



Original Article

Preparation, translation and evaluation of face and content validity of the Preschool Age Psychiatric Assessment (PAPA) in Farsi

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Abstract

Introduction: Childhood is the time of onset for many psychiatric disorders. Preschool Age Psychiatric Assessment (PAPA) is developed in response to the need for a standard and reliable tool for assessment of psychiatric disorders in preschool age. The aim of this study was to translate this tool to Farsi and evaluate the face and content validity of this precious and comprehensive tool.

Methods: The process was forward translation to Farsi, evaluation for face and content validity, finalization of items within expert panel, backward translation to English, matching the original PAPA with randomly selected items from the backward translation version and revision as needed and finally evaluation for validity of the changes for localization and cultural considerations.

Results: The research team translated original PAPA to Farsi. In the next step, evaluation for face and content validity was performed by expert panel, a mean of 30-35 items from 100 pages were revised and 7 items which were not compatible with social and cultural conditions in our country got localized. Two percent of pages from this forward translation (14 pages) were randomly selected as a sample from the whole questionnaire in order to be back translated to Farsi and expert panel were asked to evaluate. This version was revised based on their comments. The localized items were evaluated based on certainty, necessity and appropriateness and revised if needed.

Conclusion: Farsi version of PAPA diagnostic interview for preschool age is available and has face and content validity.

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Introduction
Increasing accuracy of the medical diagnosis
has driven more attention in recent decades.¹

The clinical diagnosis based on expert
opinion, has generally been questioned, as it
is not accomplished based on a standard and

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unique pattern. It does not check every possible diagnoses and experience and individual performance have a significant effect while the reliability of this type of diagnosis will be low.

Timely diagnosis plays a key role in the process of control and management of mental health problems.² Different studies show that most of the psychiatric disorders begin during childhood and adolescence. Preschool Age Psychiatric Assessment (PAPA) is a valuable and comprehensive clinical interview which was designated because of a need for a standard and reliable method for psychiatric assessment of children psychiatric disorders in preschool ages.³ This method has been introduced for the first time by Egger et al. in 1998 as an interview with parents for diagnosing signs and symptoms in preschool age (2 to 5 years).³⁻⁵

This study aimed to prepare Farsi version of this systematic tool with regard to difficulties in the evaluation of psychiatric conditions in children of preschool ages and the requirement for a modified diagnosing and yet systematic system in this age group in Iranian population.

Methods

This psychometric study was carried out in the psychiatry department of Tabriz University of Medical Sciences in Tabriz, Iran. Upon formal request for translation from the first author of PAPA, written agreement was achieved.

PAPA

This tool was created based on the parent version of Child and Adolescent Psychiatric Assessment (CAPA).³⁻⁵ The structure of PAPA is described in table 1. Psychometric features of this tool have been evaluated comprehensively in English. This structured interview evaluates the symptoms in four main areas: (1) diagnostic criteria of all diagnoses in Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV) and International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10) which are

related to the considered age group, so conditions such as substance related or sexual disorders have been removed; (2) all of the Research Diagnostic Criteria-Preschool Age (RDC-PA) items which suggest developmental modifications to DSM-IV-Text Revision (DSM-IV-TR) criteria; (3) all of the Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood-Revised (DC: 0-3R) and (4) potential behaviors and symptoms which are not merely a diagnostic criteria like sleeping rituals and peer relationship.⁶⁻⁸ The structure of this tool consists of 25 units. Each of them may be used alone or as a combination together. The tool evaluates the past three months to decrease the bias.

For all of questions, there is an explanation with an example (as a respondent based interview) to makes sure that the interviewee fully understands the question. In presence of a symptom, the interviewer should record its example and recognize its frequency, duration and the beginning date of the symptom. The lifetime existence of severe symptoms (suicidality, fire setting, mistreating animals and human beings) as well as potential traumatic events is also evaluated.

Preparing and evaluation of Farsi version of PAPA

In order to prepare Farsi version of PAPA diagnosis interview, a research group including a Farsi speaking expert in English language and a psychiatrist (the first author) translated the original version to Farsi. The original version is 635 pages. This translated version was evaluated within an expert panel (three child and adolescence psychiatrists, one psychiatrist, one methodologist, one psychologist, one professor of English language) regarding the accuracy and validity, and was edited if needed. Questions and answers of PAPA were also evaluated regarding cultural and social considerations and revisions were proposed where needed. After making an agreement on the items of Farsi version, this questionnaire was back-translated to English by an English-speaking

person highly skilled in Farsi.

