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### *Original Article*

## **Investigating psychometric properties of Parental Reflective Functioning Questionnaire (PRFQ)**

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#### **Abstract**

**Introduction:** Reflective function is one of the important and new areas in the development and pathology of children. This study aimed to determine the reliability and validity and reliability of the parental reflective functioning questionnaire in children.

**Materials and Methods:** The cases of this study conducted in Mashhad city (the second populous city in Iran) included 300 children aged 3-5 years (150 children with asthma and 150 healthy children). The children with asthma were selected through convenience sampling method from Akbar pediatric hospital and personal office in Mashhad city, and the healthy children selected through multistage cluster sampling from kindergartens of Mashhad in 2019. Mothers completed a parental reflective functioning questionnaire. The reliability of the questionnaire was assessed with Cronbach's alpha coefficient, and its validity with content validity and construct validity method (confirmatory factor analysis).

**Results:** The reliability coefficient of the questionnaire based on Cronbach's alpha indicated desirable reliability for the whole scale and all three factors ( $\alpha=0.60$ ). The results of exploratory factor analysis (EFA) indicated three factors, totally defining 60 percent of the total variance. Also, confirmatory factor analysis indicated acceptable fitness in the determination of factors with new items. These factors were called pre-metallization, certainty about the mental states, and curiosity in the mental states in conformity with the main study.

**Conclusion:** It seems that the parental reflective functioning questionnaire is an useful questionnaire that has a desirable validity and reliability for measuring parental reflective function in Iranian population.

**Keywords:** Children, Parental Reflective Functioning Questionnaire, Psychometric properties

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#### **Introduction**

The capacity of reflective function for leading the social world is a crucial capability (1). Reflective function, or mentalization, refers to the ability to "keep one's mind in mind" (1,2). The studies indicate that mentalization capacity is created insecure primary attachment relationships and supports affect regulation,

self-control, and secure attachment in the child (3,4).

This results in increased attention to the concept of parental reflective function in the research and clinical practice, and in this context, the capacity of the caretaker for reflection on his own and child's mental experiences is considered a key factor (4-6).

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The disturbances existing in the initial attachment relationships and further damages are the potential factors that may cause a defect in developing a coherent self-structure in the mother and result in a lack of mentalization in the relationships with high emotional intensity. In such situations, the mother may turn to the methods of thinking existing in her before forming full mentalization (7). In the contents of parental reflective function, pre-mentalizing is a term applied for this method of thinking. In this method of thinking, the caretakers show confidence and certainty about their children's mental states. Moreover, this method of thinking is often correlated with the creation of malevolent attributions and the inability to enter the child's mental world.

In contrast, awareness of opacity in mental states and showing original interest and curiosity in the child's interior world are deemed signs of original parental reflective function. On the other hand, there is the issue of "parental hyper-mentalizing" or "Pseudomentalizing", that is, the existence of a kind of mentalization in the mother which is over-cognitive, ponderous, and complicated, and may result in an incorrect interpretation or "wrong reading" of child's mind, and is experienced by the child as an intruder and intervening factor (1). Therefore, parental reflective function disturbances may be either deficient, which occurs in a limited, objective, and stimulus-dependent, or excessive, where the idea of parents about their children is often altered, intervening, and even sometimes pessimistic (paranoid) (8-10).

Considering the significance of the structure of parental reflective function, Luyten, Nisens, Fonagy, and Maes (11) designed and compiled Parental Reflective Functioning Questionnaire (PRFQ). The questionnaire has 18 items, where the parents and children are requested to complete the questionnaire on a Likert seven scale. This questionnaire is an easy and brief screening tool for measuring parents' reflective function. Luyten et al. (11) recognized three factors in the confirmatory and exploratory factor analysis. Each consists of six items: Pre-mentalization, which evaluates the lack of mentalization state and often is the feature of parents with severe defective parental reflective function (PRF). The items of parent's denial or defense reflection are in contrast with mentalization, which is characterized by the tendency to create incompatible attributions

