 8.6% spiritual well-being ($F = 35.515, p = .000$) (Table 2).

Table 2.

Linear regression analysis related to the prediction of the SWLS and SIWB by the BRS

Dependent variable	Independent variables	B	Std. Error	β	t	p
SWLS	Constant	10.338	1.267		8.163	.000
	BRS	.341	.067	.254	5.113	.000*
R = .254, R ² = .065, F = 26.141, p = .000						
SIWB	Constant	45.747	3.125		14.638	.000
	BRS	-.980	.164	-.293	-5.959	.000*
R = .293, R ² = .086, F = 35.515, p = .000						

BRS: Brief Resilience Scale, SWLS: Satisfaction with Life Scale, SIWB: Spirituality Index of Well-Being, * $p < .001$

The distributions of the BRS, SWLS, and SIWB scores according to the characteristics of the pregnant women are shown in Table 3. According to the analysis results, the mean BRS score of primigravidas was higher than multigravidas. Furthermore, the mean SWLS score differed significantly based on income level and planned pregnancy. Regarding the spiritual well-being of the participants, the SIWB mean score differed significantly with age, education level, and income level ($p < .05$). However, no difference was observed between other variables and the scale scores ($p > .05$) (Table 3).

Table 3.*Distribution of BRS, SWLS, and SIWB mean scores of pregnant women according to descriptive characteristics*

	BRS	SWLS	SIWB
	Mean ± SD	Mean ± SD	Mean ± SD
Age			
18-29	18.82 ± 3.02	16.98 ± 4.32	27.18 ± 10.38 ^a
30-39	18.70 ± 3.33	16.29 ± 3.84	26.73 ± 9.71 ^a
40 and older	17.73 ± 2.49	16.53 ± 4.69	35.93 ± 13.68 ^b
<i>Test and p scores</i>	F = .885 p = .414	F = 1.160 p = .315	F = 5.475 p = .005*
Education status			
Literate	17.80 ± 2.62	17.70 ± 2.79	32.50 ± 12.17 ^a
Primary school	18.50 ± 3.34	16.63 ± 4.14	28.89 ± 10.37 ^a
High school	18.63 ± 2.64	16.72 ± 4.28	27.76 ± 10.43 ^a
College	19.41 ± 3.55	16.76 ± 4.22	23.79 ± 9.44 ^b
<i>Test and p scores</i>	F = 1.941 p = .122	F = .205 p = .893	F = 5.306 p = .001*
Employment status			
Employed	18.59 ± 2.98	16.62 ± 3.76	26.08 ± 9.51
Housewife	18.80 ± 3.17	16.77 ± 4.33	27.87 ± 10.73
<i>Test and p scores</i>	t = -.575 p = .566	t = -.301 p = .764	t = -1.502 p = .134
Income level			
Income less than expenses	18.27 ± 2.79	15.59 ± 4.26 ^a	28.55 ± 9.45 ^{ab}
Income equal to expenses	18.99 ± 3.19	17.39 ± 3.83 ^b	26.06 ± 10.14 ^a
Income more than expenses	18.60 ± 3.43	16.05 ± 5.05 ^{ab}	31.73 ± 12.94 ^b
<i>Test and p scores</i>	F = 2.038 p = .132	F = 7.741 p = .001*	F = 6.187 p = .002*
Gravidity			
Primigravida	19.22 ± 3.09	17.04 ± 4.57	26.51 ± 10.48
Multigravida	18.42 ± 3.09	16.51 ± 3.88	27.96 ± 10.36
<i>Test and p scores</i>	t = 2.490 p = .013*	t = 1.206 p = .229	t = -1.341 p = .181
Planning of pregnancy			
Planned	18.89 ± 3.19	17.09 ± 4.06	27.53 ± 10.57
Unplanned	18.29 ± 2.82	15.64 ± 4.33	26.92 ± 9.99
<i>Test and p scores</i>	t = 1.665 p = .097	t = 3.004 p = .003*	t = .499 p = .618
Hospitalization status during pregnancy			
Yes	19.08 ± 3.55	16.55 ± 4.78	28.01 ± 10.02
No	18.67 ± 3.01	16.76 ± 4.04	27.24 ± 10.51
<i>Test and p scores</i>	t = -1.006 p = .315	t = .376 p = .707	t = -.555 p = .580

SD: Standard deviation, t=Independent Samples t-test, F= One Way ANOVA (post-hoc Tukey HSD), a-b: There is no difference between data with the same letter, BRS: Brief Resilience Scale SWLS: Satisfaction with Life Scale SIWB: Spirituality Index of Well-Being, *p < .05

Discussion

This study examined the resilience, life satisfaction, and spiritual well-being of pregnant women. The findings revealed pregnant women exhibited moderate levels of resilience and life satisfaction with a good level of spiritual well-being. Furthermore, we found a positive correlation between resilience and life satisfaction. Moreover, we determined that resilience was negatively correlated with spiritual well-being.

