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Research Paper

Psychometric Evaluation of the Persian Version of the Scale of Parental Involvement and Self-efficacy-revised

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ABSTRACT

Background and Objectives: Limited valid scales have been developed in English to measure the self-efficacy and involvement of parents of hearing-impaired children in early interventions, like parental involvement and self-efficacy (SPISE) and early intervention parenting self-efficacy scale (EIPSES), and none exist in Persian. This study aimed to translate the SPISE-revised (SPISE-R) into Persian and evaluate the psychometric properties of the translated version for use by Persian-speaking parents of deaf or hard-of-hearing children.

Methods: This test-development study was conducted in two phases: 1) Translation of the SPISE-R by six native Persian translators fluent in English (two of them were psychologists and the remaining were audiologists) using standard steps (e.g. forward translation, reconciliation, and back-translation), and 2) evaluation of the validity and reliability of the Persian version with input from 10 audiologists and psychologists. Answers from 59 parents of hearing-impaired children were used to assess the psychometric characteristics. The children were younger than 4 years old.

Results: The content validity ratio (CVR) demonstrated satisfactory cultural adaptation for all items. Item-level face validity indices for appropriateness and fluency ranged from 0.72 to 1.0. For the confidence subscale, the correlation coefficient was 0.55, the intra-class correlation coefficient was 0.65, and the agreement rate was 0.76. In the action subscale, these values were 0.31, 0.47, and 0.82, respectively. Test re-test Pearson correlation coefficients confirmed consistency across all subscales over time.

Conclusion: The Persian version of the SPISE-R is a valid and reliable tool for assessing the beliefs, self-efficacy, and participation of parents of Persian-speaking hard-of-hearing children in early intervention. This questionnaire can facilitate tailored support and guidance for families in this population.

Keywords: Self-efficacy, Hard-of-hearing children, Deafness, Early intervention, SPISE-R, Persian language

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What is "already known" in this topic:

Early intervention programs for D/HH children increasingly focus on empowering parents with the knowledge and confidence needed to support their child's development. However, only a limited number of valid tools are available in other languages to evaluate self-efficacy and parental involvement.

What this article adds:

The SPISE-R scale has been adapted into Persian as a valid tool for evaluating self-efficacy and parental involvement. It helps specialists assess and support parental engagement in early intervention.

Introduction

Language development in children is shaped by a dynamic interplay of biological and environmental factors, with hearing status playing a central role. For children with typical development, language acquisition predominantly occurs through auditory-verbal communication. In contrast, deaf and hard-of-hearing (D/HH) children often rely on additional modalities, such as sign language and lip reading, to learn language [1]. Beyond internal factors, like hearing status, the environment plays a critical role in shaping language development. Early exposure to rich and diverse linguistic input is vital for fostering language growth [2]. Research has demonstrated that D/HH children receiving sufficient and high-quality linguistic input in their early years exhibit better language outcomes than those with limited exposure [3].

As primary caregivers, parents provide essential linguistic input that shapes their D/HH child's language trajectory. Parental self-efficacy—the belief in one's ability to effectively fulfil parenting responsibilities—has shown to positively influence parents' involvement and resourcefulness in addressing challenges [4]. In the context of D/HH children, higher parental self-efficacy beliefs are associated with greater engagement in activities that promote language development, while lower self-efficacy may hinder involvement, potentially contributing to language deprivation [5].

Early intervention programs for D/HH children increasingly focus on empowering parents with the knowledge and confidence needed to support their child's development. These programs aim to enhance parental involvement through family-centered approaches that provide language and communication support, emotional and psychosocial guidance, and education on communication modalities and other D/HH-related topics. Given the critical role of parental beliefs in influencing child outcomes, accurately measuring parental self-efficacy during early intervention is crucial for tailoring interventions and evaluating program effectiveness.

Several valid tools have been developed in English to systematically assess parental self-efficacy and involvement in early intervention, including the scale of parental involvement and self-efficacy-revised (SPISE-R) [5-7]. However, a few Persian tools are available to check the language and communication skills of Persian hearing-impaired children [8-11] and no proper instrument exists to examine parents' beliefs and self-efficacy. Although the old version of the SPISE was translated into Persian [12], its psychometric characteristics have not been examined. The SPISE-R is newer and more comprehensive than the others; therefore, it was selected for translation. This questionnaire, originally developed in English, systematically has five subscales, including beliefs (7 questions), knowledge subscale (10 questions), confidence subscale (10 questions), and actions subscale (15 questions) related to supporting their children's auditory access and language development. The final section of the questionnaire asks parents to report the amount of time their child uses hearing assistive devices during the day [5]. Thus, this study aimed to translate and adapt a valid and reliable Persian tool for assessing parental self-efficacy in the context of childhood hearing loss by translating the SPISE-R and examining its psychometric properties.

Materials and Methods

This cross-sectional study aimed to translate and validate a Persian version of the SPISE-R through translation and psychometric evaluation.

Phase I: Translation process

First, permission to translate the questionnaire in Persian was obtained from its authors. Then the international quality of life assessment (IQOLA) protocol [13] was followed and involved two main phases: forward and backward translations.