with malevolence against the child. 2) Certainty about the mental states of a child, which evaluates the parents' ability for recognition and diagnosis of the child's mental states (CMS). High scores in this scale indicate excessive certainty, and low scores indicate excessive uncertainty about the child's mental state. 3) Interest and curiosity in the mental states of a child (ICMS) which its phrases indicate active curiosity and eagerness and interest in understanding the child's mental states. High scores in this sub-scale indicate intrusive hypermentalizing, and low scores indicate a lack of interest in the child's mental states. Internal consistency coefficient too is obtained sub-scales are obtained respectively 0.70, 0.82 and 0.75. There are numerous instruments for measuring parental reflective function (1). Shibor, Lotzin, Rumer, Shoulet-Markout, and Remsaer (12) have recognized at least 15 separate instruments for measuring mother mentalization just in this age period. Including: Measuring of mother's narrations for reflective function (5,13), insightfulness (14,15). Moreover, there are numerous observatory instruments (like Mother's application of state-mental terms (16,17), state-mental language (18). These instruments have numerous advantages and allow in-depth review of the role of reflective function (parental) in child development. Obtaining such data through self-reported questionnaires is impossible. The techniques of observation and encoding, concerning measuring mother-child relationships generally, and parental reflective function particularly, provide precise and valid data for the researcher, but their most important problem is the difficulties the researcher faces in practice. The time-consuming and costly nature of such instruments prevents to use of them widely in studies.

The specialists in the area of clinical psychology of children and researchers in the field of development need some instruments by which they could obtain particularly main and important components of the parent-child relationship in a short period and at a low cost. However, as far as our review indicates, the reliability and validity of none of the instruments related to the mother-child interaction, which were mentioned above, are not studied in the Iranian culture. Therefore, if a researcher wants to use the existing instruments, either observatory or self-reporting, he would not have a valid instrument.

Considering this point, the objective of this study was validation of the parental reflective functioning questionnaire (PRFQ).

## Materials and Methods

This study was in the frame of validation study project aimed at evaluation of validity and reliability of parental reflective functioning questionnaire in a sample of Iranian children. First, with observance of principles of translation, the main text of the said questionnaire was translated into Persian. Then, 11 university professors and specialists in psychology and psychiatry of Ferdowsi University of Mashhad and Mashhad University of Medical Sciences reviewed the translated forms, and the face and content validity of the questionnaire was confirmed. Finally, in the form of an initial plan, the questionnaire was implemented on 25 parents. The possible difficulties in the test phrases were reviewed based on the results of this stage, and the required modifications were applied in the Persian translation.

The statistical population of this study included the mothers of children in the age range of 3-5 years, suffering asthma, visiting Akbar specialty and super-specialty pediatric hospital and a private office of super-specialty office asthma and immunology, and mothers of healthy children in preschools of Mashhad in 2018-2019. The sample size was obtained 388 persons based on Krejcie and Morgan table, which finally, excluding the incomplete questionnaire, data analysis was performed on 300 persons. In the present study, the convenience sampling method was used to select children with asthma, and the cluster multistage sampling method was used to select healthy children. For data collection of children with asthma, after referring to the Akbar pediatric hospital of Mashhad city, Iran, and a personal office, and based on the criteria for inclusion and exclusion, a research sample was selected, and a satisfaction letter for participation in the study and completion of the questionnaire was received from their families. For healthy children, among different districts in Mashhad, district 3 in Mashhad was selected randomly, and five preschools were selected from each district, and 12 parents in each preschool completed the questionnaire. The parents provided the questionnaire at suitable conditions and were completed with similar and understandable instruction. Finally, the

completed questionnaire was reviewed, the incomplete questionnaire was discarded, and final analysis was applied to the remaining questionnaires. Then, the study sample was selected based on the criteria for inclusion or exclusion criteria. Criteria for inclusion in the study were: Lapse of at least three months from the start of asthma in the child, diagnosis of asthma by a physician specialist in pediatric asthma and allergy, knowing the satisfaction of mothers for participation in the study, children in the age range of 3 to 5 years. Criteria for exclusion from the study were: Affliction to any present or previous severe physical or mental disorders in the children, except asthma, the record of taking psychiatric medicine or affliction to any resent or previous severe physical or mental disorders in the mothers (based on their self-expression), the existence of any chronic pulmonary, digestive and blood disease in the children.

