

## Original Article

## Self-efficacy, Psychological Well-Being and Perceived Social Support Levels in Pregnant Women

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### Abstract

**Background:** Studies focused on the self-efficacy in pregnant women demonstrated that the perceived self-efficacy was related to the fear of giving birth, the intention of breastfeeding after the delivery, social support, and psychological problems.

**Aim:** The aim of this study was to determine the perceived levels of self-efficacy, psychological well-being, and social support in pregnant women.

**Method:** This cross-sectional and descriptive study consisted of 258 pregnant women. Data were collected using Self-efficacy Scale, Psychological Well-being Scale, and Multidimensional Scale of Perceived Social Support. Mann-Whitney U test, Kruskal-Wallis test and Spearman correlation test was used in the data analysis.

**Results:** It was found that some factors like the age, educational level, presence of the social support and having birth knowledge were affecting the self-efficacy, perceived social support and psychological well-being levels of the pregnant women ( $p < .05$ ). There was a weak positive correlation of self-efficacy scores with psychological well-being and perceived social support scores and a moderately positive correlation between perceived social support and psychological well-being scores ( $p < .05$ ).

**Conclusion:** There were statistically significant relationships between self-efficacy, psychological well-being and perceived social support in pregnant women. For this reason, all pregnant women should be evaluated for self-efficacy, psychological well-being and perceived social support levels.

**Key words:** Pregnancy; self-efficacy; psychological well-being; perceived social support

### Introduction

Self-efficacy refers to an individual's confidence or belief in his/her own abilities to meet, overcome or control tasks successfully (Gozum & Aksayan, 1999). The development of self-efficacy in individuals under care is one of the most important responsibilities of nurses. Studies have shown that parallel to the increase in the self-efficacy, the capability of the patients to perform their daily activities and their quality of life are improved, depression levels decreased, their capability of self-care and their self-care behavior are improved. The acceptance of the disease by the patients and their capability to cope with the symptoms of the disease are also

enhanced (Korpershoek, van der Bijl, & Hafsteinsdottir, 2011; Sharoni & Wu, 2012; Chen et al., 2014; Buck et al., 2015; Zhang, Kwekkeboom, & Petrini, 2015; Zhang et al., 2015; Akturk & Aydinalp, 2018). It was reported that the behavior related to the seeking for and getting information is also increased along with the increase in the self-efficacy not only in patients but also in healthy individuals (Tiraki & Yılmaz, 2018).

Studies focused on the self-efficacy in pregnant women demonstrated that the perceived self-efficacy was related to the fear of giving birth, the intention of breastfeeding after the delivery, social support, and psychological problems. A

study, in which the relationship between the fear of giving birth and perceived self-efficacy was investigated, showed that the women, who had a lower level of fear of giving birth, had higher levels of self-efficacy (Lazoglu, 2014).

In a study where the factors affecting the breastfeeding behavior of the pregnant women were investigated, it was found out that the breastfeeding behavior was improved parallel to the increase in the perceived self-efficacy (Thomas et al., 2015). In a study, in which the factors affecting the perceived self-efficacy related to delivery was evaluated, the authors demonstrated that the self-efficacy had a positive correlation to the feeling of integrity and social support, a negative correlation with psychological problems and the fear of giving birth. In addition, they determined that the pregnant women with high self-efficacy levels needed less epidural anesthesia during the delivery (Carlsson, Ziegert, & Nissen, 2015).

The studies which are focused on the self-efficacy in pregnant women, showed a relationship between self-efficacy and both the preparation to the birth and breastfeeding behavior. In a study, in which the self-efficacy related to childbearing was investigated, it was shown that low levels of self-efficacy caused fear of giving birth and depressive symptoms (Schwartz et al., 2015).

In studies focused on the self-efficacy related to the breastfeeding, it was determined that the self-efficacy had a positive effect on the perceived sufficiency of milk and emotional adaptation. It was also shown that lower levels of self-efficacy may cause mild depressive symptoms (Henshaw et al., 2015; Gokceoglu & Kucukoglu, 2017). In studies conducted in Turkey, it is reported that there was no correlation between the postpartum depression and breastfeeding self-efficacy (Kucukoglu, Çelebioglu, & Coskun, 2014; Aslan & Ege, 2016). In another study, it was suggested that there was a weak correlation between breastfeeding self-efficacy and postpartum pain and fatigue (Isik, Egelioglu-Cetisli, & Baskaya, 2018).

