

Language Assessment for Chinese-Speaking Preschool Children: A Review of Current Developments, Challenges, and Future Directions

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Abstract: The development of children's language skills directly influences their cognitive development, social interaction, and subsequent academic performance. The preschool years represent an important stage of language development. Language abilities acquired during this period not only influence children's current communicative effectiveness but also strongly predict later performance in reading, writing, and academic learning. Language assessment tools, as essential means for identifying children's language development levels, play a fundamental role in early screening, clinical diagnosis, and monitoring of interventions. Internationally, research on children's language assessment has established a relatively comprehensive theoretical and instrumental framework, with research priorities gradually expanding from traditional standardized tests to dynamic assessment, ecological assessment, and culturally responsive assessment. In contrast, although research on language assessment for Chinese-speaking preschoolers in China has developed rapidly, there remain significant shortcomings in the development of assessment tools, the integration of local linguistic characteristics, and the establishment of normative data. This article reviews relevant domestic and international research findings, analyzes the current state of language assessment tools for Chinese-speaking preschool children, and, by considering the structural characteristics of the Chinese language, explores existing issues and potential future directions, with the aim of providing guidance for the refinement of the language assessment system for Chinese-speaking children.

Keywords: Preschool Children; Language Assessment; Chinese-Speaking Children;

Language Disorders

1. Introduction

Language development is one of the key foundations of early childhood development and is vital to cognitive development, socialization, emotional expression and later learning in school [1]. Children acquire information from the outside world and organize inner experiences and gradually develop meaningful relationships with their environment through language. Early language development is well-established in previous studies to be associated with later reading comprehension, written expression and school readiness [2]. Language development is multidimensional and involves vocabulary, syntax, narrative skills and pragmatic skills, all of which contribute to children's communication skills. So assessment of children's language capacities is of immense significance [3]. If the level of development for a child is assessed, researchers and therapists are able to identify the child's development and are able to identify risks and plan intervention early. In practice, language difficulties in some children are very subtle and could manifest as slow vocabulary growth, simple expressive structures and poor interactive responses but that could hide the more complex language processing challenges [4]. Without a systematic assessment, these risks are easily missed, which can affect the timing and effectiveness of early intervention. [5].

The preschool years are generally considered to be a critical period for children's rapid growth and internal reorganization of language skills. Children's vocabulary is rapidly increasing, syntactic structures are gradually developed and narrative organization and pragmatic skills continue to develop and mature at this stage of development [2]. The language development quality during this period has implications for

later educational adjustment and literacy outcomes [5]. So the preschool stage is also a critical period which receives most attention for language ability assessment and early screening in children.

A relatively mature theory and assessment system has been developed worldwide to assess children's language abilities [6,7]. In contrast, the language assessment in Chinese-speaking preschool children has been developed more recently but still faces challenges when it comes to tool construction, cultural adaptation and multidimensional integration. It is especially worth mentioning that much of the language assessment tools are based on the English language system and Chinese has its own language type, syntactic structure and pragmatic rules [8]. These differences mean that assessment of Chinese-speaking children's language abilities cannot rely only on English language assessment tools but also requires the establishment of a developmental assessment system that more closely aligns with the characteristics of the Chinese language.

Based on this background, we hope to provide an overview of the current research progress in preschool language assessment tools in both China and the world, discuss existing challenges and discuss the future development of Chinese language assessment tools.

2. International Developments in Preschool Language Assessment Tools

Early research on preschool language assessment started in Western countries and has become a rather mature process with a variety of theories and assessment approaches. Early international studies mainly introduced standardized language assessment tools which assessed children's receptive and expressive language, vocabulary, syntax, and communication skills with standard language assessment tools [9], such as Preschool Language Scale (PLS), the Clinical Evaluation of Language Fundamentals (CELF), and the Peabody Picture Vocabulary Test (PPVT), etc. In time, these standardized tools have become the base of preschool language assessment. So far they have shown strong psychometric features and have been widely employed to assess vocabulary comprehension, syntactic processing, and expressive language ability.

As the research has progressed, it has been gradually recognized that standardized

assessment can be more reliable and produce quantifiable results but will often only capture language skills that a child 'already has' and do not reveal his or her developmental potential. As a result, dynamic assessment has received increasing attention [10]. Some studies have shown that including prompts, feedback and scaffolding in the assessment process can reduce the differences between language disorders and poor language experience of children [11]. So that way children's learning skills are more effectively assessed within a supportive environment and that the assessment results are more developmentally meaningful for children.

Cultural and linguistic contexts have also found a greater attention in assessment results. Hamann et al (2020) argued that taking into account the linguistic rules and cultural background of the child's language community when interpreting assessments allows for a more accurate distinction between typical language variation and genuine language disorders [11]. This has led to the development of culturally responsive assessment and language assessment is not limited to a single language standard.

