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ABSTRACT

This study aims to develop the Attitudes and Beliefs Scale about Sexuality during Pregnancy (ABSSP) and to test its validity and reliability. The study utilized a methodological approach and was conducted at a university hospital. The ABSSP developed in this study consisted of 25 items and 4 sub-scales. As a result, the ABSSP was found to be a valid and reliable measurement tool in Turkish pregnant women. The scale developed is believed to contribute to the literature as a measurement tool to identify attitudes, myths, beliefs, and knowledge of pregnant women and their partners about sexuality in pregnancy.

Introduction

Pregnancy is a process that causes physical and several psychological changes and that has radical effects on a woman's life. This process also affects sexuality and sexual life, which is very important in every phase of life. Sexuality that starts in the intrauterine life develops from childhood to adulthood as a result of being affected by the physiological, psychological and socio-cultural factors. Sexuality is a phenomenon required for the continuity of species, and it is known to be affected by pregnancy generally in a negative way (Demirci, 2016).

Studies show that continuing sexual life during pregnancy does not have any negative effects on pregnancy physiologically; rather it is reported to have an important effect in terms of intimacy and help men and and women to feel good and strengthen their relationship (Demirci, 2016; Nakić Radoš, Vraneš, & Šunjić, 2015). Sexual expression is highly individual during pregnancy. Sexual relationship is affected by the emotional factors, myths about sex in pregnancy, sexual dysfunctions, and physical changes in women's body. There is no doubt that not only women but also men might tend to avoid sexual intercourse in pregnancy due to myths (Demirci, 2016; Nakić Radoš et al., 2015; Sacomori & Cardoso, 2010; Shojaa, Jouybari, & Sanagoo, 2009). Partners limit their sexual life due to concerns such as sexual intercourse might cause miscarriage, increase the risk of preterm birth, cause waters break, make fetus blind or be born disabled, and even harm the hymen of female babies (Nakić Radoš et al., 2015; Ribeiro, Scanavino, Amaral, Horta, & Torloni, 2017; Sacomori & Cardoso, 2010; Shojaa et al., 2009). A review of the related literature shows that several studies aimed to identify the sexual life changes in pregnancy (Bilen Sadi & Aksu, 2016; Gałązka, Drosdzol-Cop, Naworska, Czajkowska, & Skrzypulec-Plinta, 2015; Jamali & Mosalanejad, 2013; Nakić Radoš et al., 2015; Ribeiro et al., 2017; Sacomori & Cardoso, 2010; Shojaa et al., 2009). However, although a few studies aimed to identify the common myths, attitudes and beliefs about sexuality in pregnancy (Ribeiro et al., 2017; Sacomori & Cardoso, 2010; Shojaa et al., 2009), there is a lack of a scale developed specifically for this purpose in this

field. The present study aims to develop Attitudes and Beliefs Scale about Sexuality during Pregnancy (ABSSP).

Methods

Study design and the purpose

This study, which utilized a methodological approach, aims to develop the ABSSP to identify the distorted attitudes, beliefs, and knowledge about sexual intercourse in pregnancy.

Target population and the sample

The study was conducted in the Pregnancy Polyclinic of the Obstetrics and Gynecology Department of a university hospital in Adana, Turkey. The target population was the pregnant women who applied to the pregnancy polyclinic of the related hospital. The sample size for methodological research is recommended to be 5 times more than the items in the scale (Buyukozturk, 2011). As the draft scale that was planned to be used for identifying the attitudes and beliefs about sexuality during pregnancy was composed of 43 items, the study was conducted with 210 pregnant women. Inclusion criteria were as follows:

- accepting to participate in the study willingly,
- having a normal pregnancy,
- having no sexual life limitations recommended by a doctor.

Research questions

1. Is ABSSP a valid tool for the identification of attitudes and beliefs about sexuality during pregnancy?
2. Is ABSSP is a reliable tool for the identification of attitudes and beliefs about sexuality during pregnancy?

Ethical considerations

Prior to the study, approval was obtained from the Noninvasive Clinical Studies Ethics committee of the University's Medical Faculty. Necessary written permissions were received from the hospital where the study was conducted, and verbal consent was obtained from the pregnant women involved in the study.

