Clinical and Experimental Health Sciences

The Relationship Between the Social Support Perceived by the Mothers and Their Motherhood Experience

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ABSTRACT

Objective: Becoming a mother, is one of the most important developmental events in a woman's life. This study, by making Turkish validity and reliability study of Being a Mother scale which was developed by Matthey, was conducted methodologically and analytically in order to determine social support which mothers perceived and motherhood experiences.

Methods: The study universe consists of 588 volunteer mothers, who have a child between 0-3 year range, that holds the criteria for the study and applied September 2015-March 1016 University Training and Research Hospital. Data was gathered with question form, which was prepared by researchers, Being a Mother Scale (BaM 13) and Multi-dimensional Perceived Social Support Scale (MDPSSS). Data were evaluated with the help of IBM SPSS Statistics 23 and IBM SPSS AMOS 23 statistics programs.

Results: It was determined that 45.7% of mothers remain in the 28-34 year range and 47.1% were primary school graduates. It was seen that the Being a Mother Scale has good psychometric characteristics. It was determined that the model, which consists of 25 statements with 6 factors integrated structure of Being a Mother Scale and Multidimensional Perceived Social Support, generally fits for the research purposes.

Conclusions: As a result of the validity and reliability study of the Being a Mother scale, it was seen that it is applicable for Turkish society. A decrease of satisfaction from motherhood was determined accordingly decreasing social support.

Keywords: Motherhood, social support, motherhood experience, reliability, validity scale

1. INTRODUCTION

Being a mother is among the most crucial developmental phases of a woman (1). The bond between the mother and her child starts during maternity and increases gradually over time (2). The intimacy between the mother and the baby during the early postpartum period facilitates the adaptation to the role of being a mother (3). According to Mathey perceived social support is a significant factor in the increase of motherhood satisfaction (4).

Motherhood is a flexible concept affected by several factors including the social, cultural, political, and ethical ones. It is fictionalized culturally, and women are thought to be a mother in the socialization process. The motherhood experience has similar universal characteristics and is affected by the culture (5).

Being a mother is seen as a duty to be conducted in Turkey just as in other cultures and mothers culturally prepare themselves to fulfill this duty. Motherhood is a dynamic process with different excitements assigning extra responsibilities to the other members of the family as well (6,7). The age, education, social status, work status, socioeconomic condition, personality characteristics of the mother as well as problems during the pregnancy can be listed as some of the factors affecting the adaptation to motherhood (8).

Social support can be defined as the relationship among the people required for psychosocial, economical, and cognitive support and it has a crucial role in maintaining and sustaining the state of health (9). For the last 25 years, social support has been in the center of interest for coping strategies and as a preventive health care method (10). The social support system is a powerful source in terms of the solutions to psychosocial problems, prevention of these problems, and also coping with tough conditions. There are various studies in the literature on the positive relationship of social support on psychological and physical health (11-13). Since the motherhood period refers to the lives of two people – the mother and the baby –, it can be considered as one of the most important intervals whenever social support is vital.

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According to Mathey (2011) perceived social support is significant for the increase in the satisfaction of maternity. Social support is also an indicator for the mothers' own consideration in regard to the feeling of adequacy as a parent, positive marital relationship, antenatal mental well-being, and satisfaction towards maternal role and baby-care (4,14,15).

The adaptation of the mother to her new role is significant in terms of having adequate knowledge and skill to fulfill the care requirements. The consultancy has given by the healthcare professionals starting with the prenatal stage functions as social support in gaining the feeling of adequacy and minimizing the anxiety level (14,16,17).

This study was conducted on the basis of the assumption that establishing the support requirements for mothers will guide the healthcare professionals in their consultancy and training processes.

2. METHODS

2.1. Aim and Type of the Study

This study was conducted methodologically and analytically in order to determine the relationship between the perceived social support and the maternal experience after the Turkish validity and reliability assessment of Being a Mother Scale-BaM 13.

2.2. Research Consent

For the application of Being a Mother Scale-BaM 13 written permission was taken from Stapphen Matthey who developed the scale. Besides, necessary permissions were taken from Sakarya University Training and Research Hospital and Sakarya University Faculty of Medicine Clinical Research Ethics Committee (2015/71522473/050.01.04/99) in order to conduct the research which was conducted on a volunteer basis.