As is seen, the perceived self-efficacy of pregnant women may affect the labor and postpartum adaptation to motherhood. It is indicated that if this perception is positive, its reflection to the postpartum period will also be positive.

## **Aim**

In this study, our objective was to determine the perceived levels of self-efficacy, psychological well-being, and social support in pregnant women.

## **Methodology**

### **Study population**

The population of this cross-sectional and descriptive study consisted of pregnant women, who were hospitalized in the clinic of obstetrics and who applied to the outpatient department of obstetrics in a training and research hospital in the central Anatolia region of Turkey between June 30, 2018 and July, 30 2018. No sample selection was done, 258 pregnant women volunteered to answer the study questions and were included in the study. As given in Table 1; 34.1% of the women were in the age group of 23-27 years, 53.1% were graduated from secondary school, and 89.1% were housewives. 35.3% of them had a spouse between the ages of 24-28 years and 49.6% of the spouses were self-employed. 67.8% of the pregnant women stated that they considered their economic status at a middle level. 76.45 of them has an nuclear family and 55.8% have been married for 1-5 years.

### **Data collection**

The data were collected by researchers with face-to-face interviews in the patient's room or in the outpatient department. First, the women were briefed about the study. Forms and scales were completed approximately in 25-30 minutes.

### **Measures**

In data collection, Pregnancy Description Form (PDF), Self-efficacy Scale (SES), Psychological Well-being Scale (PWBS), and Multidimensional Scale of Perceived Social Support (MDSPSS) were used.

*PDF.* This form contains questions about the age, educational status, occupation, economic status, family structure and the age and occupation of the spouse. The second part constitutes questions about the gestational week, number of parity, number of living children, history of high-risk pregnancies and previous prenatal status (Kucukoglu et al., 2014; Lazoglu, 2014; Carlsson et al., 2015; Henshaw et al., 2015; Schwartz et al., 2015; Thomas et al., 2015; Aslan & Ege, 2016; Gokceoglu & Kucukoglu, 2017; Isik et al., 2018).

**SES.** It was developed by Sherer et al. (1982) and adapted by Gozum and Aksayan (1999) in the Turkish language. SES uses a 5-point Likert scale and contains 23 items. The items are scored as follows: 1=Strongly disagree; 2=Slightly disagree; 3=Neutral; 4=Slightly agree; 5=Strongly agree). The items 2, 4, 5, 6, 7, 10, 11, 12, 14, 16, 17, 18, 20, and 22 are reversely scored. The scale has 4 sub-factors as "starting behavior," "continuing behavior," "behavior completion" and "fight with obstacles". The minimum and maximum scores are 23 and 115. The higher is the score, the higher is the self-efficacy. The Cronbach's alpha coefficient of the scale was 0.81. In our study, the Cronbach's alpha coefficient was calculated as 0.78.

**PWBS.** This scale was developed by Diener, Scollon, & Lucas (2009) and Diener et al. (2010) and adapted by Telef (2013) to the Turkish language. It has 8 items, which are scored with a 7-point Likert scale between 1=strongly disagree and 7=strongly agree. The total score can be between 8 and 56. High scores show that the individual has several reliable psychological resources. The Cronbach's alpha coefficient of the scale was 0.87. In our study, the Cronbach's alpha coefficient was calculated as 0.75.

**MDSPSS.** It was developed by Zimet et al. (1988). The validation and reliability studies for the Turkish language was conducted by Eker and Akar (1995) and Eker, Arkar, & Yaldız (2001). The scale contains 12 items, which are scored with a 7-point Likert scale (7=strongly agree; 1=strongly disagree). It has three sub-factors for the family (items 3, 4, 8, 11), friends (items 6, 7, 9, 12) and for a significant other (items 1, 2, 5, 10). The score that can be obtained from sub-factors is between 4 and 28. The total score to be obtained from the scale is minimum 12 and maximum 84. The higher is the score the higher is the perceived social support. The Cronbach's alpha coefficient of the scale was 0.89. In our study, the Cronbach's alpha coefficient was calculated as 0.86.

### **Ethical Aspect of the Study**

Written consents were obtained from the Directorate of the Training and Research Hospital, Local Health Authority and Ethics Committee for Human Research at Aksaray University (No: 2018/147). The pregnant participants were informed about the study and assured for the confidentiality of their personal data. Then informed consent was obtained from

all pregnant participants and the data were collected according to the principles of the Helsinki Declaration.