Resilience is a protector for several problems during pregnancy including stress, anxiety, and depression (Alves et al., 2021; Jin et al., 2021; Tuxunjiang et al., 2023). In this study, we found that the pregnant women had a moderate mean BRS score. Similarly, Yılmaz and Şahin (2019) determined that pregnant women had a moderate level of resilience. Abera et al. (2023) found that 52.7% of pregnant women had moderate resilience. Contrary to our findings, the resilience of pregnant women was found to be higher in some previous studies (Özçetin & Erkan, 2019; Tartıcı & Beydağ, 2022). Resilience can help women get through pregnancy more easily and comfortably. Therefore, interventions to increase resilience should be planned.

We found that pregnant women had a moderate level of SWLS mean score. High life quality scores in pregnant women were reported in the literature (Mazúchová et al., 2018). Additionally, life satisfaction in pregnant women has been reported to be higher than in our study (Yu et al., 2020). Ruseckienė et al. (2021) found that 97.1% of pregnant women were satisfied with their lives. Another study showed that 38% of pregnant women were dissatisfied with their lives (Abujilban et al., 2017). Life satisfaction can be affected by many different variables (Abujilban et al., 2017; Kumcağız, 2016). The different results in the literature may be due to social, economic, and individual differences between the sample groups.

Spiritual well-being can reduce stress and pregnancy anxiety, while increasing psychological well-being (Chehrazi et al., 2021; Rafati et al., 2023). Therefore, it is important to maintain the spiritual well-being of pregnant women. We determined that pregnant women exhibited a good level of mean SIWB score. Some researchers also reported high levels of spiritual well-being among pregnant women (Bilgiç & Bilgin, 2021; Yaylaoğlu & Zengin, 2023). The findings of this study are consistent with existing literature. Additionally, assessing the spiritual well-being of pregnant women from different cultures and traditions may provide further information.

Individuals with high psychological well-being are mostly satisfied with their lives. Conversely, individuals with lower psychological well-being tend to evaluate life events more negatively (Demir et al., 2021). In our study, we observed a weak positive correlation between BRS and SWLS. The results indicate that life satisfaction increases as resilience increases. Consistent with our findings, other researchers also reported a positive correlation between resilience and life satisfaction (Çelik et al.,

2017; Demir et al., 2021). Our findings are consistent with existing literature. The findings emphasize the positive outcomes of supporting resilience on life satisfaction.

In our study, we determined a statistically significant weak negative correlation between SIWB and BRS. Additionally, we did not observe a correlation between SIWB and SWLS. A previous study revealed that the spiritual well-being of pregnant women does not have an impact on their resilience (Karagöz, 2022). Studies involving different samples have demonstrated a positive correlation between resilience and spiritual well-being (Mahdian & Ghaffari, 2016; Ölmez & Karadağ, 2022). Furthermore, life satisfaction in pregnant women was reported to be associated with spiritual well-being (Karagöz, 2022; Niaghiha et al., 2019). The coping strategy chosen by the individual may contribute positively to the psychological health of the individual or it may be detrimental. A review study reported that spirituality can harm mental health through negative religious coping, misunderstanding, and miscommunication (Weber & Pargament, 2014). Positive religious coping positively affects life satisfaction and resilience (Uysal et al., 2017). Conversely, there exists a negative correlation between negative religious coping and both life satisfaction and resilience (Karagöz, 2022; Uysal et al., 2017). However, the present study did not examine the difficulties faced by women and their coping methods. Additionally, the difficulties faced by women and the meaning they attributed to these difficulties may have affected their psychological and spiritual well-being. Moreover, our findings may be influenced by various factors not addressed in this study (such as intimacy with the husband, social support, high-risk pregnancy, prenatal stress, anxiety, etc.). The results obtained in the present study, which contradict existing literature, require further research.