Scale development process

Scale for Attitudes and Beliefs About Sexuality During Pregnancy was developed in four steps based on the instrument development guidelines by DeVellis (2017) which included (1) generation of an item pool; (2) estimation of content validity; (3) preliminary survey; and (4) testing of validity and reliability in a large sample survey (Figure 1).

Step 1: Generation of an item pool

In the first stage, factors associated with attitudes and beliefs about sexuality during pregnancy were explored in a comprehensive literature review. In accordance with the main factors
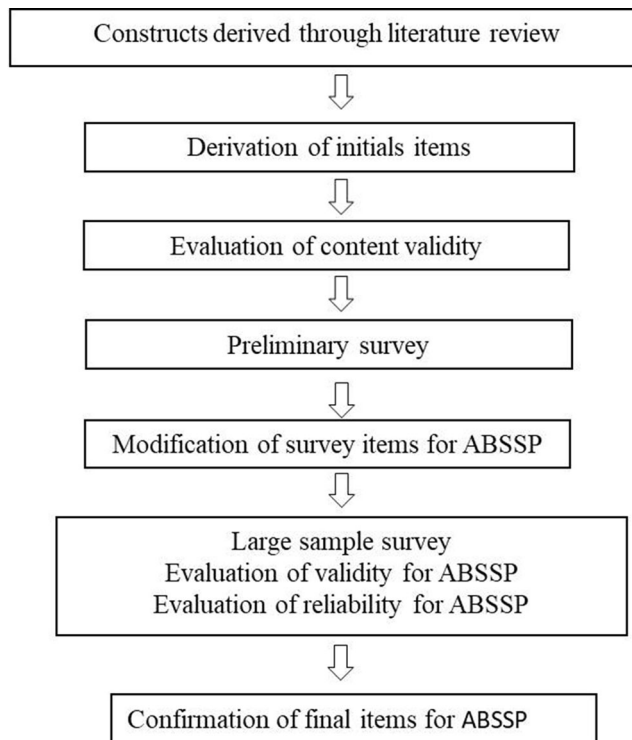
Figure 1. Development process of the Attitudes and Beliefs Scale about Sexuality during Pregnancy (ASSSP).

frequently highlighted in the literature, the items in the pool were planned to be categorized under four theoretical dimensions: "Pregnancy and Sexuality", "Concerns about the Baby", "Sexuality/Attraction" and "Concerns about Pregnancy". The 45-item draft scale was rated on a 5-point Likert scale that included "I totally agree = 5, I agree = 4, I am not sure = 3, I disagree = 2, I totally disagree = 1" options.

Step 2: Estimation of content validity

The 45 items in the item pool were presented to 10 expert reviews in order to identify content validity. The 10 experts were contacted through e-mail, to which 7 of them responded (6 midwives/nursing academic, 1 female gynecologist/academic). The Davis technique (1992) was used for content validity based on expert reviews. The experts were asked to assess the scale items by scoring each item between 1 and 4 (1: not relevant, 2: somewhat relevant, 3: quite relevant, 4: highly relevant). Two items were excluded from the scale as they were below 0.42. A total number of 43 items ranging from 0.57 to 1.00 validity ratios were obtained, and the scale Content Validity Index (CVI) score was found 0.93. Following this, the items were revised according to the suggestions, and the final draft was prepared.

Step 3: Pilot test

The 43-item version of the draft scale was piloted with 20 people who had similar characteristics to the sample population. The pregnant women who were involved in the pilot study were not involved in the study. Minor wording changes were made to improve clarity.

Step 4: Psychometric Evaluation of the Attitudes and Beliefs Scale about Sexuality during Pregnancy

Statistical analyses of the findings were performed using IBM SPSS Statistics 22 and SPSS AMOS 22 (IBM SPSS, Turkey program). Whether data distributed normally was tested using the Shapiro Wilks test. Descriptive statistical methods (means, standard deviations, frequencies) were utilized for the data. Explanatory Factor Analysis (EFA) was performed for the validity of the scale, and Confirmatory Factor Analysis (CFA) was performed for content validity. Reliability analysis included Cronbach's Alpha analysis for internal consistency analysis and Pearson correlation analysis for item-total score correlation (Alpar, 2010; Boke, 2014; Capik, 2014; DeVellis, 2017; Gurbuz & Sahin, 2018; Tavsancil, 2014;Tezbasaran, 2008).