2.3. Validity and Reliability Study of the Scale

2.3.1. Universe and Sample

The universe of this study contains the mothers of the children between the age range of 0 and 3 who were staying in the clinics of Sakarya University Training and Research Hospital and who applied to the hospital between September 2015 and March 2016. Besides, 588 (five hundred and eighty-eight) volunteer mothers who applied to the above-mentioned clinics and who are matching the criteria generated the sample. And the test-retest method was conducted with the participation of 30 mothers.

2.3.2. The Tools Used for Data Collection

Questionnaire Form: This form includes 28 questions on personal characteristics and on general medical condition all of which was prepared by the researcher in accordance with the literature review (4,11,13,14)

Being a Mother Scale (BaM-13): Being a Mother Scale (BaM 13) was developed by Matthey in 2011 to determine the maternity experience of the mothers of a child between the age range of 0 and 3. The scale consists of 13 questions. The Cronbach'sAlphavaluewasfoundas0.798inMatthey'sstudy(4).

Scoring: The scale consists of 13 items each of which are scored between 0 and 3 and in which the higher scores indicate a lower satisfaction for the maternal experience. To facilitate the scoring each item was scored in the same manner: 0, 1, 2, 3. The total score varies between 0 and 39. The data with a score of 9 and above indicate a significant level of maternal dissatisfaction. The 13th, 9th, 12th, 3rd, 10^{th,} and 11th questions evaluate the sub-dimension of child experience, the 5th, 6th, 7th, 11th, 2^{nd,} and 8th questions evaluate the sub-dimension of adult experience, and the 1st and the 4th questions evaluate the sub-dimension of emotional intimacy (4).

Multi-Dimensional Perceived Social Support Scale (MDPSSS): Multi-Dimensional Perceived Social Support Scale was developed by Zimet et all in 1988 (41,18) and it was adapted to Turkish adaptation by Eker, Arkan and Yaldız. In the factorial structure, validity, and reliability study of the revised version of the MDPSSS by Eker, Arkan & Yaldız (2001) the Cronbach's Alpha reliability coefficient was found as 0.80-0.95 (10). The scale consists of 12 questions all of which can easily be understood by anyone regardless of the education level. In this study, the Cronbach's Alpha reliability coefficient was found as .921.

2.3.3. The Validity Study of the Scale

Content Validity: The directives and the questions of the scale which were translated into Turkish were sent to various faculty members of the High School of Nursing and Medical Schools in Turkey and to the experts in order to evaluate the accuracy in terms of language and expression and the comprehensiveness in terms of the topic. 12 expert opinions were regarded, and the items were corrected in terms of language and expression. The interscore concordance of these 12 experts for the content validity of the 13 items in the scale was examined with Kendall Coefficient of Concordance Correlation Test. To evaluate the concordance of the scores of the experts Kendall's coefficient of concordance (W) was calculated. It was concluded that the experts reached an agreement on the content of the items and that all the expressions are in accordance with Turkish culture and represent the targeted scope (p=0.115).

Construct Validity-Exploratory Factor Analysis (Being a Mother Scale – BaM – 13): In this study which was conducted with 588 participants to determine the relevance of Being a Mother Scale (BaM-13) to Turkish society, the data were transferred to IBM SPSS Statistic 23 program. First, exploratory factor analysis was performed with 147 randomly chosen participants in the data set, and "Principal Components Analysis" was preferred as the factor exploratory method.

Factor number related to any scanting was not made. For factor load, statements above 0.500 were preferred (Table 1).

Table 1. *Results of KMO and Bartlett*

Kaiser-Meyer-Olkin (KMO)		0.768
Bartlett Sphericity Test	X^2	480.031
	Sd	78
	P	**<0.001***

** Statistical significance*

According to this table, Kaiser-Meyer-Olkin (KMO) value was found as 0,768. Therefore, it is likely that the factor analysis results to be performed with the data will be useful and applicable. With the results of Bartlett Sphericity test, it was inferred that there is a significantly high correlation among the variables and that the data are suitable for the performance of factor analysis (X^2: 480.031, SD: .78, p<0.001).

After the factor analysis the numbers of the items – which was 13 – were unchanged. According to the results of the content validity of these 13 items, three factors were found out and all the factor loads were over 0.500.

The sub-dimension of the adult experience expresses 21.526% of the total variance; the sub-dimension of the child experience expresses 17.838% of the total variance and the sub-dimension of emotional intimacy expresses 13.294% of the total variance. Thus, all these three factors express 52.658% of the total variance.

Confirmatory Factor Analysis (Being a Mother Scale – BaM): Confirmatory factor analysis was applied via IBM SPSS AMOS 23 program with 294 randomly chosen participants from the data set of 588 participants.