We found that primigravidas had higher BRS scores. Similarly, previous studies determined that women experiencing their first pregnancy exhibited higher levels of psychosocial health compared to multigravida women (Meghil & Busarira, 2022; Özçetin & Erkan, 2019). The resilience levels of women in their second pregnancy (Jin et al., 2021) were mostly lower than those of women experiencing their first pregnancy (Shang et al., 2019). Another study found that women with lower parity exhibited higher levels of resilience compared to those with higher parity (Jafaru & Musa, 2021). Although pregnancy is a transitory process, motherhood leads to definitive changes in a woman's life. Becoming a mother brings new responsibilities and challenges for women, and each woman's transition to motherhood is unique. This unique experience can be affected by many environmental and individual factors. Primigravidas experience many new emotions during pregnancy, which they cannot identify, and may have concerns about their role in motherhood. However, in multigravidas, several factors such as previous adverse pregnancy outcomes and birth experiences, lack of social support, socioeconomic status, advancing age, number of children, and unwanted or unplanned pregnancy may cause psychological problems

and explain low resilience (Jafaru & Musa, 2021; Jin et al., 2021; Meghil & Busarira, 2022). The findings of the present study reveal the necessity of prioritizing efforts to strengthen the resilience of multigravidas.

Difficulties faced during pregnancy can negatively affect life satisfaction. It is known that women experiencing unplanned or unintended pregnancies often encounter elevated levels of stress (Dündar et al., 2019). Our findings indicated that women with planned pregnancies had higher levels of life satisfaction. Similarly, Kumcağız (2016) found that women with planned pregnancies show higher life satisfaction. In addition, we found that life satisfaction scores significantly differ with income level. Abujilban et al. (2017) reported that pregnant women who were younger, better-educated, with high economic levels, and fewer children show higher life satisfaction. Our findings support the literature.

Furthermore, our findings revealed that the mean SIWB score differed significantly with age, education, and income level. In contrast to these findings, existing literature has demonstrated that the spiritual well-being of pregnant women does not differ significantly with age, education level, family structure, number of pregnancies, and having a planned pregnancy (Ruseckienė et al., 2021). A different researcher found that the importance given to spirituality by pregnant women significantly varied based on age, whereas no differences were observed between the importance given to spirituality and several variables such as education, employment status, income, family type, number of pregnancies, and having a planned pregnancy (Şahin, 2019). Spirituality is an essential component of the holistic health of pregnant women. In this regard, further research is needed to examine the factors affecting the spiritual well-being of pregnant women.

Limitations of the Study

This study was limited to a specific province in northern Türkiye and exclusively involved Turkish-speaking women. It's important to note that women residing in different regions of Türkiye might exhibit different levels of life satisfaction, resilience, and spiritual well-being due to distinct sociocultural attributes. This limits the generalizability of the findings. Furthermore, a cross-sectional study was designed. Conducting prospective studies that assess life satisfaction, resilience, and spiritual well-being can provide comprehensive insights.

Suggestions for Future Research

Considering the limitations of this study, it may be advisable to explore resilience, life satisfaction, and spiritual well-being in larger sample groups, including different cultures and populations. Data that can yield more robust and comprehensive

inferences can be obtained through interventional, qualitative, and longitudinal studies conducted with larger populations. Additionally, comparative studies to explore resilience, life satisfaction, and spiritual well-being across different groups (such as primigravida and multigravida, low and high-risk pregnant women, as well as, pregnant and non-pregnant women) can be conducted. Furthermore, future research could test whether resilience, life satisfaction, and spiritual well-being remain consistent across all three trimesters of pregnancy.

We conducted a quantitative study. Therefore, future researchers can use innovative qualitative research methods such as Online Photovoice to gather richer data on the experiences of pregnant women. Also, community-based participatory research can be conducted to understand the experiences of pregnant women and develop solutions to potential problems.

Implications

This research provides valuable insights into the resilience, life satisfaction, and spiritual well-being levels of pregnant women. The results emphasize the importance of focusing on the mental health of women during pregnancy. Additionally, the findings can assist health professionals in protecting and increasing the overall health of pregnant women. One of the important results of this study is the positive correlation observed between resilience and life satisfaction. Programs designed to increase the resilience of pregnant women have the potential to help them cope with the challenges of pregnancy and improve their life satisfaction. Therefore, healthcare providers should be aware of the importance of focusing on factors that will increase resilience during pregnancy.