Results

The average age of the participants was 29.82 ± 5.94 with a range from 17 to 48 years.

Analysis of the validity of the Attitudes and Beliefs Scale about Sexuality during Pregnancy

Kaiser Mayer Olkin and Barlett analysis of the Attitudes and Beliefs Scale about Sexuality during Pregnancy

Initially, Kaiser Mayer Olkin (KMO) and Barlett values were assessed for performing the factor analysis of the ABSSP.

KMO measure of sampling adequacy of the scale was found 0,910, which indicates the adequacy of the sample. The results of the Barlett test was found $\chi^2 = 3167.685$; df = 300, $p < 0.001$, which indicates that it was appropriate for factor analysis.

Item analysis of the Attitudes and Beliefs Scale about Sexuality during Pregnancy

Item total correlations showed that items 18, 19, 25, 30 and 43 had a very low level of item-total correlations (Table 1). Especially item 43 had a very low and negative item-total correlation. The correlation values of all the items in the anti-image correlation matrix were found to be higher than 0.500. Cronbach's alpha coefficient of the scale was found 0.941. When the items 18, 19, 25, 30 and 43 that had low item-total correlation were excluded, the overall Cronbach's Alpha coefficient was found to increase to 0.954. Hence, it was decided that items 18, 19, 25, 30 and 43 should be excluded from the scale.

Explanatory Factor Analysis

Explanatory Factor Analysis (EFA) was performed to test the structural validity of the scale. Principal Components Analysis and Varimax rotation approach were utilized for factor analysis. EFA also showed that the factor loads of the 14 items were overlapping and low. Therefore, items 1, 2, 7, 10, 11, 12, 13, 27, 28, 30, 31, 32, 33 and 34 were eliminated from the scale. The EFA performed on the remaining 25 items indicated that the scale items were collected under four factors. Table 2 demonstrates the factors obtained from the explanatory factor analysis performed on the remaining 25 items and the Rotated Component Matrix collected under these items. It was found that the first factor explained the 20.787% of the total variance, Factors 1 and 2 together explained the 39.631% of the total variance, factors 1, 2, and 3 explained the 51.714% of the total variance, and all the factors explained the 61.591% of the total variance.

Table 3 demonstrates the EFA results of the scale. According to the topics and content of the items, the factors where item 3, 4, 5, 6, 8 were collected was the "Pregnancy and Sexuality" (PS) sub-scale; the factors where item 9, 16, 17, 21, 23, 24 and 26 were collected was the "Concerns about the Baby" (CAB) sub-scale; the factors where item 14, 15, 20, 22 and 37 were collected was