Forward translation

Two native Persian-speaking translators with sufficient English proficiency (Translators 1 and 2) independently translated the questionnaire into Persian. They provided alternative translations for specific terms when necessary. Each translator rated the translation difficulty for each item on a scale from 0 (easy) to 100 (difficult). Items with an average score above 50 were flagged as difficult to translate. The translators collaboratively developed a consensus Persian version of the questionnaire. The consensus Persian version was reviewed by two additional translators (Translators 3 and 4) who evaluated its quality compared to the original English version. They rated each item's clarity, conceptual equivalence (similarity in meaning), and appropriateness of language on a scale from 1 (very low) to 5 (very high). This process ensured the production of an acceptable Persian version.

Backward translation

Two other native Persian-speaking translators fluent in English (translators 5 and 6) independently translated the Persian version back into English. Their translations were compared with the original English questionnaire to assess alignment and accuracy and were approved by the developers of the original English version.

This rigorous process ensured that the Persian version of the SPISE-R maintained linguistic, cultural, and conceptual equivalence to the original questionnaire (Appendix 1).

Phase II: Psychometric evaluation

Parents were asked to complete the questionnaire if their child met the following criteria: a) 48 months of age or younger, b) using at least one hearing aid or cochlear implant, c) learning spoken language, and d) no known conditions other than hearing loss. To evaluate the psychometric characteristics of the Persian version of the SPISE-R, several measures were assessed, including cultural adaptation, face validity, concurrent validity, and reliability.

Cultural adaptation: The cultural adaptation of the questionnaire was assessed using the content validity ratio (CVR) and content validity index (CVI). A panel of 9 experts, including audiologists and psychologists, rated the appropriateness of each item on a 3-point Likert scale (1=suitable, 2=moderate, and 3=unsuitable). The CVR was then calculated [4].

Face validity index (FVI): To assess face validity, 10 experts and 34 parents (mothers and fathers) rated the clarity and fluency of the translated questionnaire. They used a 6-point Likert scale: very weak, weak, moderate, good, very good, and best. This evaluation focused on whether the items used meaningful, easy-to-understand language appropriate for the target population.

Concurrent and discriminant validity: As no existing questionnaire served as a standard for comparison, we developed a researcher-made questionnaire with items similar to those in the SPISE-R (Appendix 1). Two audiologists independently scored this new questionnaire. We then compared their scores with the responses from 25 mothers and fathers who completed the translated SPISE-R. The comparison focused on the beliefs, confidence, and action subscales, which were rated using the 7-point Likert scale.

For concurrent validity, three scores were calculated for each subscale. In the beliefs section, responses were categorized as "negative", "intermediate", or "positive": values of 1-2 were classified as "negative", 3-4 as "intermediate", and 5-7 as "positive" (with questions 5, 6, and 7 scored in reverse). In the confidence section, responses were categorized into "ineffective", "intermediate", and "effective" levels, similar to the beliefs section. For the action subscale, responses were classified as "weak", "moderate", or "excellent", based on the levels of parent responses. These categories were then compared across the subscales for consistency and validity.

For discriminant validity, we collected responses from the audiologist to the researcher-made questionnaire in the confidence and action subscales. Based on these responses, parents were divided into two groups, including average and high, and the mean scores of their self-efficacy and action subscales were compared with the scores of the main questionnaire using an independent t-test and the non-parametric Mann-Whitney U test.

Test re-test reliability: A total of 78 mothers and fathers were initially asked to complete the questionnaire. Of these, 37 participants completed the question-

naire again after a one-month interval. This test re-test procedure helped to assess the reliability of the translated SPISE-R, providing information on its consistency over time. The sample size was estimated based on prior studies. All parents first filled out the informed consent form, then if they were willing to cooperate, entered the study.

Statistical analysis

SPSS software, version 26 was employed for data analysis. CVR, CVI, FVIs, and impact scores were used to evaluate cultural adaptation and face validity. Test re-test reliability and internal consistency were examined using intra-class correlation coefficient (ICC) and Cronbach's α. Pearson correlation coefficients and ICCs were used to assess the link between each item's test re-test score. The degree of agreement between clinical scores from audiologists and the new questionnaire for each item was calculated as concurrent validity. $P<0.5$ were considered significant for all analyses.

Results

Demographic characteristics of the patients involved in the face validity assessment were gathered from 34 individuals. The majority were mothers, 23(67.6%), compared with fathers, 11(32.4%). The mean age of the children was 45.35(22.9) months, while the mean age at confirmation of hearing loss was 11.44(11.7) months. Eleven children (33.3%) reported using binaural hearing aids, 15 children (45.4%) had unilateral cochlear implants, and 7 children (21.2%) reported wearing bilateral cochlear implants (Table 1). A reliability and descriptive study was conducted, including 78 children, with 62 (79.5%) being mothers and 16 (20.5%) being fathers: 25 children reported using hearing aids (25.6% binaural and 6.4% monaural), and 53 children reported wearing cochlear implants (62.8% unilateral and 5.1% bilateral). Confirmation of hearing loss was obtained in 57 cases (73.1%) before 12 months, while hearing loss was detected after 12 months in 12 cases (26.9%). Participant demographics, including parental age, education level, and child hearing status, are summarized in Tables 1 and 2.

Based on the 9 experts' reviews, the minimum acceptable CVR and item-level CVI (I-CVI) for this analysis were set at 0.77 and 0.70, respectively. The results showed that the CVRs for all items in the questionnaire were above the acceptable threshold, indicating that each item had an appropriate validity score (Table 3).