In the first phase, a first-order CFA model where the three-factor-dimension (F1: Adult Experience, F2: Child Experience, F3: Emotional Intimacy) were the latent variable and the expressions generating these factors where the indicator variables were created in Figure 1. As the latent variable wasn't metrical, a value of 1 should be assigned to one of the lines drawn from the latent variable to the indicator variable (the factor load should be equated to 1) or any value (mostly 1) should be assigned to the variant of the latent variable to estimate the parameter values (19,20).

In the second phase, the maximum likelihood method which is generally used for structural equation modeling and which gives reliable results even when the data weren't distributed normally was used for estimation of the model and estimation of the errors of the observed variables, the variances of the latent variables and the parameters including the regression coefficients regarding the lines drawn from the latent variables to the observed variables were targeted. For the betterment of the fit indices, a two-way relationship was established between the error terms in the questions of "I had difficulties in coping with the situation when my baby cried." and "I felt guilty." both of which have the highest modification indices values in Being a Mother Scale. Besides, a relational set-up among the dimensions was assembled to establish the expected covariance among the dimensions and these relationships among the dimensions are illustrated in Figure1. Finally, in the last phase, the fit indices constructed for the three-dimensional first-order CFA Model were examined. It was observed that the three-factor-structure of Being a Mother Scale consisting of 13 items generally correlates well.

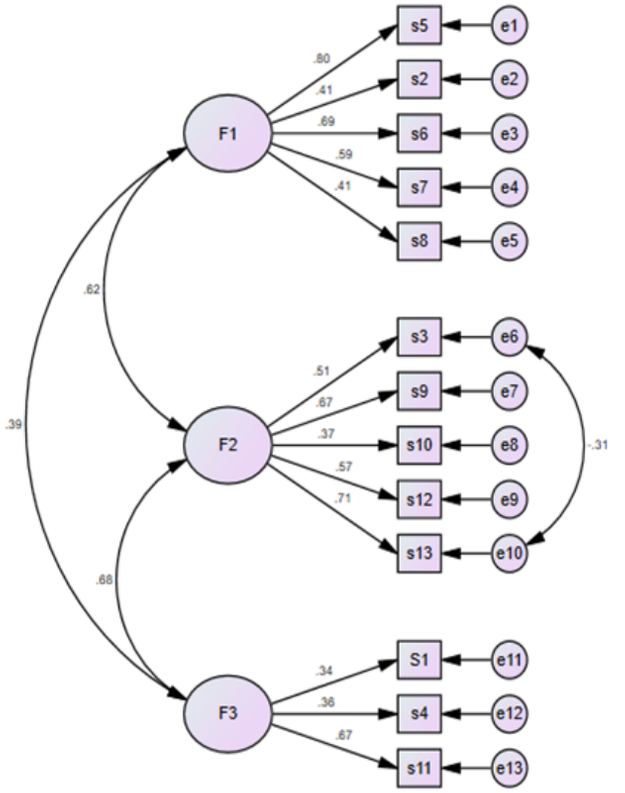

Figure 1. *A first order CFA Model with three different sub-dimensions*

On looking at the obtained adaptive value it can be stated that while χ2/df, GFI, RMSEA, and SRMR values are good, IFI, TLI, and CFI values are unacceptable (3,19,20,21). According to the fit indices it can be declared that Being a Mother Scale is acceptable.

Second-Order Confirmatory Factor Analysis (Being a Mother Scale – BaM-13) and Multi-Dimensional Perceived Social Support Scale (MDPSSS): Confirmatory factor analysis was applied via IBM SPSS AMOS 23 program with 294 randomly chosen participants from the data set of 588 participants. In the first phase, a second-order CFA model where two scales and the six-factor-dimension (F1: Adult Experience, F2: Child Experience, F3: Emotional Intimacy, F4: Family, F5: Friend, F6: A Special Person, F7: Multi-Dimensional Perceived Social Support Scale, F8: Being a Mother Scale) were the latent variables and the expressions generating these factors where the indicator variables were created in Figure 2. As the latent variable wasn't metrical, a value of 1 should be assigned to one of the lines drawn from the latent variable to the indicator variable (the factor load should be equated to