Table 1. Mean and total-item correlations of the scale items

Items	X̄ ± SD	Median	Anti-image correlation	Item-total correlation	Cronbach's alpha when the items eliminated
1. Sexual life in pregnancy is out of question.	2.13 ± 1.11	2	0.877	0.576	0.940
2. A pregnant woman does not have sexual desires.	2.32 ± 1.19	2	0.926	0.614	0.940
3. Masturbating is wrong in pregnancy.	3.06 ± 1.21	3	0.726	0.322	0.942
4. Oral sex is wrong in pregnancy.	3.17 ± 1.26	3	0.754	0.388	0.942
5. Sexual happiness is possible only through the sexual intercourse of a man and woman.	3.00 ± 1.33	4	0.674	0.314	0.942
6. The number of sexual intercourse should be limited in pregnancy.	3.51 ± 1.21	4	0.859	0.356	0.942
7. Sexual intercourse in pregnancy is a sin.	1.96 ± 0.99	2	0.908	0.555	0.940
8. All the physical intimacy such as touching, stroking, kissing, etc. in pregnancy should end up with sexual intercourse.	2.56 ± 1.21	2	0.785	0.359	0.942
9. No sexual intercourse should be experienced in pregnancy.	2.23 ± 1.13	2	0.954	0.667	0.939
10. It is wrong to have sexual fantasies in pregnancy.	2.49 ± 1.19	2	0.908	0.608	0.940
11. No sexual intercourse should be had in the first three months of pregnancy.	2.74 ± 1.30	2	0.907	0.557	0.940
12. Sexual intercourse in pregnancy satisfies only men.	2.66 ± 1.25	2	0.902	0.667	0.939
13. Sexual intercourse in pregnancy is not right morally.	2.08 ± 1.05	2	0.940	0.607	0.940
14. Pregnant women lose their attraction.	2.42 ± 1.19	2	0.943	0.601	0.940
15. A pregnant woman's partner is not satisfied with sexual life.	2.28 ± 1.11	2	0.920	0.611	0.940
16. Sexual intercourse in pregnancy harms the baby.	2.54 ± 1.20	2	0.950	0.645	0.940
17. The man's penis touches the baby's head during sexual intercourse and causes mental retardation in baby.	1.96 ± 1.09	2	0.928	0.633	0.940
18. A pregnant woman's body is more beautiful.	3.36 ± 1.03	3.5	0.694	**0.073**	0.944
19. Women become more beautiful when they are pregnant.	3.00 ± 1.12	3	0.714	**0.037**	0.944
20. Lack of erection means that the man does not find his pregnant wife attractive.	2.50 ± 1.12	2	0.945	0.602	0.940
21. Semen can make baby's eyes blind.	1.97 ± 1.00	2	0.927	0.661	0.940
22. Pregnancy takes women's all beauty and causes her to look ugly.	2.46 ± 1.19	2	0.918	0.527	0.940
23. If the baby's face comes into contact with semen during the sexual intercourse, there will be stains in the baby's face.	1.88 ± 0.92	2	0.923	0.697	0.940
24. If the baby is a girl, semen might harm her hymen.	1.77 ± 0.92	2	0.921	0.683	0.940
25. A pregnant woman's body is more attractive/sexy.	3.43 ± 0.97	4	0.794	**0.031**	0.943
26. If semen comes into contact with the baby's ear during the sexual intercourse, the baby becomes deaf.	1.84 ± 0.96	2	0.939	0.660	0.940

Table 1. Continued.

Items	$\bar{X} \pm SD$	Median	Anti-image correlation	Item-total correlation	Cronbach's alpha when the items eliminated
27. The man's sexual organ touches the baby during the sexual intercourse.	2.22 ± 1.23	2	0.958	0.653	0.940
28. The baby might become disabled if couples have sexual intercourse in pregnancy.	2.09 ± 1.09	2	0.923	0.719	0.939
29. The baby might die due to sexual intercourse in pregnancy.	2.27 ± 1.18	2	0.916	0.692	0.939
30. Men find their pregnant wife more beautiful.	3.25 ± 0.97	3	0.777	**0.013**	0.943
31. Sexual intercourse in pregnancy causes twin pregnancy.	2.15 ± 0.97	2	0.928	0.543	0.940
32. Sexual intercourse in pregnancy causes the baby to get infected.	2.71 ± 1.22	3	0.901	0.589	0.940
33. If the baby is born with a white creamy thing in face, it means that the couples had too much sex during pregnancy.	2.28 ± 1.03	2	0.917	0.471	0.941
34. There should be no sexual intercourse in the last 3 months of pregnancy.	2.96 ± 1.30	3	0.901	0.569	0.940
35. Sexual intercourse in pregnancy causes waters break.	2.81 ± 1.18	3	0.949	0.660	0.939
36. Sexual intercourse in pregnancy causes preterm birth.	2.86 ± 1.21	3	0.929	0.698	0.939
37. Men do not find their pregnant wife attractive.	2.54 ± 1.06	2	0.930	0.430	0.941
38. Sexual intercourse in pregnancy makes the baby grumpy and naughty.	2.02 ± 1.03	2	0.958	0.577	0.940
39. The baby feels sexual intercourse in pregnancy	2.67 ± 1.27	2	0.931	0.560	0.940
40. Sexual intercourse in pregnancy causes miscarriage.	2.87 ± 1.20	3	0.932	0.714	0.939
41. Sexual intercourse in pregnancy causes the mother to get infected.	2.92 ± 1.23	3	0.932	0.623	0.940
42. Sexual intercourse in pregnancy causes bleeding.	2.87 ± 1.24	3	0.918	0.683	0.939
43. Sexual intercourse in pregnancy can be continued like before.	2.73 ± 1.20	2	0.859	−0.355	0.947