Although the research findings show a negative correlation between resilience and spiritual well-being, the results may contribute to understanding of factors that may affect pregnant women's well-being and develop effective interventions. Prenatal health care policies and service providers should strive to ensure that pregnant women's psychospiritual care is an integral part of maternal care. Additionally, the evaluation and psychospiritual care of the mental health status of pregnant women, as well as their physical health, should be included in the pre- and post-graduate training curricula of relevant health professionals.

Conclusion

The findings of this study revealed that pregnant women have a moderate level of resilience and life satisfaction with a good level of spiritual well-being. The study identified a positive correlation between resilience and life satisfaction as well as a negative correlation between spiritual well-being and resilience. Considering the

findings of this study, it is recommended that pregnant women's resilience, life satisfaction, and spiritual well-being be evaluated during prenatal follow-ups, and the factors that affect their psychological and spiritual well-being should be determined. Pregnant women's age, education level, income level, planned pregnancy status, and gravida should also be considered in prenatal evaluations. Additionally, psychoeducation and support programs can contribute to strengthening resilience and life satisfaction in pregnant women. These programs should be comprehensive and tailored to the needs of pregnant women.

Acknowledgement. The authors thank all the pregnant women who participated in the study.

Ethical approval. The study adheres to the principles outlined in the Declaration of Helsinki. To carry out the research, approval was obtained from the Social and Human Sciences Research Ethics Committee of Ondokuz Mayıs University (Dated 28.04.2023, Decision no: 2023-383), as well as written permission from the institution where the research was conducted. All participants provided verbal and written informed consent.

Authors' contribution. Dr. Keten Edis and Dr. Bal conceptualized this study, engaged in data collection, and reviewed the final manuscript. Dr. Keten Edis wrote the first draft of the manuscript.

Peer-review. Externally peer-reviewed.

Funding. There was no funding for this study.

Disclosure statement. The authors declare that they have no conflict of interest.

Data Availability Statements. All data generated or analyzed during this study are included in this published article.

References

- Abera, M., Hanlon, C., Fedlu, H., Fewtrell, M., Tesfaye, M., & Wells, J. C. (2023). Stress and resilience during pregnancy: A comparative study between pregnant and non-pregnant women in Ethiopia. *PLOS Global Public Health*, 3(5), e0001416. <https://doi.org/10.1371/journal.pgph.0001416>
- Abujilban, S., Abuidhail, J., Mrayan, L., & Hatamleh, R. (2017). Characteristics of pregnant Jordanian women dissatisfied with life: A comparison between satisfied and dissatisfied women's demographics. *Health Care for Women International*, 38(6), 556-570. <https://doi.org/10.1080/07399332.2017.1289535>
- Afrashteh, M. Y., Hanifeh, P., & Morovati, Z. (2024). The relationship between family resilience and the psychological well-being and life satisfaction of pregnant women: The mediating role of individual resilience. *BMC Psychology*, 12(1), 1-9. <https://doi.org/10.1186/s40359-024-01547-6>
- Alves, A., Cecatti, J., & Souza, R. (2021). Resilience and stress during pregnancy: A comprehensive multidimensional approach in maternal and perinatal health. *The Scientific World Journal*, 2021, 1-7. <https://doi.org/10.1155/2021/9512854>
- Armans, M., Addante, S., Ciciolla, L., Anderson, M., & Shreffler, K. M. (2020). Resilience during pregnancy: How early life experiences are associated with pregnancy-specific stress. *Adversity and Resilience Science*, 1(4), 295-305. <https://doi.org/10.1007/s42844-020-00017-3>
- Bilgiç, G., & Bilgin, N. Ç. (2021). Relationship between fear of childbirth and psychological and spiritual well-being in pregnant women. *Journal of Religion and Health*, 60(1), 295-310. <http://doi.org/10.1007/s10943-020-01087-4>
- Cehrazi, M., Faramarzi, M., Abdollahi, S., Esfandiari, M., & Shafie rizi, S. (2021). Health promotion behaviours of pregnant women and spiritual well-being: Mediatory role of pregnancy stress, anxiety and coping ways. *Nursing Open*, 8(6), 3558-3565. <https://doi.org/10.1002/nop2.905>
- Çelik, M., Sanberk, İ., & Deveci, F. (2017). Öğretmen adaylarının yaşam doyumlarının yordayıcısı olarak psikolojik dayanıklılık ve umutsuzluk [Psychological resilience and hopelessness as a predictor of life satisfaction of teacher candidates]. *Elementary Education Online*, 16(2), 654-662. <https://doi.org/10.17051/ilkonline.2017.304725>
- Daaleman, T. P., & Frey, B. B. (2004). The spirituality index of well-being: A new instrument for health-related quality-of-life research. *The Annals of Family Medicine*, 2(5), 499-503. <https://doi.org/10.1370/afm.89>
- Dağlı, A., & Baysal, N. (2016). Yaşam doyumunu ölçeğinin Türkçe'ye uyarlanması: Geçerlik ve güvenilirlik çalışması [Adaptation of the satisfaction with life scale into Turkish: The study of validity and reliability]. *Electronic Journal of Social Sciences*, 15(59), 1250-1262. <https://doi.org/10.17755/esosder.263229>
- Demir, R., Tanhan, A., Çiçek, İ., Yerlikaya, İ., Kurt, S. Ç., & Ünverdi, B. (2021). Yaşam kalitesinin yordayıcıları olarak psikolojik iyi oluş ve yaşam doyumunu [Psychological well-being and life satisfaction as predictors of quality of life]. *Journal of Education for Life*, 35(1), 192-206. <http://doi.org/10.33308/26674874.2021351256>
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75. https://doi.org/10.1207/s15327752jpa4901_13