1) or any value (mostly 1) should be assigned to the variant of the latent variable to estimate the parameter values (4,10). In the second phase, the maximum likelihood method which is generally used for structural equation modeling and which gives reliable results even when the data weren't distributed normally was used for estimation of the model and estimation of the errors of the observed variables, the variances of the latent variables and the parameters including the regression coefficients regarding the lines drawn from the latent variables to the observed variables were targeted. For the betterment of the fit indices a two-way relationship was established between the error terms in the questions of "I felt lonely and isolated" and "I felt like I wasn't supported", the questions of "I had difficulties in coping with the situation when my baby cried." and "I felt guilty, the questions of "I was worried about something bad might happen to my baby" and "I was worried because I thought I am not as good as the other mothers", the questions of "I was sure that I can take care of my baby when he/she was born" and "I felt close to my baby" in Being a Mother Scale as well as the questions of "In can get the necessary emotional help and support from my family" and "I can talk to my family about my problems", the questions of "I can count on my friends when things do not go well" and "I have friends with whom I can share my happiness and sorrow", the questions of "There is a person other than my family and friends with me whenever I need" and "There is a person other than my family and friends with whom I can share my happiness and sorrow" in the multi-dimensional perceived social support scale, all of which have the highest modification indices values. Besides, establish the expected covariance among the dimensions, and these relationships among the dimensions are illustrated in Figure1. Besides, a relational set-up among the dimensions was assembled to establish the expected covariance among the dimensions and these relationships among the dimensions are illustrated in Figure 2.

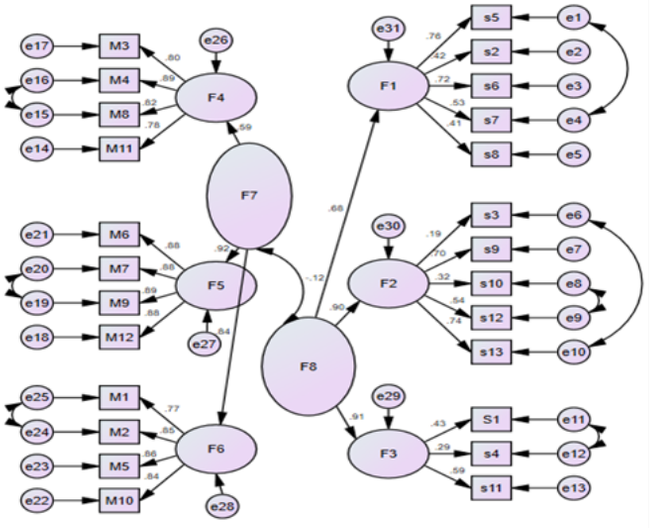

Figure 2. *Two scales and second order CFA model with the six-factor*

In the last phase, the fit indices for the two scales and the second-order CFA model with six-factor dimensions were analyzed. On examining the obtained findings, it can be concluded that the model generally correlates well respecting the usability of the 25 expressions and the six-dimensional structure of both Being a Mother and Multi-Dimensional Perceived Social Support Scale together.

On looking at the obtained adaptive value it can be stated that while χ2/df, GFI, IFI, TLI, CFI, RMSEA, and SRMR values are good, the GFI value is unacceptable (2023).

Reliability of the Scale and the Dub-Dimensions: A calculation was made for each scale and sub-dimension and Cronbach's Alpha value was calculated (Table 3)

Table 2. *Scale factors*

	Factor Loads	Percentage of Variance	Eigenvalue
Adult Experience		**21.526**	**2.798**
I have felt lonely or isolated.	0.805		
I have felt unsupported .	0.771		
I have felt bored .	0.724		
I have felt alright about asking people for help or advice when I needed to .	0.669		
I have felt confident about looking after my baby/toddler.	0.520		
Child Experience		**17.838**	**2.319**
I have been worried that something would happen to my baby/toddler.	0.715		
I worry I am not as good as other mothers .	0.669		
I have felt guilty.	0.630		
I have felt nervous or uneasy around my baby/toddler.	0.519		
I have found it hard to cope when my baby/toddler cries.	0.503		
Emotional Intimacy		**13.294**	**1.728**
I have felt close to my baby/ toddler.	0.786		
I have felt confident about looking after my baby/toddler	0.661		
I have been annoyed or irritated with my baby/toddler.	0.521		
Total		**52.658**	**6.846**