The PCA with Varimax rotation revealed five components with an eigenvalue above 1 (range 1.043– 9.973). However, the scree plot (DeVellis, 2017) supported the four-component structure which explained 61.591% of the total variance in ABSSP with variances between 9.888–20.78.

Table 2. Eigenvalues and percentage of explained variance of the components

	Initial eigenvalues			Rotation sums of squared loadings		
	Total	Varieance (%)	Cumulative (%)	Total	Variance (%)	Cumulative (%)
3	9.973	39.891	39.891	5.197	20.787	20.787
4	2.292	9.167	49.057	4.711	18.844	39.631
5	1.846	7.386	56.443	3.021	12.084	51.714
6	1.287	5.148	61.591	2.469	9.877	61.591
8	1.043	4.170	65.761			
9	0.893	3.570	69.331			
14	0.842	3.367	72.698			
15	0.735	2.939	75.637			
16	0.669	2.676	78.314			
17	0.640	2.562	80.876			
20	0.578	2.313	83.189			
21	0.493	1.972	85.161			
22	0.463	1.851	87.012			
23	0.420	1.681	88.692			
24	0.400	1.601	90.293			
26	0.362	1.449	91.742			
29	0.346	1.386	93.127			
35	0.300	1.201	94.329			
36	0.275	1.101	95.430			
37	0.251	1.004	96.434			
38	0.214	0.858	97.292			
39	0.206	0.825	98.117			
40	0.178	0.711	98.828			
41	0.149	0.596	99.424			
42	0.144	0.576	100.000			

Table 3. Explanatory factor analysis results of the scale.

	Factors loading according to factors			
Items	Factor 1	Factor 2	Factor 3	Factor 4
3	**0.712**	0.154	0.126	−0.024
4	**0.830**	0.191	−0.005	0.048
5	**0.655**	0.112	−0.064	0.163
6	**0.576**	−0.019	0.278	0.171
8	**0.490**	−0.105	0.115	0.365
9	0.197	**0.637**	0.339	0.196
16	0.124	**0.460**	0.299	0.384
17	0.058	**0.788**	0.125	0.220
21	0.089	**0.831**	0.117	0.214
23	0.123	**0.821**	0.105	0.236
24	−0.003	**0.852**	0.155	0.278
26	0.128	**0.828**	0.108	0.167
14	0.086	0.333	**0.690**	0.248
15	0.042	0.504	**0.591**	0.206
20	0.154	0.122	**0.552**	0.475
22	0.100	0.173	**0.735**	0.244
37	0.076	0.070	**0.738**	0.222
29	0.055	0.426	0.199	**0.588**
35	0.162	0.199	0.252	**0.698**
36	0.122	0.154	0.300	**0.773**
38	0.036	0.373	0.315	**0.423**
39	0.002	0.332	0.121	**0.578**
40	0.144	0.265	0.173	**0.808**
41	0.170	0.254	0.234	**0.640**
42	0.177	0.229	0.153	**0.797**