The average age of the children was 4.27, with a standard deviation of 1.61 and an age range of 3 to 5 years.

## Research instruments

A) *Parental Reflective Functioning Questionnaire (PRFQ)*: A parental reflective functioning questionnaire (PRFQ) was used in this study. The questionnaire with 18 items provides a short and multi-aspect measuring of the parental reflective function. The questionnaire could be easily implemented for the parents in a wide range with social, economic, and educational backgrounds. Therefore, a limited number of items have been considered, and also tried to provide short and easily understandable items, so that either the parents would be able to complete them or read for them (the second method may be more appropriate for the vulnerable samples). Each item was discussed in the form of a phrase. The mother or caretaker is asked to read the phrase and tick her comment about her child on a continuum (from strongly disagreed=1 to strongly agreed=7). Due to the common interest in the parental Reflective Function in the intergenerational transmission of attachment in early childhood, the parental Reflective Functioning Questionnaire was initially planned for parents with 0-5 year children. Mainly, in the early stages of development, when the mother and infant relationship is non-verbal, the capability of being sensitive and responding towards the emotional clues of the

child may be a determining factor in the future emotional-social development of the child. In this context, it is often supposed that high levels of PRF appear in the active interest and curiosity towards the mental states, which results in searching to find the states. Some believe that this, together with an acknowledgment of opacity in the mental states, is a sign of healthy PRF (20).

Based on the theoretical configuration related to PRF, which was reviewed above, the items of PRFQ were planned for obtaining three fundamental features of PRF (5,20,21). a: Interest and curiosity on the mental states (for example, item 9: "I am often curious to find out how my child feels.", b: Ability of recognition of opacity in the mental states (for example,

item 5: "I can completely read my child's mind.", c: Methods of non-metallization, which is the feature of parents with (severe) difficulties in PRF (like malevolent attributions and inability to enter child's mental world) (for example item 13: "When my child is fussy he or she does that just to annoy me.". For the last aspect, we should notice that metallization-based attitudes emphasize understanding the relation between the metallization disorders, insecure attachment, and psychopathology (22,23).

## Results

Table 1 shows the demographic features of participants in the study.

**Table 1.** Demographic features of participants in the study

Demographic variable		Frequency	Percent
Gender of child	Girl	119	39.7
	Boy	181	60.3
Education	Secondary school	48	16
	Diploma	79	26.3
	Associate degree	36	12
	Bachelor degree	131	43.7
	Master degree and higher	6	2
Occupation	Self-employed	56	18.7
	Employee	84	28
	Housewife	158	52.7
	University student	2	0.7
Marital status	Married	281	93.7
	Divorced	19	6.3
Mother's age		mean	standard deviation
		33.20	5.76
Child's age		4.27	1.61

Of 300 participants in the present study, all were mothers with 3 to 5 years of children. Most participants had bachelor's degrees (43.7%), diplomas (26.3%), and the minor participants had a master's degree and higher with 6 percent. In addition, most participants were married (93.77%), and 6.3 percent had divorced. The average and standard deviation of the age of mothers was respectively 33.20 years and 5.76. Moreover, the children's mean age was 4.27 years, among whom 119 were girls (39.7%), and 181 were boys (60.3%).

## Validity and reliability

### Construct Validity

The construct validity of the reflective functioning questionnaire was checked with two exploratory and confirmatory factor analysis methods.

#### 1. Exploratory Factor Analysis (EFA)

To check construct validity, correlation coefficients between the total score with subscales were studied, and the results are presented in Table 2.

**Table 2.** Mean, standard deviation, correlation coefficients of the total score of PRF with scores of sub-scales

	Mean	SD	1.	2.	3.	4.
Parental Reflective Function	76.03	11.24	1			
Pre-mentalization	21.02	6.57	0.45**	1		
Certainty about the mental states	29.87	7.70	0.73**	-0.15*	1	
Curiosity about the mental states	24.48	6.82	0.58**	0.29**	0.47**	1

\*\*P&lt;0.01

Table 2 shows that all subscales of parental reflective function have a significant correlation with the total score, which indicates a desirable internal relationship among the subscales.