Table 1. Demographic characteristics of children and parents (n=34) in the assessment of the face validity of the questionnaire

Demographic Characteristics	Category	No. (%)/Mean±SD
Parent's gender	Female	23(67.6)
	Male	11(32.4)
Education level	Elementary	5(14.7)
	Diploma	12(35.3)
	Bachelor's degree	11(32.4)
	Master's degree	6(17.6)
Child's gender	Female	15(44.1)
	Male	19(55.9)
Device type	Binaural hearing aid	11(33.3)
	Unilateral cochlear implant	15(45.5)
	Bilateral cochlear implant	7(21.2)
Child's age (m)	0-48	45.35±22.9
Age at time of hearing loss confirmation (m)	0-48	11.44±11.7

Table 2. Demographic characteristics of parents (n=78) and children (n=78) to determine validity and reliability

Factors		No. (%)
Parent's gender	Male	16(20.5)
	Female	62(79.5)
Parents' hearing status	Deaf	0
	Hard-of-hearing	3(3.8)
	Hearing	75(96.2)
Education level	Elementary	27(34.6)
	Diploma	39(50)
	Bachelor's degree	8(10.3)
	Master's degree	2(2.6)
Occupation	Unemployed	50(64.1)
	Employed	26(33.3)
Number of children	One	63(80.8)
	Two	15(19.2)
Child's gender	Female	40(51.3)
	Male	38(48.7)
Age at time of hearing loss confirmation (m)	<12	57(73.1)
	>12	12(26.9)
Unaided Hearing loss in the better ear	Mild to moderate	2(2.6)
	Moderate to severe	5(6.4)
	Severe	20(25.6)
	Profound	51(65.4)
Aided hearing loss in the better ear	Slight	32(41)
	Mild	28(35.9)
	Moderate	12(15.4)
	Moderately severe	6(7.7)
Communication mode	Verbal auditory	43(59.7)
	Oral	19(26.4)
	Multiple modalities	9(12.5)
	Sign language & speech reading	1(1.4)
Device type	Binaural hearing aid	20(25.6)
	Monaural hearing aid	5(6.4)
	Unilateral cochlear implant	49(62.8)
	Bilateral cochlear implant	4(5.1)

Table 3. CVR, individual I-FVI, and impact scores

Subscale	Item*	Cultural Adaptation		Face Validity	
				Fluency	
		CVR	Total Number of Agreements (n=44)	I-FVI	Impact Score
Beliefs	1	1	44	1	4.18
	2	1	43	0.97	4.35
	3	1	34	0.79	2.96
	4	1	41	0.95	4.27
	5	1	39	0.88	3.46
	6	1	41	0.93	3.81
	7	1	38	0.86	3.51
Knowledge	1	1	44	1	4.68
	2	1	44	1	4.43
	3	1	32	0.72	2.38
	4	1	36	0.83	3.11
	5	1	34	0.77	2.77
	6	1	42	0.97	4.22
	7	1	43	0.97	4.28
	8	1	42	0.95	4.01
	9	1	41	0.93	3.79
	10	1	41	0.93	3.87
Confidence	1	1	42	0.95	4.07
	2	1	43	0.97	4.5
	3	1	40	0.93	3.89
	4	1	42	0.97	4.27
	5	1	39	0.88	3.52
	6	1	44	1	4.38
	7	1	42	0.97	4.31
	8	1	43	0.97	4.04
	9	1	43	0.97	4.26
	10	1	37	0.84	3.15

Subscale	Item*	Cultural Adaptation		Face Validity	
				Fluency	
		CVR	Total Number of Agreements (n=44)	I-FVI	Impact Score
Action	1	1	42	0.97	4.33
	2	0.88	40	0.93	4.02
	3	1	42	0.95	4.29
	4	1	42	0.95	4.18
	5	1	44	1	4.13
	6	1	41	0.93	3.87
	7	1	40	0.9	3.57
	8	1	41	0.95	4.03
	9	0.88	44	1	4.38
	10	1	39	0.92	3.93
	11	1	41	0.95	4.12
	12	1	40	0.93	3.72
	13	1	38	0.86	3.37
	14	1	43	0.97	4.35
	15	1	32	0.91	3.81
Devices used	1	1	43	0.97	4.15
	2	1	44	1	4.63
	3	1	37	0.84	3.30
	4	1	40	1	4.50
	A	1	43	1	4.62
	B	1	41	0.95	4.19
	C	1	43	1	4.55
	D	1	43	0.97	4.37
	E	1	43	0.97	4.28
	F	1	43	0.97	4.28

*For the name of Items, please refer to the Persian version of the SPISE-R.