the ""Sexuality/Attraction" (SA) and the factors where item 29, 35, 36, 38, 39, 40, 41 and 42 were collected was the "Concerns about Pregnancy" (CAP) sub-scale.
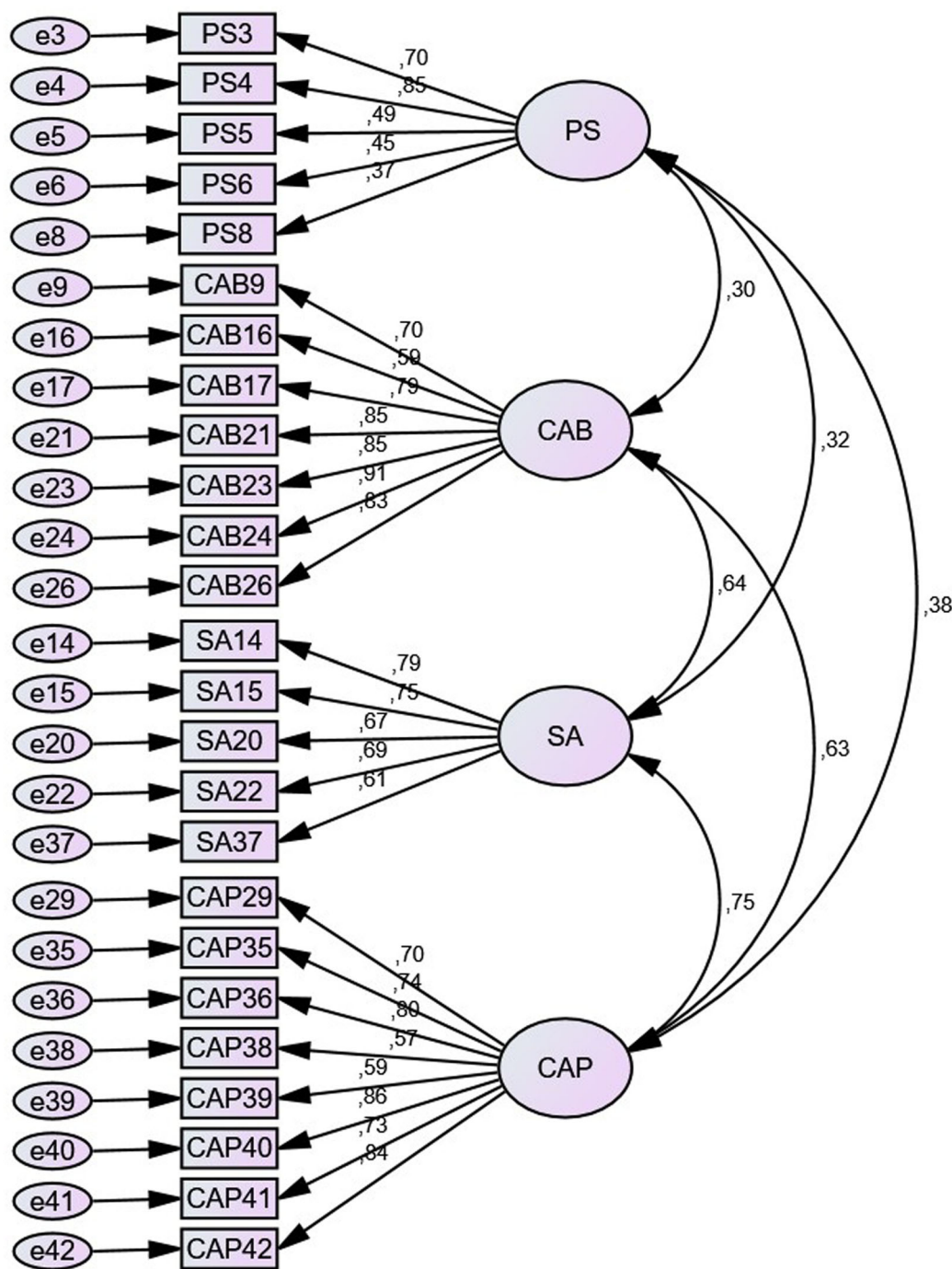
Figure 2. Confirmatory factor analysis for the Attitudes and Beliefs Scale about Sexuality during Pregnancy.

Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) results showed the following values: Chi-square goodness of fit (χ^2 (269)) = 637.53, Normed Chi-square (NC) = 2.370, Comparative Fit Index CFI = 0.878, The Root Mean Square Error of Approximation (RMSEA) = 0.081, Normed Fit Index (NFI) =

Table 4. Criteria values of the fit indices and fit index values of the scale.

	Fit indices criteria values	CFA Indeks
NC (χ^2/sd)	≤ 2.5 = perfect	2.370
RMSEA	≤ 0.05 = perfect	0.081
CFI	≥ 0.90 good	0.878
NFI	1 = perfect	0.808
GFI	≥ 0.90	0.800

Table 5. The score distributions and internal consistency of the scale total and sub-scales.