Exploratory factor analysis (EFA) was used to assess PRFQ construct validity. Three factors

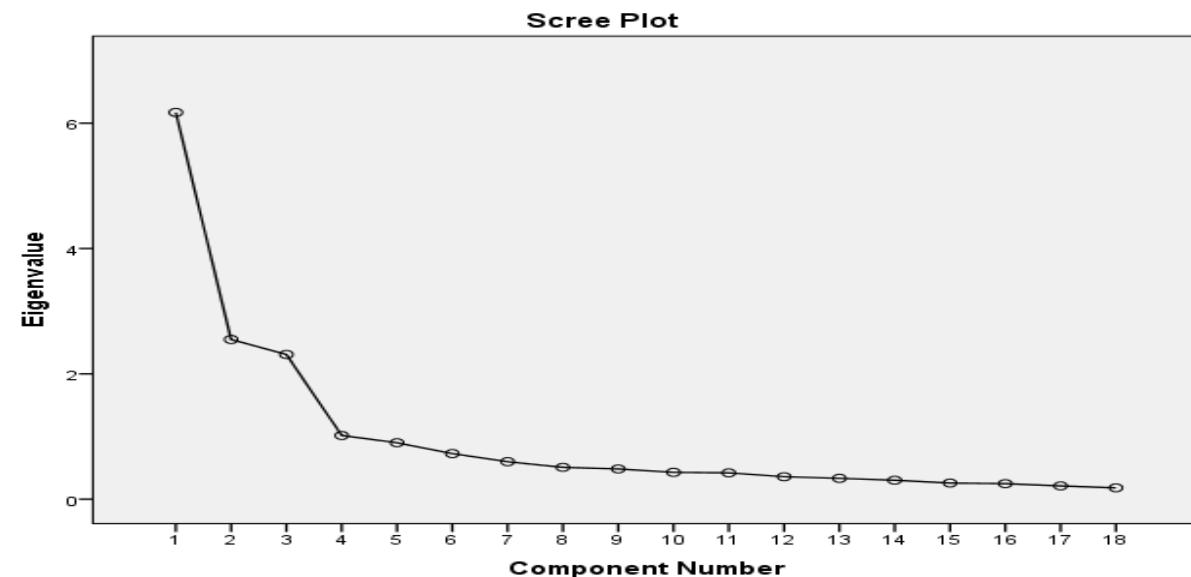
were identified with the Varimax rotation method in exploratory factor analysis. The result of the KMO test ( $KMO= 0.85$ ) was satisfactory, and Bartlett's test of sphericity was obtained at a significant at  $P< 0.001$  level, the results of which have been reported in Table 3. Therefore, the factor ability of data is approved.

**Table 3.** Results of KMO and Bartlett Test

KMO	Bartlett	Degree of freedom	P
0.85	2859.29	0.153	0.001

A scree diagram of factors of 18 question items of PRFQ has been presented in Diagram 1, and we could say that the share of first-factor invariance of all variables is more noticeable

and distinguished than the other factors. Several identified factors, three factors with special value more than 1.

**Diagram 1.** Scree diagram of 18 questions factors of PRFQ

The scree diagram in the 1 figure shows that it has turned between items 3 and 4, and three factors have a special value of more than one and account for a considerable part of the variance. Therefore, three factors were

considered for this questionnaire. Based on the factor analysis results, the number of 3 factors with a special value of more than one are extracted, which account for 61.26 percent of the total variance of variables. The highest

share belongs to the first factor with about 34 percent.

**Table 4.** Squares and rotated factor load with special value more than one

Factors	Special value	Percentage of explained variance	Compression percentage of explained variance
1	6.17	34.28	34.28
2	2.54	14.15	48.43
3	2.30	12.82	61.26

The results of factor analysis on all questions were made and resulted in the extraction of 3 primary factors with special value more than

one. These three factors explain 61.26 percent of the variance of the whole questionnaire.