Table 4. Spearman's correlation coefficients between beliefs and the other three subscales—knowledge, confidence, and action

Belief Subscale Questions		Spearman Correlation Coefficient						
		1	2	3	4	5	6	7
Knowledge subscale	Facilitating hearing access	0.27*	0.47**	-0.14	0.17	-0.11	-0.24*	-0.07
	Supporting language development	0.45**	0.55**	-0.2	0.26*	-0.06	-0.23*	0.24*
	Total score	0.37**	0.53**	-0.16	0.22	-0.08	-0.26*	-0.17
Confidence subscale	Facilitating hearing access	0.26*	0.36**	-0.16	0.17	-0.19	0.3**	-0.24*
	Supporting language development	0.36**	0.53**	-0.09	0.14	-0.08	-0.3**	-0.22
	Total score	0.33**	0.49**	-0.15	0.16	-0.12	-0.37**	-0.23*
Action subscale	Facilitating hearing access	0.25*	0.43**	-0.08	0.12	-0.03	-0.08	0.23*
	Supporting language development	0.24*	0.36**	-0.07	0.16	-0.05	-0.25*	-0.2
	Early intervention programs	0.13	0.36**	-0.06	-0.01	-0.009	-0.14	0
	Overall score	0.25*	0.48**	-0.07	0.12	-0.10	-0.12	-0.16

*Significant at <0.05, **Significant at <0.01

The item-face validity indices (I-FVIs) for item appropriateness and fluency ranged from 0.72 to 1.0. For the cultural appropriateness specific to Iranian culture, the I-FVIs ranged from 0.79 to 1.0. The S-FVIs were 0.94 and 0.95, respectively. A threshold greater than 0.70 was considered acceptable for FVI. However, further assessments are needed for FVI values between 0.7 and 0.8.

Regarding impact scores, all items had acceptable ratings. An impact score greater than 1.5 was considered satisfactory (Table 3).

Table 3 represents Spearman's correlation coefficients between the seven questions of beliefs and the knowledge subscale (facilitating hearing access and supporting language development), confidence subscale (facilitating hearing access and supporting language development), and action subscale (facilitating hearing access, supporting language development, and early intervention programs).

The results showed that in the beliefs section, question 2 had the most significant positive relationship with other sections, followed by question 1, which exhibited the second strongest positive relationship. Although questions 3-5 demonstrated a positive relationship with the support of language development in the knowledge section, these relationships were not statistically significant. Conversely, questions 6 and 7 revealed a negative relationship in some situations, with several instances showing a significant negative relationship. The total score of knowledge and questions 3, 4, 5, and 7 showed no significant differences. The total confidence score showed no significant difference with questions 3, 4, 5, and 7 of the beliefs section. The total score of action subscale showed a positive significant difference only relative to questions 1 and 2 of the beliefs section, and the rest of the questions did not show any statistically significant ($P<0.05$). However, there was a significant positive relationship between the total knowledge subscale score and the total confidence score ($r=0.73$, $P<0.001$), as well as between the total knowledge subscale score and action subscale ($r=0.61$, $P<0.001$), and between the total confidence subscale score and action subscale ($r=0.70$, $P<0.001$). This indicates a strong positive relationship between parental knowledge and confidence. The Mean±SD, ICC, Cronbach's α coefficient, and Pearson's correlation coefficient of all questions related to the beliefs section, total scores, and subscale scores of the domains were analyzed. The knowledge, confidence, and action subscales had a sufficient level of consistency, with Cronbach's α values ranging from 0.75 to 0.82 for beliefs-related items. The consistency of the knowledge, confidence, and action subscales was confirmed through test re-test Pearson correlations, with values ranging from 0.71 to 0.98, except for the second item in the beliefs section. Additionally, the ICCs demonstrated strong relevance for individuals and factors, as summarized in Table 5.

Table 5. Descriptive statistics, reliability (ICC and Cronbach's α), and test-re-test reliability

Subscale	Item*	Mean±SD	ICC	Test-re-test***	Cronbach's α
Beliefs	1	6.6±0.95	0.97**	0.95**	-
	2	6.52±1.41	0.4	0.28	
	3	3.2±2.29	0.96**	0.93**	
	4	6.64±1.25	0.95**	0.92**	
	5	3.44±2.08	0.92**	0.85**	
	6	2.6±2.02	0.88**	0.71**	
	7	1.64±1.11	0.99**	0.98**	
Information	Facilitating hearing access	5.89±1.05	0.91**	0.85**	0.82
	Supporting language development	6.15±0.92	0.95**	0.92**	
Confidence	Facilitating hearing access	6.26±0.82	0.95**	0.91**	0.80
	Supporting language development	6.37±0.75	0.88**	0.80**	
Action	Facilitating hearing access	5.91±0.7	0.93**	0.88**	0.75
	Supporting language development	5.72±0.94	0.88**	0.82**	
	Early intervention programs	6.24±1.05	0.88**	0.78**	

*Significant at<0.05, **Significant at <0.01, ***Pearson correlation.

Note: For the name of items, please refer to the Persian version of the SPISE-R.