ABSSP and sub-scales	Number of items	Min-Max	$\bar{X} \pm$ SD	Cronbach alpha
Pregnancy and sexuality	5	5-24	15.30 ± 4.26 (16)	0.717
Concerns about the baby	7	7-35	14.19 ± 5.88 (13.5)	0.913
Sexuality/attraction	5	5-24	12.19 ± 4.39 (12)	0.830
Concerns about pregnancy	8	8-40	21.29 ± 7.35 (21)	0.901
Total	25	25-113	62.97 ± 17.54 (61)	0.916

0.808, and Goodness of Fit Index (GFI) = 0.800. In line with all fit indexes, the model obtained with EFA was confirmed with CFA, and the confirmed model was found to have a good level of fit (Figure 2, Table 4) (Buyukozturk, 2011).

Analysis of the reliability of the Attitudes and Beliefs Scale about Sexuality during Pregnancy

Table 5 demonstrates the score distributions and internal consistency of the scale total and sub-scales. Analyses results showed that the final scale had four sub-scales, which included the "Pregnancy and Sexuality" (5 items), "Concerns about the Baby" (7 items), "Sexuality/Attraction" (5 items), and "Concerns about Pregnancy" (8 items). The scale had no reverse items. Higher scores indicate increased sexual myths in pregnancy. The Cronbach's alpha value of the scale was found 0.916, and this value ranged from 0.717 to 0.913.

The internal consistency reliability of the ABSSP was calculated by splitting the test into two. The split-half reliability analysis of ABSSP included the reliability coefficient with Guttmann Split-Half and Spearman-Brown formulas and Cronbach's alpha reliability coefficient calculations separately. The Spearman-Brown reliability coefficient of the ABSSP was 0.870; the 13-item first half Cronbach's alpha value was 0.845, and the 12-item second half Cronbach's alpha value was 0.912. This study identified a positive, statistically significant relationship between "Pregnancy and Sexuality" and "Concerns about the Baby" ($p < 0.001$), "Sexuality/Attraction" ($p < 0.001$), "Concerns about Pregnancy" ($p < 0.001$) sub-scales and ABSSP total scores ($p < 0.001$) at 30.7%, 32.9%, 38.3% and 58.8% levels respectively. There was a positive, statistically significant relationship between "Concerns about the Baby" and "Sexuality/Attraction" ($p < 0.001$) and "Concerns about Pregnancy" ($p < 0.001$) sub-scales and ABSSP total ($p < 0.001$) scores at 59.1%, 64.7% and 82.9% levels respectively. A positive, statistically significant relationship was found between "Sexuality/Attraction" and "Concerns about Pregnancy" ($p < 0.001$) sub-scales and ABSSP total scores ($p < 0.001$) at 67.8% and 81.2% respectively ($p < 0.01$). There was a positive and statistically significant relationship at 89.8% level between the "Concerns about Pregnancy" sub-scale and ABSSP total scores ($p < 0.01$). These results indicate that all the items in the scale measure the same feature; hence, ABSSP could be considered a reliable measurement tool.

Discussion

This was a methodological research study that aimed at developing the Sexual Myths in Pregnancy Scale to assess distorted attitudes, beliefs and knowledge about sexual intercourse in

pregnancy and examine its validity and reliability. The ABSSP consists of 25 items and uses a 5-point Likert scale with the total score ranging from 25 to 125 points. The scale has no items scored reversely. Higher scores indicate increased sexual myths in pregnancy.

Content validity of the scale and the items on it need to be provided with evidence. This evidence could be obtained through the content validity index (CVI) based on expert ratings of relevance for multi-item scales in nursing studies. Expert reviews on this issue support the validity of the scale (Polit & Beck, 2006; Tavsancil, 2014). Analyses showed that as a result of the ABSSP content reliability ratios, totally 43 items that ranged between 0.57 and 1.00 at item level were obtained, and the scale CVI score was found 0.93, which indicates that the scale has sufficient content validity according to literature.