**Table 5.** Factor loads of the questions of PRFQ using EFA and CFA

Phrases	Exploratory Factor Analysis (EFA)			Confirmatory Factor Analysis (CFA)		
	Factor 1	Factor 2	Factor 3	Factor 1	Factor 2	Factor 3
1- The only time I'm certain my child loves me is when he or she is smiling at me.	0.50					0.30
2- I always know what my child wants.	0.79			0.78		
3- I like to think about the reasons behind the way my child behaves and feels.			0.58			0.69
4- My child cries around strangers to embarrass me.	0.68				0.69	
6- I wonder a lot about what my child is thinking and feeling.		0.70				0.64
7- I find it hard to actively participate in make believe play with my child.	0.65				0.45	
8- I can always predict what my child will do.	0.79			0.80		
9- I am often curious to find out how my child feels.			0.79			0.30
10- My child sometimes gets sick to keep me from doing what I want to do.	0.65				0.77	
11- I can sometimes misunderstand the reactions of my child.	0.51				0.31	
12- I try to see situations through the eyes of my child.			0.75			0.71
13- When my child is fussy he or she does that just to annoy me.	0.77				0.78	
14- I always know why I do what I do to my child.	0.75			0.76		
15- I try to understand the reasons why my child misbehaves.			0.68			0.90
16- Often, my child's behavior is too confusing to bother figuring out.	0.70				0.58	
17- I always know why my child acts the way he or she does	0.84			0.77		

Table 5 shows the factor loads of each of the questions of PRFQ on the three extracted factors. Factor loads more than 0.50 and higher are considered for the allocation of each question to one component. The results of this phase resulted in the approval of three factors. According to EFA, six questions on the first

factor, seven on the second factor, and five on the third factor are loaded.

## 2- Confirmatory Factor Analysis (CFA)

To approve obtained factor structure and test power and significance of each of the factors in measuring PRFQ, CFA was performed using AMOS software. According to the CFA, the

factor load of all questions is more than 0.30, which is statistically significant. Table 6 shows

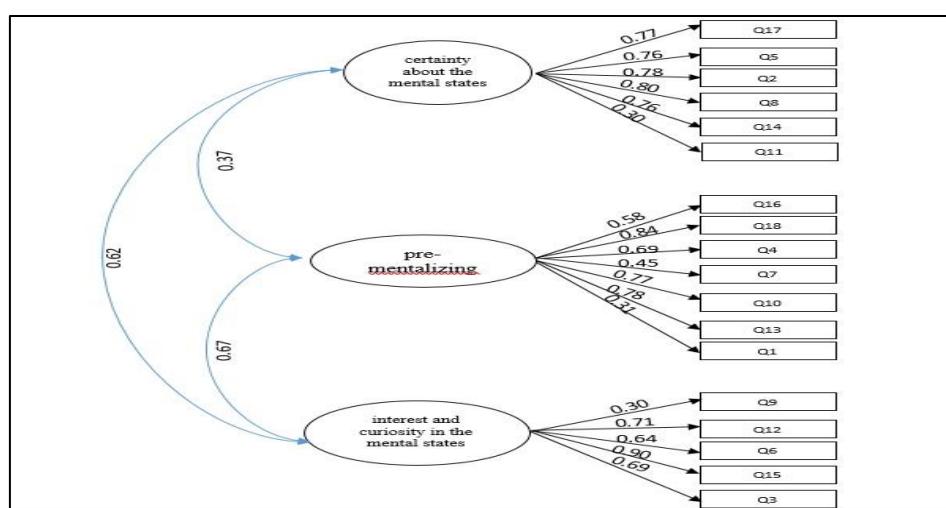
the fit indexes of the CFA model in the present study.

**Table 6.** Model fit indexes

Fit indexes	Amount
Chi-square	421.50
Chi-square/degree of freedom	3.48
Level of significance	0.001
Normed Fit Index (NFI)	0.86
Comparative Fit Index (CFI)	0.90
Root Mean Square Error (RMSEA)	0.07
Incremental Fit Index (IFI)	0.90
Normed Fit Index (NFI)	0.86
Goodness of Fit Index (GFI)	0.90
Adjusted Goodness of Fit Index (AGFI)	0.82

As Table 6 shows, the results of Chi-square statistics are significant at the level of  $P < 0.001$ . The amounts of NFI and CFI are respectively 0.86 and 0.90. RMSEA too is 0.07, which indicates a moderate fit of the model. The amounts of statistics should be more than 0.9

and considering that the above indexes are in the range of 0.82 to 0.90, we could say that the model has an acceptable fit. A structural diagram of CFA has been presented in Diagram 2.