The concurrent validity of the questionnaire was assessed by examining the association and agreement between audiologists' clinical judgments and parents' self-efficacy and participation scores on the confidence and action subscales. Audiologists used a 7-point Likert scale to categorize self-efficacy into three levels: "Inefficient" (scores 1–2), "intermediate" (scores 3–4), and "efficient" (scores 5–7). Scores of "1–2" were categorized as "inefficient," "3–4" as "intermediate," and "5–7" as "effective" for calculating the confidence subscale. Expert evaluations categorized as "weak," "moderate," and "excellent" were included in the participation section. These evaluations were aligned with the action subscale responses, where scores of "1–2" represented "weak," "3–4" represented "moderate," and "5–7" represented "excellent." The results of the specialists' evaluations for self-efficacy in the confidence subscale showed a correlation coefficient of 0.55, an ICC of 0.65, and an agreement rate of 0.76 (13 out of 17 items). For the action subscale, the correlation coefficient was 0.31, the ICC was 0.47, and the agreement rate was 0.82 (14 out of 17 items). These values suggest moderate agreement between audiologists' evaluations and parent-reported scores. Both parents completed the questionnaire, and the results showed no significant difference in their knowledge levels for the subgroups of facilitating hearing access (Z=-0.83, P=0.40) and language development (Z=-1.24, P=0.21). However, mothers scored significantly higher than fathers in both the confidence and action subscales. Statistically significant differences were observed in the following areas: the confidence subscale for facilitating hearing access (Z=-2.33, P=0.02), the confidence subscale for supporting language development (Z=-3.40, P=0.001), and the action subscale for facilitating hearing access (Z=-1.88, P=0.05). The gender-based findings are compelling and suggest that mothers may perceive themselves as more confident and engaged in supporting their child's auditory and language development.

Discussion

The coaching model, which fosters collaboration between professionals and parents, is central to early intervention for D/HH children from birth to age three. The ultimate aim is to empower parents and caregivers with the knowledge and confidence to independently implement their children's individualized program goals

without ongoing professional involvement. Parents participating in early intervention exhibit varying levels of beliefs and self-efficacy concerning their children's hearing loss [5]. By thoroughly understanding parents' strengths and identifying areas where they seek guidance, professionals can better support parents in achieving these goals.

The SPISE-R serves as a valuable tool for identifying parents' capacities in terms of their beliefs, knowledge, and confidence in supporting a child with hearing loss. It provides insights that allow for tailored counseling, training, and guidance during early intervention. Given its usefulness, translating the SPISE-R into Persian was imperative to extend its applicability to Persian-speaking populations.

The Persian version demonstrated strong cultural compatibility across all five sections (CVR=0.77–1) and was highly comprehensible to families (S-FVI=0.94). Unlike the English [5] and Korean [14] versions, which have not published their content and face validity metrics, the Persian version provides these values, enhancing transparency and replicability. Additionally, the Persian version exhibited acceptable reliability, with no significant differences between test and re-test results, consistent with findings from the original and Korean versions.

Grounded in social learning theory, parental self-efficacy refers to parents' beliefs in their ability to fulfil parenting tasks [15, 4]. Previous research demonstrates a strong association between parents' task-specific self-efficacy and child language outcomes in children with hearing loss [3]. Higher confidence levels are linked to greater engagement in actions [5]. Consequently, parents play a pivotal role in enabling their child's hearing access and fostering language development.

In terms of gender effects, we found no significant differences based on whether the father or mother completed the questionnaire. However, mothers scored higher than fathers in the confidence and action subscales. These differences were statistically significant for the confidence subscale in facilitating hearing access (Z=-2.33, P=0.02) and language development (Z=-3.40, P=0.001), as well as for the action subscale in facilitating hearing access (Z=-1.88, P=0.05). These findings may reflect greater maternal involvement, as mothers were predominantly unemployed and had more available time compared with fathers, and intervention programs may benefit from actively engaging fathers and addressing potential barriers to their involvement. Another study reported higher self-efficacy among mothers in managing their child's hearing loss [16]. These results underscore the need to assess the unique strengths and needs of both parents when designing early intervention programs.

Parents' beliefs about hearing loss significantly influence their self-efficacy and engagement in early intervention programs. Several factors, including gender, education level, and occupation, can shape these beliefs and their participation [4]. Additionally, child-specific factors, such as the age of hearing loss diagnosis, the timing of early intervention, the type of hearing devices, and the presence of comorbidities, may impact parents' self-efficacy and involvement. Future research should explore how the SPISE-R can be utilized to assess these variables, thereby further refining early intervention strategies. The Persian version of the SPISE-R, like its English [5] and Korean [14] counterparts, is a valid and reliable tool.

Insights derived from the questionnaire can effectively highlight both parents' resources and areas requiring additional support. The SPISE-R will be valuable in identifying families of children with hearing loss who may benefit from further counselling, education, and training to better support their child's development. To enhance its clinical utility, future studies should focus on developing detailed implementation guidelines for its use in practice.

Conclusion

The validated Persian SPISE-R offers clinicians and researchers a culturally appropriate tool (CVR=0.77–1, S-FVI=0.94) to assess and support parental engagement in early intervention. Future work should focus on implementation protocols and longitudinal studies to evaluate its impact on child outcomes.

Ethical Considerations

Compliance with ethical guidelines

The study was approved by the Research Ethics Committee of Iran University of Medical Sciences (Code: IR.IUMS.REC.1400.492) on 29 August 2021. The participants received written and oral information about the study and provided consent to participate.

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Authors' contributions

Methodology, formal analysis, and supervision: Shohreh Jalaie; Literature review: Zahra Validabadi, Maedeh Radayi; Investigation and data collection: Samaneh Tourani; Data curation, validation, and conceptual equivalence assessment: Shahrbanoo Ghaharri; Instrument validation and English questionnaire editing: Jean L. DesJardin; Writing: Anis Hosseini, Shohreh Jalaie and Mahsa Morsali; Translation: Anis Hosseini, Zahra Validabadi, Samin Moradi, and Sahand Rahimipour.

Conflict of interest

The authors declared no conflict of interest.