In recent years, researchers have put more emphasis on children's language performance in real-life situations and have begun to add observations of natural interactions, classroom recordings and family communication to language assessment systems, in order to assess children's functional language performance in real world settings [12]. This is not only about whether children "can speak" but also about "how they use language," which has resulted in a gradual transition from structural assessment to functional assessment.

At the global level, the development of children's language assessment tools overseas in general has been moving from static to dynamic, from structural to functional and standardized to culturally adapted, providing insights to the future development of Chinese language children's language assessment tools.

3. Language Assessment Tools for Chinese-Speaking Preschool Children

Language assessments for Chinese-speaking children in China began very slowly but the process has been very rapid over the past two decades. As a result of the review of domestic studies, Huang Wenqiao et al. (2020) found that

there are now more than 30 types of language assessment tools for children in China, covering children with different kinds of special needs: language disorders, hearing impairments, cerebral palsy and dyslexia [6]. This growing body of work indicates that a solid foundation for the domestic child language assessment system has been established.

In the field of language assessment for typically developing children, the S-S Language Development Test, Chinese Communication Development Inventory (CCDI), the Chinese Early Language and Communication Development Inventory (PCDI), and the Early Language Development Progress Scale (EIMS) are the most commonly used tools primarily to measure vocabulary comprehension, expressive ability and early communication levels. These tools have advanced quantitative research on children's language development in China, allowing researchers to more systematically map the early language acquisition trajectories of Chinese-speaking children. However, the existing research seems to focus primarily on vocabulary and syntax but little on narrative capabilities, pragmatic skills, and language use in natural situations [6,13].

As the research on developmental language disorders has increased, China has also improved the assessment of language disorders. Current assessment approaches are hierarchical with widespread screening of general receptive and expressive language abilities and then more specific phonology, vocabulary, syntax, semantics and pragmatics [14]. The layered approach allows clinicians and researchers to identify more specific areas of difficulty and is indicative of a gradual transition from general screening to more detailed diagnostic profiling. More and more attention has been paid to the assessment of early communicative behaviors before spoken language is established. Recent studies have suggested that joint attention, turn-taking and communicative intention seem to be important early indicators of later language problems. In fact, as we have seen, the assessment has increasingly expanded from spoken language itself to prelinguistic communication skills, providing a broader view on early language development [14].

In recent years, domestic research has begun to look into a more comprehensive picture of children's language issues. Liu (2025) developed a three-dimensional assessment

model that takes into account “language—social communication—cognition” and shows that children's language problems are often related with social communication skills and cognitive processing abilities [15]. This perspective breaks down the old approach of considering language in isolation, and encourages a more holistic way of assessing the language.

Technological innovation has also begun to impact assessment practices. Zhang Xiaoheng (2023) believed that artificial intelligence may play a larger role in language disorder screening and assessment through automatic speech analysis, corpus processing, and behavioral recognition [16]. Lu et al. (2024) developed a Chinese speech communication assessment system that uses natural language sampling and automated analysis to assess semantic, syntactic, phonological, and fluency-related aspects [17]. This indicates that language assessment in China has been moving towards more digitalized, automated, and fine-grained approaches.

The study of language assessment for Chinese preschool children has increasingly shifted from measuring vocabulary in a one-dimensional way to one in which receptive and expressive language, prelinguistic communication, multidimensional assessment, and technology-assisted assessment are measured at a higher level. However, it is clear that the field is still moving away from structural measurement to more functional and integrated assessment.

4. Chinese Language Characteristics and the Localization of Assessment Tools

The majority of language assessment tools for children are based on the English language system, but Chinese language type as well as structure are very different from English. Such differences mean that English language assessment tools can't be directly applied for Chinese children without linguistic and cultural adaptation.

Chinese is generally classified as an isolating language, characterized by minimal inflectional morphology, and word order and context are used to communicate grammatical relationships [8]. However, in English-based language assessments, many tasks involve tense marking, plural inflections, and verb morphology. These grammatical markers often provide a valuable window into development for English-speaking

children and are key factors in English language assessment. However, in Chinese, the same morphological forms are rarely present or function differently. Instead of these markers, children use aspect markers and syntactic order to represent temporal and event relationships.

The measure word (classifier) framework is also an important feature of the Chinese language. In Chinese, a measure word is required between a noun and a numeral, such as 'yi ben shu' (a book) and 'yi zhi mao' (a cat), with different nouns taking different measure words. English assessment tools are not able to capture the growth of children's acquisition of measure words, and the same is the case in Chinese as well.