**Diagram 2.** Structural diagram of CFA

### Content Validity

First, the main questionnaire was translated into Persian and then interpreted into English by one of the English language professors. In the next step, the version translated into English was compared with the original version by a psychology professor, with command of English language, and then, the required revisions were approved. To obtain a content validity index, the questionnaire and the general explanations related to the dimensions were provided for 11 psychologists and psychiatrists who had sufficient familiarity in this field. For assurance of selection of the most important and proper content, Content Validity Ratio

(CVR) index, and for assurance of design of tools items in the best way for content measurement, Content Validity Index (CVI), were used. To obtain CVI, all items of the questionnaire were assessed concerning four criteria of "relevancy, simplicity, clarity, and necessity" in Likert form (0 to 3) with the preparation of referees evaluation form. The data were extracted, and the Content Validity Ratio (CVR) index and Content Validity Index (CVI) for all items were obtained based on the following formulas. CVR index of 18 items was in the range of 0.60 to 1, which indicates that the related questions with an acceptable statistical level of significance in these tools are

essential. Moreover, the results show that the CVI score of 18 questions was in the range of 0.85 to 1. Then, the items with an index of less than 0.80 were reviewed, replaced, and edited according to the specialists' comments. Following formulas were used for review of CVR and CVI: CVI= [P/N]

$$CVR = \frac{[E - (N/2)]}{(N/2)}$$

P= Number of specialists who have selected options 3 and 4, N= Total number of specialists, E= Number of specialists who have selected the option of essential, N= Total number of specialists

### Reliability

Internal Consistency Coefficients (Cronbach's alpha) To assess the reliability of PRFQ, an internal consistency method was used. The internal consistency results using Cronbach's alpha coefficient method have been presented in Table 7.

**Table 7.** Results of internal consistency using Cronbach's alpha coefficient

Factor	Quantity Items	Alpha Coefficient in the external study	Alpha Coefficient in this study
Certainty about the mental states	6	0.70	0.87
Pre-mentalization	7	0.82	0.50
Curiosity about the mental states	5	0.75	0.72
Parental Reflection Function (Total score)	18	0.64	0.60

The coefficient of reliability of PRFQ for the factors of certainty about the mental states, pre-mentalization, and curiosity about the mental states have been 0.87, 0.50 and 0.72, and 0.60 for its total score.

### Discussion

The objective of this study is the review of psychometric features of PRFQ. PRFQ with 18 phrases and three subscales was approved given psychometric features. The results showed that the internal consistency of the questionnaire through Cronbach's alpha was 0.60 for the total score, 0.87 for the subscale of certainty about mental states, 0.50 for pre-mentalization, and 0.72 for curiosity about the mental states. Furthermore, the obtained Cronbach's alpha is concordant with the study of Luyten et al. (11). Therefore, the internal stability of the questionnaire too was approved. Construct, and content validity was used for validity assessment. To assess the content validity of PRFQ, the specialists were asked to declare their attitude about the phrases of the questionnaire given necessity and relation, and the results showed that content reliability has been acceptable.

In construct validity, EFA and CFA were used. Through exploratory factor analysis and with a special value of more than one, three factors as the main components of PRFQ were

identified, which formed a total of 60 percent of the total variance, and had some changes compared with the main version. The results of this study showed that the subscale of certainty about mental states are the phrases 2, 5, 8, 11, 14, and 17, a subscale of pre-mentalization are the items 1, 4, 7, 10, 13, 16, and 18, and subscale of curiosity about the mental states are the items of 3, 5, 9, 12 and 15. In the prior version, the phrase 18 is in the curiosity about mental states subscale. Assessment of factor validity with the CFA method too showed that the model has a desirable fit. Fit indexes indicate the acceptable fit of the model. A review of fit indexes of the CFA model showed that Chi-square fit index was 421.50 and less than 0.001 at a level of significance. The incremental fit index was 0.90, GFI was 0.90, and CFI was 0.90. In the study of Luyten et al. (29), the amounts of comparative fit indexes (CFI) have been reported 0.91. The Root Mean Square Error (RMSEA), which determines if the model amounts are fit, was obtained at 0.07.