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دانشکده علوم توانبخشی

گروه شنوایی‌شناسی

مقیاس میزان مشارکت و خودکارآمدی والدین-۱۴۰۱

۲۰۲۰-(SPISE-R)

دستورالعمل: در پاسخ به هر سوال دور شماره مورد نظرتان (از یک تا هفت را که احتمال بیشتر می‌دهید)، دایره بکشید.

الف) باورها

سوالات زیر مواردی هستندکه برخی از والدین کودکان کم‌شنوا ممکن است به آن اعتقاد، یا نگرانیهایی درباره آن داشته باشند. **لطفاً مشخص کنید که چقدر به این موارد اعتقاد و باور دارید.**

سوال	اصلا			تا حدودی			کاملا
۱. معتقدم که اگر فرزندم را کاملا "حمایت" کنم، می‌تواند بر اثرات ناشی از کم‌شنوایی غلبه کند.	۱	۲	۳	۴	۵	۶	۷
۲. معتقدم که نحوه صحبت کردن و نوع ارتباط اعضای خانواده با فرزندم، بر چگونگی رشد او تاثیر قابل توجهی دارد.	۱	۲	۳	۴	۵	۶	۷
۳. مهم نیست که ما چه اقدامات توانبخشی و آموزشی در خانواده انجام می‌دهیم، باورم این است که رشد فرزند من در مقایسه با کودکان شنوا، همواره با تاخیر همراه خواهد بود.	۱	۲	۳	۴	۵	۶	۷
۴. معتقدم که "سمعک یا کاشت حلزون" فرزندم به او کمک می‌کند تا ارتباط برقرار کردن را یاد بگیرد.	۱	۲	۳	۴	۵	۶	۷
۵. اگر مردم ببینند فرزندم از "سمعک یا کاشت حلزون" استفاده می‌کند، معتقدم که در مورد او یا خانواده‌ام، قضاوت خواهند کرد.	۱	۲	۳	۴	۵	۶	۷
۶. اگر محیط خانه را بیش از حد ساکت نگه دارم، معتقدم که فرزندم گوش دادن در محیط "پر سر و صدا" و شلوغ را یاد نمی‌گیرد.	۱	۲	۳	۴	۵	۶	۷
۷. اگر فرزندم مرتباً از "سمعک یا کاشت حلزون" خود استفاده کند، معتقدم که بیش از حد به آنها وابسته می‌شود، و این وابستگی خوب نیست.	۱	۲	۳	۴	۵	۶	۷

ب) اطلاعات:

هنگامی که والدین، دارای فرزند کم‌شنوا می‌شوند؛ باید اطلاعات و مهارت‌های جدید بسیاری را بیاموزند و این فرایندی زمان بر است. می‌خواهیم بدانیم که **شما در حال حاضر درباره هر یک از موضوعات زیر چقدر آگاه هستید و اطلاعات دارید.**

سوال	اصلاً		تا حدودی			کاملا	
۱. می‌دانم که «سمعک یا کاشت حلزون" فرزندم را چگونه نگهداری و مراقبت کنم.	۱	۲	۳	۴	۵	۶	
۲. می‌دانم که از چه روش‌هایی برای نگهداری «سمعک یا کاشت حلزون" روی گوش فرزندم استفاده کنم.	۱	۲	۳	۴	۵	۶	۷
۳. می‌دانم که فرزندم چه صداهایی را بدون «سمعک یا کاشت حلزون" خود، می‌تواند بشنود، و چه صداهایی را نمی‌تواند بشنود.	۱	۲	۳	۴	۵	۶	۷
۴. می‌دانم که فرزندم چه صداهایی را با «سمعک یا کاشت حلزون" خود، می‌تواند بشنود، و چه صداهایی را نمی‌تواند بشنود.	۱	۲	۳	۴	۵	۶	۷
۵. می‌دانم که چگونه آزمون ۶ صدایی (صداهای /آ/ ای/ او/ م/ ش/ س/) را انجام دهم.	۱	۲	۳	۴	۵	۶	۷
۶. می‌دانم که فرزندم چه صداها، کلمات و جملاتی را برای صحبت کردن باید یاد بگیرد.	۱	۲	۳	۴	۵	۶	۷
۷. می‌دانم که چگونه باید به فرزندم کمک کنم تا برقراری ارتباط را یاد بگیرد.	۱	۲	۳	۴	۵	۶	۷
۸. می‌دانم که کم‌شنوایی فرزندم، چگونه بر یادگیری او تأثیر می‌گذارد.	۱	۲	۳	۴	۵	۶	۷
۹. می‌دانم که با فرزندم چگونه کتاب بخوانم تا به او کمک کند، برقراری ارتباط را یاد بگیرد.	۱	۲	۳	۴	۵	۶	۷
۱۰. از توصیه‌های متخصصین (شنوایی شناس، گفتاردرمان) استفاده می‌کنم تا به فرزندم کمک کنم برقراری ارتباط را یاد بگیرد.	۱	۲	۳	۴	۵	۶	۷

ج) اطمینان:

داشتن اطلاعات به تنهایی همیشه ما را در انجام کاری مطمئن و آسوده نمیکند. ممکن است برای ایجاد اطمینان و اعتماد به خود، به زمان یا تمرین بیشتری نیاز داشته باشیم. **لطفاً مشخص کنید که چقدر نسبت به توانایی خود در انجام هر یک از کارهای زیر اطمینان دارید.**

