

DOI: 10.53555/ks.v12i4.3655

Development Of Literacy Skills Checklist In Urdu

Nimra Kamran¹, Syed Tariq Shah², Naima Farooq^{3*}, Maimoona Ismail⁴, Rabia Mansoor⁵

¹MS. Nimra Kamran, MS (SLP), Speech Therapist, ASAS International School, Islamabad

E-mail: nimrakamran7643@gmail.com

²PhD Scholar, Senior Lecturer, Department of Rehabilitation Sciences, Riphah International University, Islamabad.

E-mail: tariq.shah@riphah.edu.pk

³PhD Scholar, Assistant Professor, Department of Rehabilitation Sciences, Riphah International University Islamabad,

E-mail: naima.farooq@riphah.edu.pk

⁴MPhil (SLP), Senior Lecturer, Department of Rehabilitation Sciences, Riphah International University Islamabad.

E-mail: maimoona.ismail@riphah.edu.pk

⁵MPhil (SLP), Senior Lecturer, Department of Rehabilitation Sciences, Riphah International University Islamabad.

E-mail: biyahmed66@gmail.com

***Corresponding Author:** Naima Farooq

*Assistant Professor, Riphah International University, Gulberg Green Campus, Islamabad,

E-Mail: naima.farooq@riphah.edu.pk

ABSTRACT.

Background: Literacy has come to be seen as important aspect in nation's development since being functionally literate is fundamental to all forms of both successes in school and in life. 'Literacy' seems to be a word that everyone is familiar with at first glance. However, literacy as a notion appears to be the most intricate and dynamic phrase.

Except Urdu language Literacy Skills Checklists are available in multiple languages, the purpose of the study was to develop a Literacy skills checklist in Urdu language. This checklist can be used by school teachers, parents, psychologists, speech and language pathologists and other professionals to assess the progress of the children with age ranges 2-7 years (2years, 2-3years, 3-4years, 4-5years, 5-6years 6-7year) according to their chronological age.

Objective: To develop a Literacy Skills Checklist in Urdu Language.

Methods: The cross-sectional study design was used in the study. The sample size was 96, consisted of typical and atypical children divided equally in two groups. Nonprobability convenient sampling technique was used in the study. The children were included according to their chronological age, from age 2-7 years. Data was collected from daycare, different institutions and home-settings of Rawalpindi and Islamabad. In the development of literacy skill checklist, during the first phase item generation was done. The construction and selection of the specific test items was guided by literature and following the normal developmental milestone in the area of language and literacy development. In the 2nd phase checklist was evaluated by 10 experts for content validity. Pilot testing was done on typical and atypical participants. Internal consistency of the items was calculated through Cronbach's Alpha. Data was analyzed through SPSS IBM version 25.

Results: There were total 107 items in the checklist, after the content validation process, some items got removed because of low CVI-Index values that were 0. After that piloting was done on typical and atypical children. After piloting again some items got removed because of low Cronbach's alpha value (less than .700). Total 90 final items were in the checklist, 19 items for 2 years of age, 12 items for 2-3years, 18 items for 3-4years, 17 items for 4-5years, 15 items for 5-6years and 9 items for 6-7 years of age. The level for the reliability statistics was not less than .750. The reliability statistics value for 2 years checklist items was .750, .870 for 2 to 3 years checklist items, .912 for 3 to 4 years checklist items, .800 for 4 to 5 years checklist items, .889 for 5 to 6 years checklist items, .797 for 6 to 7 years checklist items.

Conclusion : It is determined that the designed checklist's results have high internal consistency values ranging from (.750 to .912). As a result, the Development of Literacy Skills Checklist in Urdu is a valid and reliable tool for assessment and Interventional plans in schools and clinical settings. Could only be used in Urdu-speaking communities for practical findings

Keywords: Literacy, Development, Literacy skills, Checklist, Urdu Language.