The next step was comparing the translated English version with the original one. A random sampling was carried out of the whole questionnaire. The random number generator gave the number "28" and pages were selected with the interval of "43", so 14 pages from both versions were selected for comparing by the expert panel. Evaluators rated conformity between two versions based on a Likert system.

Content validity ratio (CVR) and content validity index (CVI) were estimated and items with low validity were revised.

Table 4 shows comments of experts about changes of the described 7 modified items regarding clarity, necessity and relevance of changes.

Table 1. Structure of Preschool Age Psychiatric Assessment (PAPA)

Source of information	Parents or primary care giver
Range of age	2-5 years (24-72 month)
Interviewers	Health professionals or trained interviewer with at least bachelor's degree
The required training	Five days are necessary for the whole interview as well as interview training for all interviewers
Available translations	Spanish, Norwegian, Romania
Implementation	Electronic or manual

Results

Translation of the original version of PAPA into Farsi lasted for one month. This version which is in 833 pages was evaluated during 12 one-hour sessions within the panel and an average of 12-13 out of hundred pages was revised. Moreover, 7 items which were considered incompatible with social and cultural conditions of our country got localized. These items were: ethnic origins, marital status of biologic parents, level of education, occupation, source of income, annual family income, and an item about negative effect (of the symptom) on relationship between parent and non-resident boy/girl friend.

Backward translation was accomplished and 14 pages of Farsi version and 14 pages of the original version as a sample of the whole questionnaire were evaluated in the expert panel that were blind to condition of the pages.

The result of the first comparison of the backward translation with the original version is shown in table 2. Based on these comments, CVI was calculated for each item and are shown in table 3. The reason for some of disagreements was backward translation into English, but some cases were related to inappropriate forward translation into Farsi or chance mistakes. These items were revised and finally approved by the panel.

Table 2. The results of the assessment of the conformity of backward translation with the original version

Page	Number of items	Completely relevant	Partially relevant	Partially non-relevant	Completely non-relevant
1	8	24	11	3	0
2	17	45	53	3	1
3	14	38	43	3	0
4	18	49	52	2	5
5	11	38	16	9	3
6	15	54	31	3	2
7	17	50	36	6	0
8	15	48	41	1	0
9	17	39	59	3	1
10	12	35	36	1	0
11	19	62	52	0	0
12	17	51	51	0	0
13	14	60	24	0	0
14	10	23	32	2	3

Table 3. The mean value of content validity indices (CVI) and modified kappa for conformity of backward translation with the original version

Page	CVI	Modified kappa
1	0.93	0.94
2	0.95	0.96
3	0.96	0.96
4	0.90	0.92
5	0.81	0.82
6	0.93	0.94
7	0.93	0.94
8	0.99	0.99
9	0.96	0.96
10	0.98	0.99
11	1	1
12	1	1
13	1	1
14	0.89	0.92

CVI: Content validity index

Table 4. Results of comments about cultural and social modifications to original items of Preschool Age Psychiatric Assessment (PAPA)

	Clarity			Necessity				Relevance				
	Completely clear	Partially clear	Vague	Completely vague	Completely necessary	Partially non-necessary	Partially non-necessary	Non-necessary completely	Completely relevant	Partially relevant	Non-relevant	Completely non-relevant
Ethnicity	5	1	0	0	5	1	0	0	4	2	0	0
Marital status	3	3	0	0	6	0	0	0	5	1	0	0
Education	1	3	2	0	6	0	0	0	5	1	0	0
Employment	2	1	2	1	3	3	0	0	5	1	0	0
Income sources	1	3	2	0	3	1	2	0	3	2	1	0
Income (annual)	3	1	1	1	3	2	1	0	2	3	1	0
Parental relationship	0	5	1	0	2	4	0	0	3	3	0	0

According to these comments, CVR and kappa indices were calculated and are shown in table 5. The most questions rose for items about source of income and annual income. Panel expert decided to use the classification previously developed by Abobakri et al. for socio-economic evaluation entitled socioeconomic status questionnaire for urban household (SES Iran) of which the psychometric properties were described before.⁹

Table 5. The mean value of content validity ratio (CVR), content validity index (CVI) and modified kappa for localized items

	CVR	Modified kappa	CVI
Ethnicity	1	1	1
Marital status	1	1	1
Education	1	0.85	0.89
Employment	1	0.65	0.72
Income sources	0.33	0.55	0.67
Income (annual)	0.67	0.73	0.78
Parental relationship	1	0.85	0.89

CVR: Content validity ratio; CVI: Content validity index

Discussion

The present study was carried out with the aim of preparing Farsi version of PAPA. This tool is a reliable standard method for assessing psychiatric disorders in preschool children which so far, research projects and clinical settings in Iranian population could not take advantage of it.