Table 3. *Reliability of the Scale and the Sub-Dimensions*

		Questions	Item-Total correlation	Cronbach's Alpha When item deleted	Cronbach's Alpha	
Being a Mother Scale (BaM-13)	Adult Experience	s5	0,521	0,739	0,757	0,769
		s2	0,444	0,749		
		s6	0,541	0,738		
		s7	0,513	0,740		
		S8	0,260	0,768		
	Child Experience	s3	0,452	0,748	0,676	
		s9	0,557	0,742		
		s10	0,264	0,774		
		s12	0,422	0,751		
		s13	0,458	0,749		
	Emotional Intimacy	S1	0,273	0,765	0,509	
		S4	0,118	0,773		
		s11	0,357	0,762		
(MDPSSS)	Family	m11	0,600	0,917	0,867	0,921
		m8	0,620	0,917		
		m4	0,592	0,918		
		m3	0,623	0,917		
	Friend	m12	0,729	0,912	0,904	
		m9	0,751	0,912		
		m7	0,653	0,916		
		m6	0,795	0,909		
	Special Person	m10	0,686	0,914	0,882	
		m5	0,704	0,913		
		m2	0,718	0,913		
		m1	0,616	0,917		

Reliability of the Scale and the Sub-Dimensions: If the item-total score correlation coefficient is below 0.30 (if the sample is 400 or more, 0.20 is also accepted), it is considered that there is a serious problem with these items and these items can be removed from the scale. An item-total score correlation coefficient of 0.30 and above is interpreted as good for reliability. However, it is not used alone to eliminate items below this value, and the decision is made by evaluating the effect of the item on the Cronbach alpha coefficient (22,23). In this study, there were items below 0.30, but it was decided not to remove any item from the scale since it did not significantly change the Cronbach's alpha value when any item was deleted in the item analysis.

Being a Mother Scale (BaM-13) Test-Retest Reliability: Being a Mother Scale was reapplied to the 30 participants in two weeks. In Being a Mother Scale a very high relation of 94.2% was found. In the study conducted for internal consistency, the Cronbach's Alpha values were found respectively as 0.94 and 0.98 for the first and the second application scale with the same participant group (n=30).

Analyses of the Data: The obtained data of the study were computerized and evaluated with IBM SPSS Statistics 23 and IBM SPSS AMOS 23 statistical programs. For the reliability and validity of the scale, exploratory factor analysis was implemented on 147 participants and for the factor extraction method "Principal Components Factor Analysis" method was preferred. Factor number related to any scanting was not made. For factor load, statements above 0.500 were preferred.

Scale reliability was conducted with test-repeat-test reliability, total item score correlation, and internal consistency reliability analysis. In the determination of other data, percentage, average, independent sample t-test and ANOVA was used. $p<0.05$ were statistically accepted as significant. After analysis, firstly, for variance homogeneity, Levene Test was used, in order to determine where the difference comes from any group or groups, the "multiple comparison test" (Tukey or Tamhane's T2) was used. In addition, in furtherance of scales and sub-dimensions, Pearson Correlation Analysis has benefited.

3. RESULTS

It was determined that 45,7% of mothers remain in the 28-34 year range and 47,1% were primary school graduates. While 10.2% of the participants became mothers at the age of 18 and under, 27.4% were aged 19-22, 31.8% were aged 23-26 and 30.6% were aged 27 and over. The introductory characteristics of the mothers who participated in the study are presented in Table 4.

Table 4. *Distribution of the introductory characteristics of the mother*

		Number	%
Age	27 years and below	191	32.5
	28-34 years	269	45.7
	35 years and over	128	21.8
Age of the Spouse	30 years and below	182	31.0
	31-35 years	209	35.6
	36 years and over	196	33.4
Age of Marriage	18 years and below	111	18.9
	19-24 years	310	52.7
	25 years and over	167	28.4
Age of Being a Mother	18 years and below	60	10.2
	19-22 years	161	27.4
	23-26 years	187	31.8
	27 years and over	180	30.6
Educational Status	Secondary School	277	47.1
	High School	177	30.1
	Undergraduate	118	20.1
	Master's-PhD	16	2.7
Educational Status of the Spouse	Secondary School	217	37.0
	High School	219	37.3
	Undergraduate	117	19.9
	Master's-PhD	34	5.8
Work Status	Working	194	33.0
	Housewife	394	67.0
Economic Status	Income is more than Expense (Good)	121	20.6
	Income is less than Expense (Bad)	59	10.0
	Income and Expense are Equal (Moderate)	408	69.4
Type of the Family	Elementary Family	468	79.6
	Extended Family	113	19.2
	Broken Family	7	1.2
Number of Pregnancy	1	163	27.7
	2	196	33.3
	3 or more	229	38.9
Number of the alive child(ren)	No Children/1 Alive Child	207	35.2
	2 Children	229	38.9
	3 or more Children	152	25.9
Number of the miscarriage(s)	No Miscarriages	457	77.7
	Miscarriage(s)	131	22.3
Abortion	No Abortion	531	90.3
	Abortion(s)	57	9.7
Stillbirth	No Stillbirth	555	94.4
	Stillbirth(s)	33	5.6
Delivery Method	NSD (Normal Spontaneous Delivery)	166	28.2
	C/S (C-section)	422	71.8