Introduction

Literacy is a query that suggests simplicity on the surface but actually reveals a world of complexity. The frequency with which the literature discusses studies, conceptual frameworks, and methods for teaching literacy (commonly referred to as reading and/or writing) without defining these words is remarkable (1). The term "literate" in English has typically signified "familiar with literature" or, more broadly, "well educated, learned." It has only been used to refer to the capacity for reading and writing while keeping its original, larger definition of "knowledgeable or educated in a particular field or fields" since the late nineteenth century. As a result, the translations of the English word "literacy" into a number of other languages do not accurately reflect its original meaning (2).

The capacity to read and write at an adequate level is emphasized in many definitions of literacy, such as Blake and Henley's statement that, the skill of reading is widely acknowledged as one of the primary educational goals of required schooling. It alludes of having a suitable level of fluency in both reading and writing. The meanings of "an appropriate level" , "effectively," and "well" are not understood by all people. though, as stated by Lawton and Gordon. (3).

Together, the Catholic Education Office of Victoria and the Victorian Department of School Education conducted research on the difficulty of defining literacy as: Literacy definitions are extremely difficult to write. A complex social construct, literacy can signify different things to different ethnic groups and at different times. As a result, the term "literacy" is flexible and ambiguous. But literacy is actually a collection of verbal and cognitive abilities that includes a wide range of routines, attitudes, interests, and knowledge and is useful in a wide range of contexts. Despite the fact that reading and writing prose and other print texts is commonly thought of as a requirement for literacy (4). Even while there isn't a single, universally accepted definition of literacy, the majority of modern definitions do include reading, writing, speaking, listening, and viewing or visual literacy. A key component of literacy is the capacity to utilize and produce texts in a range of formats. The United Nations Educational, Scientific and Cultural Organization (UNESCO) defines literacy as the capacity to identify, understand, interpret, create, communicate, use, and compute with printed and written resources (5).

The literature also emphasized the critical role that parents and other primary caregivers—who act as their children's first teachers—play in a child's educational development. The home environment of a kid, especially how much they learn reading habits and abilities from the adults who are parenting them, is crucial to early literacy development (6). Literacy requires a wide range of verbal and cognitive skills. Theories of proficient literacy cover the techniques used in reading and writing. Theories about the development of literacy explain how literacy changes as children acquire the cognitive and language skills necessary for those activities. To fully reap the rewards, it is essential to comprehend the procedures involved in reading and writing as well as the skills needed to make those procedures efficient. Only after that will we be able to understand influences that are more general, such as affective influences like motivation and self-efficacy, or environmental influences like the reading environment at home and at school, on the development of such abilities (7).

A study was done to look at what student teachers and student SLP/Ts knew and believed about language ideas, junior school literacy instruction, service delivery, and inter-professional cooperation. 58 student primary school teachers and 37 student SLP/Ts in their final year of professional study responded to an online survey. The findings showed that these groups had little grasp of one another knowledge of spoken language and literacy curriculum. The awareness of spoken-written language linkages and how SLP/Ts can help children build their orthographic knowledge was little indicated by both groups. Participants showed acceptance of indirect classroom based service delivery strategies (such as the SLT serving as a consultant), but they showed less acceptance of direct strategies (such as collaborative teaching). Both groups stated that their pre-service education included little to no SLT-teacher collaboration. The statistics indicate that pre-service inter-professional education (IPE) is necessary to educate aspiring SLP/Ts and teachers for collaborative instruction that improves children's communication. This IPE should focus on children's early literacy learning (8).

In another study, The Maximizing Academic Growth by Improving Communication (MAGIC) comprehensive classroom teacher and speech-language pathologist collaborative intervention program was created and initially implemented in 12 kindergarten and first-grade classes to see if the language-enriched students outperformed their peers significantly on a curriculum based test and on teacher reports of classroom communication. The results showed that weekly classroom interventions led to considerably increased listening and writing sub-test scores for the MAGIC programme participants. Students in the therapy groups showed noticeably better comprehension of vocabulary and cognitive-linguistic ideas, as well as improved writing skills for crafting pertinent sentences with proper grammar and spelling (9).