This tool is translated into Farsi within this project. Also face and content validity of this valuable and comprehensive interview was assessed and some changes were made in some of the questions with regard to cultural and social conditions of the country. The final version was confirmed by the panel of experts, psychiatrists and child and adolescent psychiatrists and epidemiologist.

Empirical studies on emotional and behavioral problems in infants and preschoolers were compared with older children and adolescents in few cases. Till recent years, studies of psychopathology in children were focused mainly on reported symptoms on behalf of parents/ caregivers and scoring were always based on scores in checklists rather than using structured interview based on clinical criteria.¹⁰ The information obtained from checklists [like child behavior checklist (CBCL) 1.5-5] does not give details on intensity, frequency or duration of symptoms.¹¹ This information is critical for diagnosis and management and a clinical interview will be the best method for this aim. Moreover, investigating presence, course and outcome of any psychopathology in preschool age will not be possible without structured diagnostic tools with satisfactory reliability and validity.^{12,13}

To date, the only introduced tool for this purpose with satisfactory validity and reliability is PAPA interview.

Psychiatric disorders are the most important disorders which lead to losing years of functional life. In Iran, the burden of psychiatric disorders ranks second, after unintentional accidents.¹⁴ One the important measure which is needed for controlling the diseases and, in other words, the first step for accurate planning of actions, is high quality

epidemiological studies. Such studies have some operational barriers in age category of preschoolers. For instance, a clear definition of function and also the duration of disease are still debated.¹⁵⁻¹⁷

In Iran, there are few studies on incidence or prevalence of psychiatric disorders. Some of them have admissible methods, and have utilized structured interviews for investigating and determining the diagnosis. The age range of these studies are also available and the minimum age which entered into the population-based studies in Iran until now, had been the age of 15.¹⁸⁻²⁰ So there is no population-based epidemiological study in younger Iranian children and lack of suitable tool may have had an essential role.

The specific importance of childhood and adolescence period is not only due to the time of onset of psychiatric disorders,² but also the fact that diagnosis in proper time in the age range of preschoolers, can affect the consequences on the individual's life.^{21,22} Based on the needs of different settings, diagnostic strategies and processes may be selected for screening since in clinical layout, especially psychiatry, the aim will be the accurate diagnosis.²³ With regard to the bias that unstructured interviews have, there is no doubt that designing a structured interview is an important progress. Needless to say, it is necessary to use such tools in researches and is strongly recommended to use them in clinical works.

According to mentioned evidences, Farsi version of PAPA structured interview has extensive capabilities for being used in the country and alleviating the research and clinical needs in the range of preschoolers.

The original version of PAPA is in English. It is translated into some other languages so far,^{24,25} but as the translation process of these versions were a part of an extended study, information about the process of translation are not mentioned here. Generally, the process of translation, investigation of face and content validity, backward translation into English and checking the conformity with the original version, were similar to our

study. Extant versions had led to designing high quality studies in their country of origin. It is hoped that the Farsi version will have similar effect in our country.

This study had some limitations. With regard to the nature of PAPA, it is obvious that the number of its questions is many to make it possible to collect all psychiatric diagnoses and the related factors. This advantage, leads to some limitations during this study. With regard to the high number of questions, not all of them were investigated after the translation. This could result in overlooking some mistakes, but the random sample might be a good indicator of all questions. A small percentage of investigated pages were the subject of change, so it might be concluded that this limitation might have negligible effect on all parts of the interview. However further studies can investigate all of the questions. We also don't have an exact assessment about duration of this interview. To have estimation, CAPA which is the most similar tool takes 66 minutes for parents and 59 minutes for children.

Conclusion

During this study, PAPA was translated into Farsi as a response to the need for a standard and reliable method for preschool age psychiatric disorders assessment. Present version is licensed by the designer of the

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Authors' Contribution

SN and MH performed the translation and evaluations, SN drafted the manuscript, SA and AM designed the study, performed evaluations and revisions, HS contributed to design and analysis. All authors approved the final draft.

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Conflict of Interest

Authors have no conflict of interest.

Ethic approval

Research proposal was approved by regional ethic committee of Tabriz University of Medical Sciences.

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