A positive and moderately significant correlation between the sub-dimension of adult experience and sub-dimension of child experience and emotional intimacy was found (p<0.05). Besides, a positive and highly significant correlation between the sub-dimension of adult experience and Being a Mother Scale (BaM-13) was seen (p<0.05) (Table 5).

Table 5. *Examining the Correlation between Being a Mother Scale (BaM-13) and the Sub-Dimensions*

		Adult Experience	Child Experience	Emotional Intimacy	Being a Mother (BAM-13)
Adult Experience	r	1.000	0.480	0.351	0.857
	p		**<0.001***	**<0.001***	**<0.001***
	N		588	588	588
Child Experience	r		1.000	0.378	0.839
	p			**<0.001***	**<0.001***
	N			588	588
Emotional Intimacy	r			1.000	0.568
	p				**<0.001***
	N				588

** Statistical significance*

A positive and moderately significant correlation between the sub-dimension of child experience and the sub-dimension of emotional intimacy was identified (p<0.05). Besides, a positive and highly significant correlation between the sub-dimension of child experience and the Being a Mother Scale (BaM-13) was detected (p<0.05). A positive and moderately significant correlation between the sub-dimension of emotional intimacy and the Being a Mother Scale (BaM-13) was identified (p<0.05).

There was a positive and moderately significant correlation between the sub-dimension of family and the sub-dimension friend and special person (p<0.05). In addition, a positive and highly significant correlation between the sub-dimension of adult experience and the MDPSSS Scale was noticed (p<0.05) (Table 5).

A positive and moderately significant correlation between the sub-dimension of a friend and the sub-dimension of a special person (p<0.05). Likewise, there was a positive and highly significant correlation between the sub-dimension of child experience and the MDPSSS Scale (p<0.05). Similarly, a positive and highly significant correlation between the sub-dimension of a special person and the MDPSSS Scale was seen (p<0.05). It was also determined that there was a negative and lowly significant correlation between BaM Scale and MDPSSS Scale (Table 7).

Table 6. *Examining the Correlation between MDPSSS and the Sub-Dimensions*

		Family	Friend	Special Person	MDPSSS
Family	R	1.000	0.370	0.488	0.708
	P		**<0.001***	**<0.001***	**<0.001***
	N		588	588	588
Friend	R		1.000	0.606	0.846
	P			**<0.001***	**<0.001***
	N			588	588
Special Person	R			1.000	0.873
	P				**<0.001***
	N				588
MDPSSS	R				1.000
	P				
	N				

** Statistical significance*

Table 7. *Examining the Correlation between BaM Scale and MDPSSS*

		ÇBASDÖ (MDPSSS)
BaM	R	-0.190
	P	**<0.001***
	N	588

** Statistical significance*

4. DISCUSSION

This study was conducted to determine the relationship between the social support perceived by the mothers and their maternal experience by carrying out the Turkish validity and reliability study of Being a Mother Scale-13 (BaM – 13).

The sample size should be big enough to ensure correlation reliability to carry out the factor analysis. Kaiser-Meyer-Olkin (KMO) test was conducted to confirm the sufficiency of the data obtained from the sample. It is underlined that when the value of Kaiser is closer to 1, it is perfect; however, when the value is under 0.50, it is unacceptable. Besides, the Bartlett Sphericity test should be significant as well (26). Since the Kaiser-Meyer-Olkin (KMO) value was found as 0,768 in this study, the factor analysis results are thought to be useful and applicable. The results of the Bartlett Sphericity test revealed that there is a highly significant correlation among the variables and that the data are suitable for the application of factor analysis (X^2: 480,031, SD: 78, p<0,001).

Exploratory factor analysis was utilized in this study and the "Principal Components Method" was used as the factor extracting method. There wasn't any scaling on the number of the factors. Factor loads above 0,500 weren't included. After the factor analysis, the item number remained unchanged. Three factors occurred after the content validity of these 13 items and all the factors loads were above 0,500. The factor analysis of Being a Mother Scale (BaM-13) the total variance of the three sub-dimensions (factors) explains 17,83% of the Adult Experience Sub-Dimension, 17,838 % of the Child Experience Sub-Dimension and 13,294% of the Emotional Intimacy Sub-Dimension. All these 3 factors explain 52,658% of the total variance. The results of the factor analysis presented that the higher the variance percentage, the stronger the factor structure of the scale.