In a study, 409 school-based speech-language pathologists (SLPs) in the state of Michigan were surveyed through mail to learn more about the kinds of language assessment techniques they used to evaluate children's language abilities. Additionally, descriptive information on the respondents' caseload, employment, and demographic factors was gathered. According to the findings, the sample of respondents was uniform, and their methods of assessment were also uniform. Although respondents evaluated the skills of English-speaking youngsters using both formal and informal methods, informal methods were utilized more frequently. Almost all responding SLPs (98%) stated that parent-teacher interviews were commonly used as an informal approach for assessment. The Clinical Evaluation of Language Functions was the formal, standardized procedure most usually utilized by respondent (79%) (10).

Methodology

The study was conducted at Riphah International University Department of Rehabilitation Sciences, Islamabad from 1st January 2023 to 31st July 2023, after permission of the research ethical committee vide Ref:RCRAHS-ISB/REC/MS-SLP/01476 .The Urdu Literacy Skills Checklist for the children was developed which consisted of six sub-scales according to the age groups.

The study was conducted in two phases:

Phase I

Step 1. Identification of domain:

In this step, to develop Literacy Skills Checklist in Urdu language. A detail and extensive review of literature and existing tools which assessed the literacy skills in various languages was done. The focus was on identifying the major areas which are

critical in literacy skills in different ages, with special emphasis on the cultural and linguistic characteristics of Urdu Language. Like script features, grammar rules and phonemic inventory. The feedback was taken from the speech-language pathologists, teachers, linguists, and parents to identify relevant domains for the checklist. After identification of domains from the literacy domains for Urdu were identified and finalized.

In the second step the item generation was done. Since the researcher was developing the Urdu literacy screening tool. In item generation special consideration were given to fact that the items were age appropriate and help to identify the red flags related to literacy skill that will help in further detail diagnosis. Special considerations were given to the fact that the items wordings should be clear, concise and relevant to the target population. In this way the literacy screener was developed with reference to different age groups, ranging from two to seven years.

Phase II

The Second phase consists of content validation process, which was done by 10 experts. Content validity was done on four parameters; these experts evaluated each item based on four key criteria: (A) relevance, (B) clarity, (C) simplicity, and (D) ambiguity, using a 4-point rating scale. Any item that was rated poorly or needed improvement was revised or removed. After making these changes, the questionnaire went through another round of review to confirm its accuracy and consistency. The content validity index (CVI) was calculated to summarize the results, and the number of revised or deleted items was carefully noted.

After content validation process, piloting was done on 96 children including 48 typical and 48 atypical (excluding children with co-morbid conditions like ASD, ADHD) children age ranges 2-7 years. The data was gathered according to the chronological age of the children. After piloting, internal consistency was calculated through Cronbach's Alpha. The highest Cronbach's Alpha Value was .912 and the lowest value was .750. There were total 106 items in the Literacy Checklist initially, 16 items were removed and the final items were 90. It is concluded that it's a reliable tool containing high consistency values and it can be used for assessment procedure in schools and clinical settings.

Data was collected from different areas of Islamabad, Rawalpindi. The data of typical children was taken from GGC daycare Centre (Gulberg Greens Campus) and different home settings of Rawalpindi and Islamabad, while the data of atypical children was taken from Ghaliya's Montessori House for Autism. For data collection parents of children age ranges 2 to 7 years were approached. The parents were briefed about the study, given the questionnaire and the chronological age was calculated. The questionnaires were administered by the researcher themselves. Statistical analysis done by SPSS Version 25. Descriptive analysis of the demographic variables was done by using frequency distribution and percentage, Cronbach's alpha was used to determine the items' internal Consistency.