The KMO test shows whether the data structure formed by the variables obtained from a specific sample was sufficient for factor analysis. If this value is 0.60 and over, it means that the sample is sufficient for factor analysis. Barlett Sphericity Test is used for testing whether the relationships in the correlation matrix is sufficient for factor analysis (Alpar, 2010; DeVellis, 2017). For the factor analysis of ABSSP, initially KMO and Barlett values were analyzed, and the KMO sample adequacy of the scale was found 0.910. Barlett test result was found $\chi^2 = 3167.685$; df $= 300$, p $= 0.001$, indicating that the sample size is appropriate for factor analysis.

EFA was performed to test the structural validity of the scale. Principal components analysis and the Varimax rotation approach were utilized for factor analysis. EFA also showed that the factor loads of the 14 items were overlapping and low. Therefore, these items were eliminated from the scale. Explanatory Factor Analysis results performed on the remaining 25 items showed that the scale items were collected under four factors. The higher the variance rates are, the stronger the factor structure of the scale is. However, variance ratios between 40% and 60% are accepted as sufficient (Boke, 2014; Buyukozturk, 2011; Gurbuz & Sahin, 2018). The explained total variance was 61.591% in this study, which is in line with this view.

After the items that would represent the factors as a result of the factor analysis were identified, these factors should be expressed with some specific names. The items under the factor are named considering the theoretical foundation, common features of the items, meanings expressed by the items with high factor loads, etc. The factor names need to be meaningful, easily understood, and supported with a theoretical base (Alpar, 2010; DeVellis, 2017). ABSSP used denomination included by each factor in line with their content. ABSSP included names according to the topics and content of the items, which included the "Pregnancy and Sexuality" sub-scale; "Concerns about the Baby" sub-scale, "Sexuality/Attraction" sub-scale" and "Concerns about Pregnancy" sub-scale.

CFA is utilized to analyze the factor structure of the measurement tool and to test the appropriateness of the structures identified with EFA to the theoretical or assumed factor structures (Capik, 2014; Tezbasaran, 2008). In line with all the fit indexes according to the confirmatory factor analysis results of this study, the model obtained with the explanatory factor analysis was confirmed with confirmatory factor analysis, which indicated that the confirmed model had a good fit.

Interpretation of the reliability analysis findings shows the internal consistency reliability with the Cronbach's Alpha values (Alpar, 2010; DeVellis, 2017; Gurbuz & Sahin, 2018). While the reliability coefficient of 0.70 is sufficient for a scale developed for the first time, it needs to exceed 0.80 for a mature scale (Buyukozturk, 2011; DeVellis, 2017). This study analyzed the Cronbach's Alpha coefficients to identify the reliability rates of the ABSSP sub-scales and total scale. ABSSP total Cronbach's Alpha internal consistency coefficient was 0.916, and the sub-scales ranged from 0.717 to 0.901. These results indicate that the scale has a very high reliability level for a scale developed for the first time.

Correlation between items is utilized to identify the reliability of the measurement, identify the consistency between the items, or reveal the secret variable in the background. Consistency

between the items becomes evident with the degree of positive relationship (DeVellis, 2017). This study identified a positive, statistically significant relationship between sub-scales and ABSSP total scores. These results indicate that all the items in the scale measure the same feature; hence, ABSSP could be considered a reliable measurement tool.

In conclusion, ABSSP, which was developed to identify attitudes and beliefs about sexuality during pregnancy, was found to be a valid and reliable tool in Turkish pregnant women. It is recommended that the validity and reliability of the scales developed for the first time should be used and retested in various studies to improve their structure. Hence, findings from different studies utilizing the scale developed in this study would have important contributions to the usage and reliability of the scale. The use of the scale in studies from different and wider sample groups such as young people, women at reproductive age, and men could contribute to the literature in this issue.

Limitations of the study

The results of the study are limited to the population of this study. ABSSP is a scale that was developed to identify attitudes and beliefs about sexuality during pregnancy and was used firstly in this study. In the development process, the scale was administered only to pregnant women. The results of this study that involves Turkish pregnant women cannot be generalized to all women and societies.

Acknowledgments

Disclosure statement

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