Luyten et al. (11) assessed the validity and reliability of PRFQ in a sample consisting of 299 mothers with 0-3 year children. Scree test revealed three factors clearly, which accounted for the first factor respectively 5.48, 3.41, and 3.29 percent and 31.24 percent of the variance. Three factors were respectively called pre-mentalization, certainty about the mental states,

and curiosity about the child's mental states. CFA too had a good fit after amendments ( $\text{RMSEA}=0.05$ ,  $\text{CFI}=0.91$ ,  $\text{NNF}=0.91$ ). Two factors of certainty about the mental states and curiosity about the child's mental states also had a high correlation ( $r=0.30$ ). Internal consistency coefficient too was obtained respectively 0.70, 0.82, and 0.75 for the subscales, which is concordant with the results of this study, and three factors are identified. The Italian version of this questionnaire was assessed, and its internal consistency coefficient was reported as satisfactory. Pazzaglia et al. (24) reported Cronbach's alpha coefficient of subscales of parental reflective function in mothers for pre-mentalization, lack of certainty, and curiosity, respectively 0.67, 0.81, and 0.62 and in fathers respectively 0.96, 0.71, and 0.70. CFA of three factors was approved. Two separate models were assessed for the mothers and fathers. CFA for the sample of 385 mothers ( $\text{RMSEA}=0.05$ ,  $\text{CFI}=0.96$ ,  $\text{TLI}=0.95$ ) and 385 fathers ( $\text{RMSEA}=0.07$ ,  $\text{CFI}=0.91$ ,  $\text{TLI}=0.89$ ) has been reported desirable, but in this study, factor analysis is only made on the mothers. In fact, in recent years, the content of PRF as the infrastructure of mother-child interaction has been focused more than mere responding, as the external aspect of the interaction. Maternal reflective function means a mother's capacity for reflection on her and her child's internal mental experiences (2,5). This capacity indicates the caretaker's ability to understand and interpret

her child based on the mental states (intentions, emotions, thoughts, incentives, and beliefs) of herself and her child. In other words, a mother's ability for her behavior with her child as a psychological factor is called maternal reflective function (25). When the parents could understand the meaning and intention of their children's messages and look at their children separately, they would probably respond delicately. A reflective mother can understand her child's behavior based on his/her mental state. The mother's deliberate, reflective function reflects a detailed understanding of how the mind and particularly complicated mental states work (5). This study has faced some limitations too. For instance, the parents with 3-5 years children in Mashhad were selected and precautionary aspects should be observed for its generalization.

## Conclusion

Therefore, Parental Reflection Function Questionnaire (PRFQ) has a desirable psychometric quality and could be used in psychological studies and treatments in 3-5 years children, and is an appropriate scale.

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## References

1. Luyten P, Fonagy P, Lowyck B, Vermote R. The assessment of mentalization. In: Bateman A, Fonagy P, editors. *Handbook of mentalizing in mental health practice*. Washington D.C.: American Psychiatric Publishing; 2012: 43-65.
2. Fonagy P, Gergely G, Jurist E L, Target M. Affect regulation, mentalization, and the development of self. New York: Other Press; 2002.
3. Fonagy P, Gergely G, Target M. The parent-infant dyad and the construction of the subjective self. *Journal of Child Psychology and Psychiatry* 2007; 48(1): 282-88.
4. Sharp C, Fonagy P. The parent's capacity to treat the child as a psychological agent: Constructs, measures and implications for developmental psychopathology. *Soc Dev* 2008; 17(3): 737-54.
5. Slade A. Parental reflective functioning: An introduction. *Attach Hum Dev* 2005; 7(1): 269-81.
6. Ensink K, Mayes LC. The development of mentalization in children from a theory of mind perspective. *Psychoanal Inq* 2010; 30(4): 301-37.
7. Fonagy P, Luyten P, Bateman A, Gergely G, Strathearn L, Target M, et al. Attachment and personality pathology. In: Clarkin JF, Fonagy P, Gabbard GO. (editors). *Psychodynamic psychotherapy for personality disorders: A clinical handbook*. Washington. D.C: American Psychiatric Publishing; 2010; 37-87.
8. Luyten P, Fonagy P, Lemma A, Target M. Depression. In: Bateman AW, Fonagy P. (editors). *Handbook of mentalizing in mental health practice*. Washington. D.C.: American Psychiatric Publishing; 2012: 385-417.
9. Sharp C, Pane H, Ha C, Venta A, Patel AB, Sturek J, et al. Theory of mind and emotion regulation difficulties in adolescents with borderline traits. *J Am Acad Child Adolesc Psychiatry* 2011; 50(6): 563-73.