### **Data Analysis**

The data were analyzed with SPSS v23.0 (Statistical Package for Social Science for Windows version 23.0) software package. Descriptive statistical parameters such as Frequency, Percentage, Mean and Standard Deviation were used. The normal distribution of the data was controlled with the Kolmogorov-Smirnov Test. As the data did not have a normal distribution, Mann-Whitney U test was used for the comparison of two variables, and Kruskal-Wallis test was used for the comparison of more than two variables. Spearman correlation test was used for the analysis of the correlation between three variables. For all analysis,  $p < 0.05$  was considered as statistically significant.

### **Findings**

The evaluation of the information related to the gestation period (Table 2) showed that 76% of the participants were in the 3rd trimester, 32.2% had 2 pregnancies, 65.1% had a previous delivery in their medical history and 34.9% had no child. 86% of the participants reported wanted pregnancy, 98.1% were supported by their spouse, 78.3% had social support excluding their spouse and 52.3% had birth knowledge.

The mean SES, PWBS and MDSPSS scores of the participants were  $88.17 \pm 13.06$ ,  $49.15 \pm 7.73$  and  $66.74 \pm 10.64$  respectively (Table 3).

The factors affecting the SES, PWBS and MDSPSS scores were listed in Table 4. There was a statistically significant correlation between the mean SES score and the age, pregnancy status, presence of social support excluding their spouse and having birth knowledge ( $p < 0.05$ ). There was also a statistically significant correlation between the mean PWBS score and having social support excluding their spouse ( $p < 0.05$ ). Finally, there was a statistically significant correlation between the mean MDSPSS score of the participants and educational level, previous delivery, having social support excluding their spouse and having birth knowledge ( $p < 0.05$ ).

There was a weak positive correlation between the mean scores of SES and PWBS ( $r = 0.231$ ,  $p = 0.000$ ) and SES and MDSPSS ( $r = 0.172$ ,  $p = 0.005$ ) and a moderate positive correlation

between the mean scores of MDSPSS and PWBS ( $r=0.458, p=0.000$ ) (Table 5).

**Table 1: Sociodemographic characteristics of pregnant women**

Sociodemographic characteristics	N	%
Age		
18-22 years	75	29.1
23-27 years	88	34.1
28-32 years	61	23.6
33 years and older	34	13.2
Education level		
University	20	7.8
High school	72	27.9
Secondary school	137	53.1
Primary school	29	11.2
Employment status		
Housewife	230	89.1
Officer	12	4.7
Worker	7	2.7
Self-employment	9	3.5
Spouse age		
19-23 years	38	14.7
24-28 years	91	35.3
29-33 years	72	27.9
34 years and older	57	22.1
Spouse occupation		
Officer	36	14.0
Worker	94	36.4
Self-employment	128	49.6
Economic status		
Well	67	26.0
Middle	175	67.8
Worse	16	6.2
Family structure		
Nuclear	197	76.4
Extended	61	23.6
Marriage year		
1- 5 years	144	55.8
6-10 years	73	28.3
11 years and over	41	15.9

**Table 2:** Pregnancy-related characteristics of pregnant women

<b>Pregnancy-related characteristics</b>	<b>n</b>	<b>%</b>
Pregnancy week		
1st trimester	9	3.5
2nd trimester	53	20.5
3rd trimester	196	76.0
Number of pregnancy		
1	82	31.8
2	83	32.2
3	56	21.7
≥ 4	37	14.3
History of previous delivery		
Yes	168	65.1
No	90	34.9
Number of children living		
No	90	34.9
1	84	32.6
2	53	20.5
3	22	8.5
4	9	3.5
Pregnancy status		
Wanted	222	86.0
Unwanted	36	14.0
Being supported by their spouse		
Yes	253	98.1
No	5	1.9
Having social support excluding their spouse		
Yes	202	78.3
No	56	21.7
Having birth knowledge		
Yes	135	52.3
No	123	47.7

**Table 3:** SES, PWBS and MDSPSS total mean score of pregnant

Scale	$\bar{X} \pm SD$	Minimum score	Maksimum score
Total SES	88.17 ± 13.06	47.00	112.00
Total PWBS	49.15 ± 7.73	10.00	56.00
Being supported by their family	25.32 ± 3.02	8.00	28.00
Being supported by their friends	20.51 ± 5.46	4.00	28.00
Being supported by a significant other	20.90 ± 5.24	4.00	28.00
Total MDSPSS	66.74 ± 10.64	25.00	84.00