Results

In the basic demographics children were selected according to their chronological age, which was divided into 6 categories (2years, 2 to 3years, 3 to 4years, 4 to 5years, 5 to 6years and 6 to 7years). The details of the demographic information's are depicted in Table: 1

Data was analyzed through SPSS IBM version 25. The items' internal consistency was assessed using Cronbach's alpha. There were total 23 items in the checklist for 2 years of age, after negative and below 0.70 coefficient value 4 items were excluded so the value of final items is .750. In the checklist for 2-3years of age there were total 17 items, 6 items were excluded, and the final value is .870. In the checklist for 3-4years of age there were total 21 items, 4 items were excluded, and the final value is .912. In the checklist for 4-5years of age there are total 17 items, no items were excluded, and the final value was .800. In the checklist for 5-6years of age there were total 15 items, no items were excluded, the final value is .889. In the checklist for 6-7years of age there were total 13 items, 3 items were excluded, and the final value was .797.

Demographics	Frequencies	Percentage
Age of children		
2 Years	16	16.6%
2 to 3 Years	16	16.6%
3 to 4 Years	16	16.6%
4 to 5 Years	16	16.6%
5 to 6 Years	16	16.6%
6 to 7 Years	16	16.6%
Gender		
Male	66	68.75%
Female	30	31.25%
(Language demographic		
Urdu	68	70.83%
English	6	6.25%
Urdu & English	12	12.5%
Others	10	10.41%
Number of siblings in a family		
No siblings	18	18.75%
One sibling	20	20.83%

Two siblings	28	29.16%
Three siblings	20	20.83%
Four siblings	6	6.25%
Five siblings	4	4.16%
Number of school going Children		
Not going to school	48	50%
Pre-Schooler	22	22.91%
Grade 1 st	12	12.5%
Grade 2 nd	12	12.5%
Grade 3 rd	2	2.08%
Family setup		
Nuclear family setup	58	60.41%
Joined family setup	26	27.08%
single parent	12	12.5%
Children		
Typical	48	50%
Atypical	48	50%
2 years typical children	8	8.33%
2 years atypical children	8	8.33%
2-3 years typical children	8	8.33%
2-3 atypical children	8	8.33%
3-4 typical children	8	8.33%
3-4 atypical children	8	8.33%
4-5 typical children	8	8.33%
4-5 atypical children	8	8.33%
5-6 typical children	8	8.33%
5-6 atypical children	8	8.33%
6-7 typical children	8	8.33%
6-7 atypical children	8	8.33%
Milestones achieved on time		
Yes	50	52.08%
No	46	47.91%
Command Following		
Yes	50	52.08%
No	10	10.41%
Sometimes	36	37.5%
Don't Know	0	0%
Difficulty in reading name		
Yes	44	45.83%
No	12	12.5%
Sometimes	40	41.66%
Don't know	0	0%
Difficulty writing name		
Yes	34	35.41%
No	52	54.16%
Sometimes	6	6.25%
Don't know	4	4.16%
Difficulty in Calculations		
Yes	56	58.33%
No	26	27.08%
Sometimes	10	10.41%
Don't know	4	4.16%
Parents rating towards their child's reading skills		
Very good	14	14.58%
Good	20	20.83%
Fair	14	14.58%
Poor	48	50.00%
Parents rating towards their child's writing skills		
Very good	16	16.66%
Good	14	14.58%

Fair	16	16.66%
Poor	44	45.83%
Parents rating towards their child's calculations skills		
Very good	10	10.41%
Good	16	16.66%
Fair	18	18.75%
Poor	52	54.16%
Parents rating towards their child's command following skills		
Very good	36	37.5%
Good	22	22.91%
Fair	24	25%
Poor	14	14.58%

Reliability Statistics of items for 2-7 years of age

AGE	Cronbach's Alpha Value	Cronbach's Alpha Based on Standardized Items	Number of Items
2 years	.750	.790	19
2-3 years	.870	.894	11
3-4 years	.912	.920	17
4-5 years	.800	.820	17
5-6 years	.889	.909	15
6-7 years	.797	.801	10

Discussion

The current study was aimed to develop a Literacy Skills Checklist in the Urdu language, addressing a critical gap in available resources for assessing literacy skills among children. Globally, various checklists and screening tools have been developed in multiple languages, yet the absence of such tools in Urdu has posed challenges for researchers, clinicians, and educators. This study utilized a cross-sectional approach with a sample of 96 children, equally divided into typical and atypical groups, and adhered to rigorous inclusion and exclusion criteria to ensure robust results.