10. Luyten P, van Houdenhove B, Lemma A, Target M, Fonagy P. A mentalization-based approach to the understanding and treatment of functional somatic disorders. *Psychoanal Psychol* 2012; 26(2): 121-40.
11. Luyten P, Mayes LC, Nijssens L, Fonagy P. Parental reflective functioning: Theory, research, and clinical applications. *Psychoanal Stud Child* 2017; 70(1): 174-99.
12. Schiborr J, Lotzin A, Romer G, Schulte-Markwort M, Ramsauer B. Child-focused maternal mentalization: a systematic review of measurement tools from birth to three. *Measurement* 2013; 46(8): 2492-509.
13. Fonagy P, Target M, Steele H, Steele M. Reflective-functioning manual, Version 5, for application to adult attachment interviews. London: London University; 1998.
14. Oppenheim D, Koren-Karie N. Infant-parent relationship assessment: parents' insightfulness regarding their young children's internal worlds. In: Zeanah CH. (editor). *Handbook of infant mental health*. 3<sup>rd</sup> ed. New York: Guilford; 2009: 23-29.
15. Bretherton I, Biringen Z, Ridgeway D, Maslin C, Sherman M. Attachment: The parental perspective. *Infant Ment Health J* 1989; 10(3): 203-21.
16. Furrow D, Moore C, Davidge J, Chiasson L. Mental terms in mothers' and children's speech: similarities and relationships. *J Child Lang* 1992; 19(3): 617-31.
17. Ruffman T, Slade L, Crowe E. The relation between children's and mothers' mental state language and theory-of-mind understanding. *Child Dev* 2002; 73(3): 734-51.
18. Schechter DS, Myers MM, Brunelli SA, Coates SW, Zeanah CH, Davies M, et al. Traumatized mothers can change their minds about their toddlers: Understanding how a novel use of video feedback supports positive change of maternal attributions. *Infant Ment Health J* 2006; 27(5): 429-47.
19. Grienberger J, Kelly K. Maternal reflective functioning, mother infant affective communication, and infant attachment: exploring the link between mental state sand observed care giving behavior in the intergeneration altransmission of attachment. *Attach Hum Dev* 2005; 73: 299-311.
20. Slade A, Bernbach E, Grienberger J, Levy D, Locker A. Addendum to reflective functioning scoring manual for use with the parent development interview. Version 3.0. New York: The City College and Graduate Center of the City University of New York; 2007.
21. Steele M, Kaniuk J, Hodges J, Asquith K, Hillman S, Steele H. Measuring mentalization across contexts: Links between representations of childhood and representations of parenting in an adoption sample. In: Jurist EL, Slade A, Bergner S. (editors). *Mind to mind: Infant research, neuroscience, and psychoanalysis*. New York: Other Press; 2008: 115-38.
22. Allen JG, Fonagy P, Bateman AW. Mentalizing in clinical practice. Washington. D.C.: American Psychiatric Publishing; 2008.
23. Levy KN, Beeney JE, Temes CM. Attachment and its vicissitudes in borderline personality disorder. *Curr Psychiatry Rep* 2011; 13(1): 50-9.
24. Pazzaglia C, Delvecchio E, Raspa V, Mazzeschi C, Luyten P. The parental reflective functioning questionnaire in mothers and fathers of school-aged children. *J Child Fam Stud* 2018; 27: 80-90.
25. Slade A, Grienberger J, Bernbach E, Levy D, Locker A. Maternal reflective functioning, attachment and the transmission gap: A preliminary study. *Attach Hum Dev* 2005; 7(3): 283-98.