	اصلا		تا حدودی			خیلی زیاد	
۱. بخوبی تشخیص می‌دهم که آیا «سمعک یا کاشت حلزون" فرزندم به‌درستی کار می‌کند یا نه.	۱	۲	۳	۴	۵	۶	۷
۲. بخوبی می‌توانم «سمعک یا کاشت حلزون" را روی گوش فرزندم قرار داده و آنها نگهداری کنم.	۱	۲	۳	۴	۵	۶	۷
۳. با ایجاد تغییراتی در محیط، می‌توانم به بهتر شنیدن فرزندم کمک کنم.	۱	۲	۳	۴	۵	۶	۷
۴. می‌توانم به فرزندم برای شنیدن و درک صداهای گفتاری جدید و یا صداهای موجود در محیط کمک کنم.	۱	۲	۳	۴	۵	۶	۷
۵. می‌توانم از آزمون ۶ صدایی (صداهای /آ/ ای/ او/ م/ ش/ س/)، استفاده کنم تا بفهمم آیا فرزندم با استفاده از سمعک یا دستگاه کاشت خود، شنوایی مناسبی دارد یا نه.	۱	۲	۳	۴	۵	۶	۷

	اصلا			تا حدودی			خیلی زیاد	
۶. می‌توانم به فرزندم کمک کنم تا گفتن صداها، کلمات و جملات جدید را یاد بگیرد.	۱	۲	۳	۴	۵	۶	۷	
۷. می‌توانم به فرزندم کمک کنم تا هنگام برقراری ارتباط، بتواند خواسته‌ها و نیازهایش را بیان کند.	۱	۲	۳	۴	۵	۶	۷	
۸. می‌توانم با فرزندم به نحوی مناسب ارتباط برقرار کنم، تا او به‌درستی صدای مرا بشنود.	۱	۲	۳	۴	۵	۶	۷	
۹. می‌توانم با فرزندم به گونه‌ای کتاب بخوانم، تا به او کمک کنم برقراری ارتباط را بهتر یاد بگیرد.	۱	۲	۳	۴	۵	۶	۷	
۱۰. می‌توانم آنچه را که در جلسات توانبخشی یادگرفته‌ام، با فرزندم انجام دهم.	۱	۲	۳	۴	۵	۶	۷	

د) اقدامات :

می‌دانیم که در طی روز مشغله‌های زیادی داریم. والدین مسئولیت‌های بسیاری دارند. از این رو ممکن است نتوانیم همه کارهایی را که دوست داریم، هرروز انجام دهیم. می خواهیم بدانیم **با در نظر گرفتن همه مسئولیت های دیگری که دارید، شما چه میزان قادر به انجام فعالیت های زیر هستید؟**

	هرگز			گاهی اوقات			همیشه	
۱. هر روز صدای «سمعک یا کاشت حلزون" فرزندم را بررسی و کنترل می‌کنم.	۱	۲	۳	۴	۵	۶	۷	
۲. کنترل کرده و مطمئن شدم اعضای خانواده که از فرزندم مراقبت می‌کنند، نحوه کار با «سمعک یا کاشت حلزون" او را یاد گرفته‌اند.	۱	۲	۳	۴	۵	۶	۷	
۳. وقتی فرزندم از خواب بیدار می‌شود، خودم یا اعضای خانواده، «سمعک یا کاشت حلزون" او را بلافاصله روی گوشش قرار می‌دهیم.	۱	۲	۳	۴	۵	۶	۷	
۴. وقتی «سمعک یا کاشت حلزون" فرزندم از گوش او می‌افتند یا او آنها را از گوش خود برمی‌دارد، خودم یا اعضای خانواده، بلافاصله مجددا آنها را روی گوش او قرار می‌دهیم.	۱	۲	۳	۴	۵	۶	۷	
۵. شرایط محیط را برای بهتر شنیدن فرزندم، تا حد امکان آسان می‌کنم.	۱	۲	۳	۴	۵	۶	۷	
۶. توجه فرزندم را به صداهای جدید در محیط یا گفتار افرادی که هنوز نشنیده است و یا در حال یادگیری آنهاست، جلب می‌کنم.	۱	۲	۳	۴	۵	۶	۷	
۷. هر روز شنوایی کودکم را با آزمون ۶ صدایی (صداهای /آ/ ای/ او/ م/ ش/ س/) بررسی و کنترل می‌کنم.	۱	۲	۳	۴	۵	۶	۷	
۸. هنگام فعالیت‌های روزانه، از روش‌هایی استفاده می‌کنم تا به فرزندم کمک کنم درک و تولید صداها، کلمات و جملات را یاد بگیرد.	۱	۲	۳	۴	۵	۶	۷	
۹. روش‌هایی را استفاده می‌کنم تا به فرزندم کمک کنم بتواند خواسته‌ها و نیازهایش را بیان کند.	۱	۲	۳	۴	۵	۶	۷	
۱۰. کنترل کرده و مطمئن شدم اعضای خانواده که از فرزندم مراقبت می‌کنند، می‌دانند چگونه به او کمک کنند تا بتواند برقراری ارتباط را یاد بگیرد.	۱	۲	۳	۴	۵	۶	۷	
۱۱. حداقل یک بار در روز برای فرزندم کتاب می‌خوانم.	۱	۲	۳	۴	۵	۶	۷	
۱۲. از روش هایی که در جلسات توانبخشی یاد گرفته‌ام استفاده می‌کنم تا به فرزندم کمک کنم برقراری ارتباط را یاد بگیرد.	۱	۲	۳	۴	۵	۶	۷	