The findings indicate that this checklist can serve as a valuable resource for parents, guardians, and professionals to document significant language, reading, writing, and other literacy skills in young children. It provides an age-appropriate framework for assessing foundational literacy skills in Urdu, facilitating early identification of potential difficulties. In the first phase Item generation was done. Following the typical developmental milestones in the field of language and literacy development. The formulation and selection of the specific test items were informed by literature. It includes milestones that kids between the ages of 2 and 7 are anticipated to be able to master. In the 2nd phase pre-testing of the item development was completed. It was evaluated by the experts for face and content validity. Pilot testing was done on typical and atypical participants. Internal consistency of the items was calculated. (47).

The results of this study shown that this tool is reliable with the reliability tool index of the age range of 2-7 years. The items of the whole checklist contain high level of internal consistency (.750, .870, .912, .800, .889, .797) across various age groups. As a result, finding of this study shown that this tool will aid parents, guardians, and professionals in documenting the presence of significant language, reading, and writing and other literacy skills in kindergarten according to their age (48).

A similar study was conducted regarding early literacy development. According to a research, preventing academic failure can be significantly aided by early detection in the preschool years. Preliminary data from the creation and validation of the Preschool Early Literacy Screening Tool (Rastreio de Literacia Emergente Pré-escolar; RaLEPE) was presented in the study. A pilot research used a sample of 128 screenings, completed by parents or other primary cares of Portuguese children aged 3 to 6, was conducted. The study of the data demonstrates the tool's dependability, with both the whole RaLEPE scale and its many components exhibiting very high levels of internal consistency. As a result, preliminary findings from this study support the RaLEPE's internal validity and validate its use as a screening tool for early intervention childhood, helping to give an early diagnosis and support early intervention for kids with language and learning difficulties (49).

Another study was being conducted to develop a screener named Get Ready to Read! Screener (E-GRTR and S-GRTR). The findings showed that the E-GRTR predicted the English emergent literacy abilities of EO (English Only) and ELL (English Language Learners) children as well as the Spanish emergent literacy skills of ELL children, while the S-GRTR predicted the English and Spanish emergent literacy skills of ELL children. Compared to the other emergent literacy measures for both groups, the E-GRTR and the S-GRTR were more accurate at predicting children's print knowledge in English and Spanish. According to the results, both screeners (50).

In another study 98 preschoolers' early literacy skills were evaluated and each sub-test's statistical validity (item difficulty level, Discrimination Index, factorial structure using Confirmatory Factor Analysis) was given in study 1. Results indicated

that the sub-tests of the instrument, with the exception of the morph-syntactic comprehension task, had strong psychometric qualities and were suitable for use with preschoolers in a school setting. Study 2 looked at the early literacy abilities of 62 preschoolers as well as their reading and writing skills at the end of the first grade in primary school. Children's reading abilities in primary school 12 months later were significantly predicted by the results of the phonological awareness task on the final version of the evaluation in preschool. The results of the lexical comprehension and morph-syntactic production (i.e., repetition of sentences) activities of the preschool assessment significantly predicted the children's writing results in primary school 12 months later. The assessment possesses certain qualities that make it a strong candidate for implementation in educational settings, both to detect vulnerable areas in time to alter the children's developmental paths to literacy and to prevent upcoming language and literacy challenges in primary school (51).