Chinese is also very much a topic-based language, and most sentences revolve around the topic rather than strictly adhering to subject-verb structures [8]. An expression like "This book—I finished reading it yesterday" is very natural in Chinese, but if evaluated according to English syntactic standards, it might be misjudged as an anomalous structure.

At the pragmatic level, Chinese expression relies heavily on context and communicative situations. The development rates of Chinese children in understanding implied meanings, polite expressions, and indirect requests may differ significantly from those of English-speaking children. This means that assessments of English-based tools based on only direct translations are not likely to capture the true language abilities of Chinese-speaking children. Taken together, these linguistic traits show that language assessment tools for Chinese-speaking children should be based on the structural and acquisition patterns of the Chinese language itself.

5. Current Challenges in Language Assessment Research in China

While domestic research has made some progress, there still are a number of important limitations that we can identify.

One major limitation is age continuity. In the context of present assessment tools, there are gaps between infancy and preschool, and it is hard to follow developmental changes early on in life in a systematic way [6]. This discontinuity restricts longitudinal study and affects developmental analysis.

Another challenge is the creation of normative data. While a range of assessment tools have

been developed, normative samples for some of them are still small and very limited in size or geographical coverage. Because of the wide variety of regional and dialectal differences in Chinese speakers, we need more representative normative databases for the assessment results. The scope of the existing assessment is also limited [1,6].

Most of the existing assessment tools are concerned with structural aspects of language; vocabulary and syntax are the major ones, for example, but narrative ability, pragmatic skills, and language usage in everyday communication are not as prominent [6]. Therefore, children's overall communicative skills will not be fully examined.

Another limitation is the lack of dynamic and functional assessment models. Most current assessment tools tend to have static testing and do not take into account children's learning ability or responsiveness to support and language skills in real communicative contexts [15]. As a result, the outcome may not be representative of children's communicative skills in real environments.

Also, the design of indigenous theoretical models is still an important issue. Most assessment tools have been adapted for Chinese-speaking children, but their theoretical frameworks are still based on Western models. Future assessment studies should be directed towards establishing theoretical frameworks that are grounded in Chinese language characteristics and development patterns, which would support the localization of language assessment [16].

6. Future Directions

Given the current state of research on children's language assessment in China, it is clear that in the future, the language assessment tools for preschool-aged Chinese children will not only have more assessment items but also will be more sophisticated as well.

Current assessment tools are still limited in age coverage, as there is no stable transition between the infant and toddler stages and preschool stages, so early childhood language development is not tracked consistently. As the need for early screening is increasing, the development of a continuous assessment tool for children's language development from birth to school age will provide a better picture of the development of children's language abilities and

the onset of interventions for early-learning issues [15].

Children's language abilities are inherently multidimensional, and structural information such as vocabulary and syntax are no longer sufficient to understand their development. Language comprehension, social communication, and cognitive processing are closely linked and are increasingly being studied [17]. Future assessment tools may not only overcome the limitations of language assessment but also move towards multidimensional integration.

Although structured tests are good tools to control variables, children's language use in real life tends to be more accurate in terms of the skills they have. Recent studies show that the incorporation of natural language samples, the observation of daily interactions, and the analysis of contextualized tasks is increasingly a part of assessment systems. These techniques are more accurate than standardized tests that are applied in a single-time setting of situations like school; they provide a more accurate representation of children's language organization and communication skills in real life.

Technology is also changing the way children's language assessment is performed. Advances in artificial intelligence (speech recognition, semantic analysis, and behavioral recognition) are leading to automatic decision-making and more accurate assessment [16,17]. This not only enhances the efficiency of the assessment process but also helps in objectivity and consistency in the results analysis.

But the next step in the evolution of Chinese children's language assessment research is to build a framework from a localized perspective. Chinese has a very specific type of language structure, way of expression, and form of language acquisition. When we build a framework that is based on the linguistic patterns of Chinese and the developmental characteristics of children, we will be able to offer local assessment tools that are truly explanatory and practical. This will also be a step forward in building further research on the assessment of Chinese children's language skills in the future.

7. Conclusion

Children's language ability assessment is crucial in understanding their language

development, identifying language risks, and developing intervention plans. relatively mature approaches are in place for standardized, dynamic, ecological, and culturally fit assessments. Although domestic research started relatively late, tool development, pre-linguistic communication assessment, multidimensional integration, and intelligent assessment methods have all increased significantly in recent years. At the same time, the particularities of the Chinese language also remind researchers that developing localized assessment tools is not a translation/adaptation process but a systematic reconstruction process based on the development of the Chinese language. In the future, as theoretical research deepens and technology approaches develop, language assessment tools for Chinese-speaking children will move towards higher continuity, comprehensiveness, ecological relevance, and intelligence.

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