- Doğan, T. (2015). Kısa psikolojik sağlamlık ölçeği'nin Türkçe uyarlaması: Geçerlik ve güvenilirlik çalışması [Adaptation of the brief resilience scale into Turkish: A validity and reliability study]. *The Journal of Happiness & Well-Being*, 3(1), 93-102. Retrived from <https://www.tayfundogan.net/wp-content/uploads/2016/09/K%C4%B1saPsikolojikSaglamlikOlcegi.pdf>
- Dündar, T., Özsoy, S., Aksu, H., & Toptaş, B. (2019). Obstetrik özelliklerin gebelikte distres üzerine etkisi [Effect on distress in pregnancy of obstetric properties]. *Journal of Anatolia Nursing and Health Sciences*, 22(1), 17-24. Retrived from <https://dergipark.org.tr/en/pub/ataunihem/issue/44383/398441>
- Ekşi, H., Soyyiğit, Z. S., & Kardaş, S. (2019). İyi oluşun spiritüel göstergesi: Bir ölçek uyarlama çalışması [Spirituality index of well-being: A scale adaptation study]. In A. Ayten, H. Ekşi, M. Zengin, & N. Tınaz (Eds). *Sağlık hizmetlerinde manevi danışmanlık ve rehberlik* [Spiritual counselling and care in the health care] (pp. 317-327). İstanbul, Türkiye: Değerler Eğitimi Merkezi Yayınları.
- Gebuza, G., Kaźmierczak, M., Mieczkowska, E., Gierszewska, M., & Kotzbach, R. (2014). Life satisfaction and social support received by women in the perinatal period. *Advances in Clinical and Experimental Medicine*, 23(4), 611-619. <https://doi.org/10.17219/acem/37239>
- Isaacs, N. Z., & Andipatin, M. G. (2020). A systematic review regarding women's emotional and psychological experiences of high-risk pregnancies. *BMC Psychology*, 8(1), 1-11. <https://doi.org/10.1186/s40359-020-00410-8>
- Jafaru, Y., & Musa, M. M. (2021). Assessment of perceived social support, quality of life and resilience among pregnant women in Northern Nigeria. *Journal of Health and Caring Sciences*, 3(2), 96-109. <https://doi.org/10.37719/jhcs.2021.v3i2.0a002>
- Jin, X., Xu, X., Qiu, J., Xu, Z., Sun, L., Wang, Z., & Shan, L. (2021). Psychological resilience of second-pregnancy women in China: A cross-sectional study of influencing factors. *Asian Nursing Research*, 15(2), 121-128. <http://doi.org/10.1016/j.anr.2021.01.002>
- Karagöz, S. (2022). Gebelerin algılanan stres, hayat memnuniyeti, psikolojik dayanıklılık ve dini başa çıkma düzeyleri ilişkisi üzerine bir araştırma [A study on the relationship between perceived stress, life satisfaction, psychological resilience and religious coping levels of pregnant women]. *Amasya Theology Journal*, 19, 44-83. <https://doi.org/10.18498/amailad.1163319>
- Kazemi, F., Nahidi, F., & Kariman, N. (2017). Exploring factors behind pregnant women's quality of life in Iran: a qualitative study. *Electronic Physician*, 9(12), 5991. <http://doi.org/10.19082/5991>
- Kumcağız, H. (2016). Relational variables predicting life satisfaction in pregnant women. *Journal of Human Sciences*, 13(1), 318-331. <http://doi.org/10.14687/ijhs.v13i1.3424>
- Mahdian, Z., & Ghaffari, M. (2016). The mediating role of psychological resilience, and social support on the relationship between spiritual well-being and hope in cancer patients. *Journal of Fundamentals of Mental Health*, 18(3), 130-138. Retrived from https://jfmh.mums.ac.ir/?_action=showPDF&sc=1&article=6873&ob=4fe351fa98c8e23aab10273317b045d5&fileName=full_text.pdf
- Mazúchová, L., Kelčíková, S., & Dubovická, Z. (2018). Measuring women's quality of life during pregnancy. *Kontakt*, 20(1), 31-36. <https://doi.org/10.1016/j.kontakt.2017.11.004>
- Meghil, S. E., & Busarira, M. O. (2022). Study of effect of parity on psycho-social and physical health of pregnant women. Ajdabya And Benghazi-2020. *Journal of Pharmaceutical Negative Results*, 13(10), 5222-5233. <http://doi.org/10.47750/pnr.2022.13.S10.635>
- Niaghiha, M., Baglooei, M. M., Mafi, M., & Taherpour, M. (2019). Spiritual well-being and life satisfaction in pregnant women: The mediating role of social support. *Social Health and Behavior*, 2(3), 83-88. http://doi.org/10.4103/SHB.SHB_11_19