The eigenvalues are the sum of the squares of the factor loads. Since the sums of these factors are above 1 for each sub-dimension, all the questions under these sub-dimensions are adequate to explain the very sub-dimension. The total Cronbach Alpha coefficient for Being a Mother Scale (BaM-13) is .76.9. Considering that the predicted reliability levels for the measuring tools are between .70-.80, it can be inferred that the reliability level of the whole scale is adequate (27).

Confirmatory factor analysis of the study was applied via IBM SPSS AMOS 23 program. In the first phase, a first-order CFA model where the three-factor-dimension (F1: Adult Experience, F2: Child Experience, F3: Emotional Intimacy) was the latent variable and the expressions generating these factors were the indicator variables were created in Figure 1. As the latent variable wasn't metrical, a value of 1 should be assigned to one of the lines drawn from the latent variable to the indicator variable (the factor load should be equated to 1) or any value (mostly 1) should be assigned to the variant of the latent variable to estimate the parameter values (20). In the last phase, the fit indices for the two scales and the second-order CFA model with six-factor dimensions were analyzed. When the obtained findings are examined, it can be seen that the model generally correlates well respecting the usability of the 25 expressions and the six-dimensional structure of both Being a Mother and Multi-Dimensional Perceived Social Support Scale together.

On looking at the obtained adaptive value it can be stated that while $\chi 2/df$, GFI, IFI, TLI, CFI, RMSEA, and SRMR values are good, GFI value is unacceptable (21,22,25,26). Reliability is a definition indicating the consistency of the measurement tool. If the repeating measurements have the same result as the measurement tool, the scale is regarded as reliable. In terms of the study, reliability is the expression of the repeatability of the measurement results. It can be stated that if the validity of the measurement tool is confirmed, its reliability is confirmed as well (27).

In the repetition of the scale method, the measurement tool is reapplied to the same subject group under the same circumstances and during the time periods which are long enough to avoid the significant remembrances but short enough to avoid significant changes to be measured (28). In this study Being a Mother Scale (BaM-13) was reapplied to the 30 mothers and Pearson Correlation Technique was utilized for the analysis. The repetitive measurements of the Being a Mother Scale (BaM-13) did not present any change against the time.

There is a hypothesis that the measurement tool has experimentally independent sections with common and equal significances for fulfilling the desired target of the scale (29). Item statistics is one of the methods for evaluating internal consistency. In this method which is also known as

item reliability or item statistics variance of each item in the test is compared to the variance of the total test score and the correlation between them is evaluated. If the item loads in the scale are uniformly significant and independent, a high correlation coefficient between each item and total values is expected. If there is an item with a lower correlation compared to the total score, it can be inferred that that item measures a different qualification of the test (30).

The results of the study on determining the validity and reliability of the Being a Mother Scale (BaM-13) presented that the scale is a valid and reliable measuring tool that can be applied to Turkish mothers. It was also established that the model was generally in accordance in terms of the structure of the Being a Mother Scale (BaM-13) and Multi-Dimensional Perceived Social Support Scale both of which had 25 expressions and 6 factors that can be used together. 36.4% of the mothers who participated in the study mentioned that they received support for baby care, while 45.3% of them were supported by their mothers, 10.3% of them were supported by their husbands. In the study of Çalışır (2003) 92.3% of the mothers stated that their husbands help them with baby care. Moreover, the study of Ertürk (2007) reported that 68,2% of the mothers took support for baby care and 41,2% of them took this support from their own mothers and 7,6% of them were supported by their husbands. Adaptation to motherhood is related to spouse support along with many factors. The mothers who were supported by their spouses during the pregnancy and labor period are seen to have a relatively easier and more comfortable pregnancy, labor, and postpartum period. A positive correlation between the spouse support during prenatal, labor, and postnatal period and the social support perceived by the mother was found out (31).

In their study, Ege Timur Zincir & Reeder (2008) mentioned that 68% of the mothers got support and 44% of them got this support from the family of their husbands and 9.3% were supported by their husbands. According to the study of Akın, Ege, Koçoğlu, Demirören & Yılmaz (2009), 61,5% of a group of mothers who were examined in terms of the social support during the postpartum period were supported by their families. Kavlak (2004) reported that 65.5% of the mothers received some support on baby care and while 55.5% of these mothers were supported by either their mothers or by their in-laws, 32.5% of them we supported by their husbands.