	هرگز			گاهی اوقات			همیشه	
۱۳. درجلسات توانبخشی و در منزل، به نیازهای فرزندم توجه کرده و از او حمایت می‌کنم.	۱	۲	۳	۴	۵	۶	۷
۱۴. هرگاه فرزندم نیاز داشت، به شنوایی‌شناس یا گفتاردرمان مراجعه می‌کنم.	۱	۲	۳	۴	۵	۶	۷
۱۵. حضور و مشارکت در جلسات توانبخشی فرزندم را نسبت به انجام فعالیت‌های غیرضروری (مانند سرگرمی‌های در اینستاگرام و واتس‌اپ و ...) ترجیح می‌دهم.	۱	۲	۳	۴	۵	۶	۷

ه) استفاده از "سمعک یا کاشت حلزون":

می‌خواهیم بدانیم فرزند شما روزانه در هنگام بیداری به طور معمول چقدر از «سمعک یا کاشت حلزون" خود استفاده می‌کند. اگر کودک شما در یک گوش سمعک و در گوش دیگر کاشت حلزون دارد و در میزان استفاده از آنها تفاوتی وجود دارد، لطفاً برای هر دستگاه به طور جداگانه پاسخ دهید. (در صورت نیاز در جدول از کلمه های «کاشت حلزون» و«سمعک» استفاده کنید.)

۱. فرزندتان در طی شبانه‌روز معمولا چند ساعت بیدار است ؟ ----------

۲. فرزندتان هنگامی که بیدار است، معمولا چند ساعت از سمعک یا کاشت حلزون خود استفاده می‌کند؟ ----------

۳. اگر فرزندتان تا به حال با سمعک یا کاشت حلزون روشن روی گوشش خوابیده است، لطفا مشخص کنید به طور معمول چند ساعت در شبانه روز این اتفاق می‌افتد؟ ----------

۴. هنگامی که فرزندتان در موقعیت‌های زیر بیدار است، چقدر از سمعک یا کاشت حلزون خود استفاده می‌کند؟

	هرگز	به ندرت	گاهی اوقات	بیشتر اوقات	همیشه	در مورد ما صدق نمیکند
الف. در منزل						
ب. در ماشین، اتوبوس، مترو						
پ. در مهدکودک، مدرسه، مهمانی‌ها						
ت. در خارج از خانه همراه خانواده، فامیل یا دوستان						
ث. هنگام بازی کردن خارج از خانه						
ج. در تفریحات (مثلا رفتن به فروشگاه، باغ وحش، موزه و ...)						

Function & Disability Journal

مشخصات پاسخ دهنده به سوالات پرسشنامه

والدین: ☐ پدر ☐ مادر

سن والد: .....

وضعیت شنوایی والد: ☐ شنوا ☐ کم شنوا ☐ ناشنوا

سطح تحصیلات والد: ☐ ابتدایی ☐ دیپلم ☐ لیسانس ☐ فوق لیسانس ☐ دکترا

وضعیت شغلی والد: ☐ شاغل ☐ غیرشاغل

تعداد فرزند کم شنوا در خانواده: ☐ یکی ☐ دو تا ☐ سه تا

سن کودک (به سال): .....

جنسیت کودک: ☐ دختر ☐ پسر

سن تشخیص کم شنوایی: ☐ ۱۲ ماهگی یا قبل ☐ بعد از ۱۲ ماهگی

میزان کم شنوایی گوش بهتر (براساس آزمایش شنوایی بدون وسیله تقویت کننده):

☐ ملایم تا متوسط (مسطح یا با شیب ملایم در فرکانس‌های بالا)

☐ متوسط تا شدید

☐ شدید

☐ عمیق

میزان کم شنوایی گوش بهتر (براساس آزمایش شنوایی با استفاده از وسیله تقویت کننده):

☐ جزئی (نزدیک به محدوده طبیعی) ☐ ملایم ☐ متوسط ☐ متوسط شدید

☐ شدید ☐ عمیق

نوع روش ارتباطی: ☐ شنیداری-کلامی ☐ شفاهی (گفتاری و لبخوانی)

☐ ارتباط کلی (گفتاری، لبخوانی و زبان اشاره) ☐ زبان اشاره و لبخوانی

وجود مشکلات دیگر علاوه بر کم شنوایی (درصورت پاسخ بلی، نوع آن نوشته شود): ☐ بلی ☐ خیر

توضیح: .....

نوع وسیله کمک شنوایی (در حال حاضر): ☐ سمعک دو گوشی ☐ سمعک یک گوشی (گوش بهتر یا بدتر)

☐ کاشت حلزون یکطرفه ☐ کاشت حلزون دوطرفه

در چه سنی (برحسب ماه)، کم شنوایی توسط متخصصین تایید شد؟ .....

در چه سنی (برحسب ماه)، سمعک دریافت و استفاده شد؟ .....

در چه سنی (برحسب ماه)، دستگاه کاشت حلزون دریافت و استفاده شد؟ .....