- Oosterveer, D. M., Mishre, R. R., van Oort, A., Bodde, K., & Aerden, L. (2014). Anxiety and low life satisfaction associate with high caregiver strain early after stroke. *Journal of Rehabilitation Medicine, 46*(2), 139-143. <http://doi.org/10.2340/16501977-1250>
- Ölmez, N., & Karadağ, E. (2022). Ayaktan kemoterapi alan kanserli hastaların spiritüel iyilik hali ve psikolojik dayanıklılık düzeyi arasındaki ilişki [Relationship between spiritual well-being and psychological endurance level in cancer patients receiving outpatient chemotherapy]. *Sakarya Medical Journal, 12*(3), 390-402. <https://doi.org/10.31832/smj.1075527>
- Özçetin, Y. S. Ü., & Erkan, M. (2019). Yüksek riskli gebelerde psikolojik sağlamlık, algılanan stres ve psikososyal sağlık [Resilience, perceived stress and psychosocial health of high-risk pregnant women]. *Cukurova Medical Journal, 44*(3), 1017-1026. <https://doi.org/10.17826/cumj.502989>
- Piccinini, C. R. P., de Castro Almeida, V., da Silva Ezequiel, O., de Matos Fajardo, E. F., Lucchetti, A. L. G., & Lucchetti, G. (2021). Religiosity/spirituality and mental health and quality of life of early pregnant women. *Journal of Religion and Health, 60*(3), 1908-1923. <https://doi.org/10.1007/s10943-020-01124-2>
- Polit, D. F., & Beck, C. T. (2004). *Nursing research principles and methods (Seventh Edition)*. Philadelphia: Lippincott, Williams & Wilkins.
- Rafati, F., Shahrbabaki, P. M., Dastyar, N., Pilevarzadeh, M., & Mehralizadeh, A. (2023). Relationship between the psychological distress and spiritual well-being in pregnant women exposed to domestic violence: A cross-sectional study in Iran. *Journal of Religion and Health, 62*(5), 3252-3266. <http://doi.org/10.1007/s10943-023-01785-9>
- Rusekienė, D., Tomkevičiūtė, J., Fisher, J., & Riklikienė, O. (2021). Spiritual well-being of pregnant women in association with life satisfaction and healthy behavior during pregnancy. *Nursing Education, Research, and Practice, 11*(1), 22-33. Retrived from <https://nerp.lsmuni.lt/spiritual-well-being-of-pregnant-women-in-association-with-life-satisfaction-and-healthy-behavior-during-pregnancy/>
- Sade, G., & Özkan, H. (2020). Gebelerin yaşam doyumları ile prenatal bağlanma düzeyleri arasındaki ilişki [The correlation between life satisfaction and prenatal attachment levels of pregnant women]. *The Journal of General Medicine, 30*(4), 255-262. <https://doi.org/10.15321/GenelTipDer.2021.274>
- Shang, N., Zhang, H., & Dong, S. (2019). Study on the relationship between psychological elasticity and anxiety of pregnant women in late pregnancy. *Tianjin Journal of Nursing, 27*(5), 509-513. <https://doi.org/10.3969/j.issn.1006-9143.2019.05.002>
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine, 15*(3), 194-200. <http://doi.org/10.1080/10705500802222972>
- Şahin, M. (2019). *Spiritüalitenin gebelik sürecine etkisinin belirlenmesi* [Determination of the effect of spirituality on the pregnancy process] (Master Thesis, Cumhuriyet University, Sivas, Türkiye). Retrieved from <https://tez.yok.gov.tr/UlusalTezMerkezi/tezSorguSonucYeni.jsp>
- Tartıcı, E., & Beydağ, K. D. (2022). Gebelerin pandemi sürecinde algıladıkları stres ve psikolojik iyi oluş düzeyleri ilişkisi [The relationship between pregnant women's perceived stress and psychological well-being levels during the pandemic process]. *BANU Journal of Health Science and Research, 4*(1), 42-49. <http://doi.org/10.46413/boneyusbad.1077300>