**Table 4:** Factors affecting SES, PWBS and MDSPSS scores of pregnant

Sociodemographic characteristics	SES $\bar{X} \pm SD$	PWBS $\bar{X} \pm SD$	MDSPSS $\bar{X} \pm SD$
Age			
18-22 years	84.54 ± 13.69	48.29 ± 8.76	66.12 ± 11.28
23-27 years	88.31 ± 12.25	49.18 ± 7.98	67.82 ± 9.22
28-32 years	89.49 ± 13.78	49.42 ± 7.53	66.36 ± 11.42
33 years and older	93.44 ± 10.30	50.50 ± 4.26	66.02 ± 11.47
Test value	$\chi^2=11.99$	$\chi^2=0.275$	$\chi^2=0.534$
P value	<b>0.007</b>	0.965	0.911
Educational level			
University	92.55 ± 10.14	50.65 ± 4.46	70.40 ± 8.40
High school	87.91 ± 14.32	49.18 ± 6.96	67.73 ± 9.79
Secondary school	87.98 ± 13.31	48.75 ± 8.97	66.83 ± 11.18
Primary school	86.68 ± 9.95	49.96 ± 4.26	61.37 ± 10.02
Test value	$\chi^2=2.62$	$\chi^2=0.668$	$\chi^2=12.72$
P value	0.453	0.881	<b>0.005</b>
Pregnancy status			
Wanted	88.80 ± 13.14	49.16 ± 7.93	66.79 ± 10.53
Unwanted	84.27 ± 12.01	49.11 ± 6.39	66.47 ± 11.47
Test value	$z=-2.178$	$z=-0.494$	$z=-0.066$
P value	<b>0.029</b>	0.621	0.947
Having social support excluding their spouse			
Yes	89.23 ± 12.96	50.19 ± 6.20	68.58 ± 8.74
No	84.35 ± 12.81	45.41 ± 10.96	60.10 ± 13.90
Test value	$z=-2.653$	$z=-3.504$	$z=-4.310$
P value	<b>0.008</b>	<b>0.000</b>	<b>0.000</b>
Having birth knowledge			
Yes	90.13 ± 12.79	49.27 ± 8.24	68.04 ± 9.87
No	86.02 ± 13.07	49.02 ± 7.16	65.32 ± 11.30
Test value	$z=-2.546$	$z=-1.266$	$z=-2.079$
P value	<b>0.011</b>	0.206	<b>0.038</b>
History of previous delivery			
Yes	88.52 ± 12.72	48.97 ± 7.54	65.98 ± 10.69
No	87.51 ± 13.72	49.50 ± 8.09	68.17 ± 10.47
Test value	$z=-0.539$	$z=-1.332$	$z=-2.006$
P value	0.590	0.183	<b>0.045</b>

**Table 5:** Correlation between SES, PWBS and MDSPSS scores of pregnant

Scales		1	2	3	4	5	6
1. SES	r	1					
	p	-					
2. PWBS	r	0.231**	1				
	p	0.000	-				
3. Total MDSPSS	r	0.172**	0.458**	1			
	p	0.005	0.000	-			
4. Being supported by their family	r	0.359**	0.332**	0.344**	1		
	p	0.000	0.000	0.000	-		
5. Being supported by their friends	r	0.144*	0.397**	0.826**	0.166**	1	
	p	0.020	0.000	0.000	0.008	-	
6. Being supported by a significant other	r	0.000	0.359**	0.848**	0.086	0.538**	1
	p	0.996	0.000	0.000	0.168	0.000	-

## Discussion

In this study, in which we investigated the levels of self-efficacy, perceived social support and psychological well-being, we found out that the pregnant women had high levels of self-efficacy, perceived social support and psychological well-being. In addition, we determined that some factors like the age, educational level, presence of the social support and having birth knowledge were affecting the self-efficacy, perceived social support and psychological well-being levels of the pregnant women.