Another study was being conducted on The Early Literacy Screener (ELS), a quick test for emerging literacy deficiencies in 4- and 5-year-olds. The Survey of Well-Being in Young Children (SWYC), the ELS, and the Ages and Stages Questionnaire-3 (ASQ-3) were completed by parents of children who were 4 ($n = 45$) and 5 ($n = 26$) years old. Calculated for each screening instrument were the rates of positive agreement (PA), negative agreement (NA), and overall agreement (Cohen's κ). In 51% of those who passed the ASQ and 38% of those who passed the SWYC, early literacy delays were found. $\kappa = 0.18$, $PA = 0.36$ (95% CI = 0.23-0.51), and $NA = 0.83$ (95% CI = 0.66-0.92) for ELS against ASQ. $\kappa = 0.42$, $PA = 0.61$ (95% CI = 0.44-0.75), and for ELS versus SWYC (52).

Screenings are frequently brief and presented to the entire population (for instance, all pupils) in order to find any issues that might not be noticed during regular contacts. For students who don't seem to be responding appropriately, assessment results may be used formatively to help plan more focused interventions. They may also be combined with results from other assessments to help determine whether a student may have an educational disability that necessitates special education services. (53).

CONCLUSIONS

The Urdu Literacy Skills Checklist is a reliable and culturally relevant tool for assessing early literacy development. While not intended for formal diagnosis, it serves as a practical resource for identifying strengths and areas for improvement in children's literacy skills. This tool complements global efforts to enhance early identification and intervention strategies, contributing to better educational and developmental outcomes. Future research should explore its long-term impact and integration into broader educational and clinical practices.

REFERENCES

1. Keefe EB, Copeland SR. What is literacy? The power of a definition. *Research and practice for persons with severe disabilities*. 2011 Dec;36(3-4):92-9.
2. Understandings of literacy. (n.d.). Coexploration.org. Retrieved June 22, 2023.
3. literate, B. (n.d.). What is literacy? An investigation into definitions of English as a subject and the relationship between English. Org.uk. Retrieved June 22, 2023.
4. (N.d.). Researchgate.net. Retrieved June 22, 2023.
5. (N.d.). Com.au. Retrieved June 22, 2023
6. Anani GE, Lamprey HK, Frempong CO. Redefining literacy in a digital age: The role of instructors in promoting digital literacy. *Journal of English Language Teaching and Applied Linguistics*. 2021 Jul 31;3(8):20-5.
7. Carroll JM, Breadmore H. Theories of early literacy development.
8. Farber JG, Klein ER. Classroom-based assessment of a collaborative intervention
9. Caesar LG, Kohler PD. Tools clinicians use: A survey of language assessment
10. Roser M, Ortiz-Ospina E. Literacy. *Our World in Data*. 2016 Aug 13.
11. Boateng GO, Neilands TB, Frongillo EA, Melgar-Quinonez HR, Young SL. Best practices for developing and validating scales for health, social, and behavioral research: a primer. *Frontiers in public health*. 2018 Jun 11;6:149.
12. Literacy skill checklist. (n.d.). National Center on Improving Literacy. Retrieved June 22, 2023.
13. Sapage S, Cruz-Santos A. Portuguese early literacy screening tool-RaLEPE: A pilot study.
14. Farver JM, Nakamoto J, Lonigan CJ. Assessing preschoolers' emergent literacy skills in English and Spanish with the Get Ready to Read! screening tool. *Annals of Dyslexia*. 2007 Dec;57:161-78.
15. Bastianello T, Brondino M, Persici V, Majorano M. A Novel Computer-Based Assessment Tool for Evaluating Early Literacy Skills in Italian Preschoolers. *Journal of Research in Childhood Education*. 2022 Sep 14:1-20.
16. Iyer, S. N., Dawson, M. Z., Sawyer, M. I., Abdullah, N., Saju, L., & Needlman, R. D. (2017). Added value of early literacy screening in preschool children. *Clinical Pediatrics*, 56(10), 959-963.
17. Munger KA. 5. Types of Literacy Assessment: Principles, Procedures, and Applications. *Steps to Success: Crossing the Bridge Between Literacy Research and Practice*. 2016.