- Toledo, G., Ochoa, C. Y., & Farias, A. J. (2021). Religion and spirituality: Their role in the psychosocial adjustment to breast cancer and subsequent symptom management of adjuvant endocrine therapy. *Supportive Care in Cancer*, 29(6), 3017-3024. <https://doi.org/10.1007/s00520-020-05722-4>
- Tuxunjiang, X., Wumaier, G., Zhang, W., Sailike, B., Wang, X., & Jiang, T. (2023). The relationship between positive psychological qualities and prenatal negative emotion in pregnant women: A pathanalysis. *Frontiers in Psychology*, 13, 1067757. <https://doi.org/10.3389/fpsyg.2022.1067757>
- Uysal, V., Göktepe, A. K., Karagöz, S., & İlerisoy, M. (2017). Dinî başa çıkma ile umut, hayat memnuniyeti ve psikolojik sağlamlık arasındaki etkileşim üzerine bir araştırma [A research about the relationships and interactions between religious coping, hope, life satisfaction and psychological resilience]. *Marmara University Faculty of Theology Journal*, 52(52), 139-160. <http://doi.org/10.15370/maruifd.333535>
- Weber, S. R., & Pargament, K. I. (2014). The role of religion and spirituality in mental health. *Current Opinion in Psychiatry*, 27(5), 358-363. <http://doi.org/10.1097/YCO.0000000000000080>
- Yaylaoğlu, Ö., & Zengin, N. (2023). Gebelerde doğum korkusu ve spiritüel iyi oluş arasındaki ilişkinin incelenmesi: Tanımlayıcı bir çalışma [Investigation of the relationship between fear of birth and spiritual wellness in pregnancy: A descriptive study]. *Türkiye Klinikleri Journal of Health Sciences*, 8(1), 57-64. <http://doi.org/10.5336/healthsci.2022-93969>
- Yılmaz, E. B., & Şahin, E. (2019). Gebelerin prenatal sıkıntı düzeyleri ile ilişkili faktörler [Factors associated with prenatal distress levels of pregnant women]. *Journal Psychiatric Nursing*, 10(3), 197-203. <http://doi.org/10.14744/phd.2019.17363>
- Yu, M., Qiu, T., Liu, C., Cui, Q., & Wu, H. (2020). The mediating role of perceived social support between anxiety symptoms and life satisfaction in pregnant women: A cross-sectional study. *Health and Quality of Life Outcomes*, 18(1), 1-8. <https://doi.org/10.1186/s12955-020-01479-w>