We observed that women, who were relatively older, had a wanted pregnancy, has social support excluding their spouse and had birth knowledge, had better scores of self-efficacy. Gokceoglu and Kucukoglu (2017) showed that women, who were relatively older, had a high educational and economic level, had a planned pregnancy and male infant, were multipara, were trained on lactation and prolonged the lactation period, had a good self-efficacy level. Nursan, Köse, and Altinkaynak (2014) reported that the demographic variables did not affect the self-efficacy level. They also stated that the self-efficacy level was improved in women, who got training on lactation. In another study, it was suggested that multipara women had high self-efficacy and women, who were not supported by her spouse, had low self-efficacy (Schwartz et al., 2015). In a study, the factors affecting the self-efficacy level of the women with high-risk pregnancy were evaluated and it was found out that older and multipara women, who had experience on delivery and had children, had higher levels of self-efficacy (Olcer, Bakır, &

Oskay, 2016). It may be suggested that women gain experience on the pregnancy and delivery with increasing age, this experience increases also the knowledge level and improves the self-efficacy along with the social support.

Another finding of this study was only the factor “social support excluding their spouse” affected the psychological well-being level of pregnant women. In another study, the investigators determined that women, who stated that they were supported by their spouses, had higher psychological well-being levels compared to the women, who stated that they were not supported by their spouses (Giurgescu & Templin, 2015).

Studies conducted on this topic showed that the psychological well-being level of the pregnant women was increased along with the perceived social support of their family, spouse, and friends (Abdollahpour & Keramat, 2016; Zakeri & DashtBozorgi, 2018). In the light of these findings, it might be suggested that not the source of social support but the sufficient level of social support is critical in meeting the expectations of pregnant women.

In our study, the perceived social support scores were high in women with high educational level, having social support excluding their spouse and having birth knowledge and it was low in multipara women. In studies focused on the perceived social support level in pregnant women, it was determined that factors like low socioeconomic status and living apart from the spouse had a negative impact on the perceived social support level and it improved with the increase of the educational level, economic

status, the number of pregnancy and delivery (Zhang et al., 2015; Peter et al., 2017). Whereas, the perceived social support is very critical for a healthy prenatal bonding with the baby (Erkal-Aksoy, Dereli-Yılmaz, & Aslantekin, 2016; Metin & Pasinlioglu, 2016).

Therefore, it is believed that the determination of the factors affecting the perceived social support is important for the establishment of a healthy mother-baby relationship.

We detected a weak positive correlation of self-efficacy scores with psychological well-being and perceived social support scores and a moderately positive correlation between perceived social support and psychological well-being scores. Similarly, in a study focused on nulliparous women in their 12th-16th gestation week, it was found out that both the psychological well-being and self-efficacy levels had a significant correlation with the social support level (Ginja et al., 2018). In a study, the psychological well-being levels of 358 women were evaluated in the first 24-48 hours after the delivery and it was determined that demographic characteristics and features related to the pregnancy did not affect the psychological well-being level. However, the psychological well-being improved with the increase of the perceived social support of the family (Abdollahpour & Keramat, 2016).

In another study, it was determined that the anxiety level, which is an important indicator of the psychological well-being, decreased significantly with the increase of the social support in 120 nulliparous women during their first gestation (Zakeri & DashtBozorgi, 2018). Thus, it may be suggested that perceived social support affects the psychological well-being levels. In other words, the psychological well-being level improved with the increase of the perceived social support.

### Limitations

This study was subject to some limitations that may have affected the results. First, the results lack generalizability because the study sample was comprised of only Turkish pregnant women. Secondly, the results from this study may have been affected by the fact that it was conducted in only one setting. For future studies, it can be recommended that different settings be used to explore this topic further.

### Conclusion

In conclusion, in this study, we determined that women, who were in older ages, had a wanted pregnancy, social support excluding their spouse, and birth knowledge, had higher self-efficacy levels. In addition, we also observed that women with social support excluding their spouse had a higher psychological well-being level and women with higher educational level, having social support excluding their spouse and having birth knowledge had higher levels of perceived social support. Furthermore, a weak positive correlation of self-efficacy scores was determined with psychological well-being and perceived social support scores and a moderately positive correlation was observed between perceived social support and psychological well-being scores. In the light of these findings, we recommend that all pregnant women should be evaluated for self-efficacy, psychological well-being and perceived social support levels. We also recommend that the women, who have feelings of inadequacy, psychological disturbances and no sufficient social support, should be determined and they should be motivated for receiving training and consultation and directed to the sources of social support.

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