Support taken from the environment, particularly from the family, is one of the crucial factors affecting the bond between the mother and the baby positively (32). The study of Evcili, Abak Tali & Yurtsal (2014) reported that most of the mothers stating a good relationship with their husbands express their feelings on their children as “I feel very happy”, however, the mothers expressing a relatively good relationship with their husbands express their feelings on their children as “I feel insufficient”. Social support given by the family, spouse, and healthcare staff is an essential element for the satisfaction of the mother.

While a positive and moderately significant correlation between the sub-dimension of “Adult Experience” and sub-dimensions of “Child Experience” and “Emotional Intimacy” was found ($p<0.05$), a positive and highly significant correlation between the sub-dimension of “Adult Experience” and Being a Mother Scale (BaM-13) was also seen ($p<0.05$). Similarly, apart from the positive and moderately significant correlation between the sub-dimension of “Child Experience” and sub-dimension of “Emotional Intimacy” ($p<0.05$), a positive and highly significant correlation between the sub-dimension of “Child Experience” and Being a Mother Scale (BaM-13) were revealed ($p<0.05$). Finally, a positive and moderately significant correlation between the sub-dimension of “Emotional Intimacy” and Being a Mother Scale (BaM-13) was found out ($p<0.05$). If the adult experiences of the mothers are positive, their childhood experiences and emotional intimacy rates increase which positively affect the satisfaction of the mothers. In one study it was stated that women expressed the beginning of their maternal experience as “a horrible shock”. Sore and irritated nipples due to breastfeeding, long and sleepless nights, constantly crying and hard-to-soothe babies are some of the tough and stressful experiences for new mothers. Due to the postnatal experiences the number of mothers who wanted a large family decreased and thus they wanted to have fewer children (33). In the present study a positive and highly significant correlation between the sub-dimension of Adult Experience and MDPSSS Scale, a positive and highly significant correlation between the sub-dimension of Child Experience and MDPSSS Scale ($p<0.05$), and a positive and highly significant correlation between the sub-dimension of Special Person and MDPSSS Scale ($p<0.05$) were seen.

The positive and high correlation between all the sub-dimensions of Being a Mother Scale (BaM-13) and total scale score and MDPSSS Scale indicates that satisfaction of the mother is closely related to the perceived social support by the mother. The spouse and the family of the mother play a crucial role in solving the problems by supporting the mother. It has been accepted that the supportive relationship has a key factor in resisting the stress of life and strengthening the coping strategies. The most significant supporters of the mothers are close family members and particularly their spouses. Women whose maternal role was accepted by their husbands and who can share their problems with them had less trouble.

There is a negative and low significant correlation between the Being a Mother Scale (BaM-13) and MDPSSS Scale. Less social support decreases maternal satisfaction as well. Social support mechanisms are the most outstanding helpers for coping with the difficulties of life. It was notified that baby care help provided by the close relatives or environment would help reduce the stress and increase the perception of competence on baby care (34).

5. CONCLUSION

Being a Mother Scale treatment and (BaM-13) can be used for analyzing the new mothers in the postpartum period (three years after the birth) by the doctors, nurses, and the midwives in terms of planning the treatment and care and assessing the results. The scale can either be used alone for the studies on the subject or be used with other appropriate scales such as MDPSSS Scale.

This is a practical scale in terms of the services and programs which target increasing the pleasure from the maternal experience or increasing self-confidence of the mothers. It can help the clinician on exploring some of the difficulties that can be experienced by the women in the clinical environment. Applicability of the scale to a wide range of mothers (from birth to preschool time) – i.e. not including only the early babyhood period – proves its practicality.

While scanning is convenient for the women with cutoff scores are 9 and above which indicates concurrent and possibly serious problems, for clinical evaluation consideration of each item in the scale might be more convenient compared to the consideration of the total score of the scale.

The exclusion of nutrition and sleep both of which are among the essential requirement of life from Being a Mother Scale (BaM-13) is the limitation of the scale.

How might this information affect nursing practice? The application of this scale in the clinics might be useful for warning the clinicians on the problematic topics. As the developer of the scale, Matthey (2011) suggested the second item in the scale is not applicable for the mothers who adopted their children. The change in the expression of “before having this baby” with “before having an infant who started to walk” is a proposal for the clinicians and researchers who will use the Turkish form of the scale.

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