

Developing Holistic Diagnostic Assessment for School Readiness (HDASR): Cognitive, Affective, and Psychomotor Domains

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Abstract. The stages of development and achievement levels of students in both cognitive and non-cognitive aspects underlie the learning principles established by the Indonesian government. This means that learning should consider children's learning needs, reflecting their diverse characteristics and developmental progress. However, *Sistem Penerimaan Murid Baru* (SPMB, The New Student Admission System) for entering elementary school in Indonesia is solely determined by the child's age at the time of enrollment resulting in schools unable to obtain a comprehensive profile of the child's development. This leads to schools being less prepared to adjust their learning services according to the profiles of the students. Therefore, a comprehensive assessment needs to be developed to obtain a holistic profile of the children to assist the success of school transition. This study aims to develop a holistic diagnostic assessment for school readiness (HDASR) covering cognitive, affective, and psychomotor domains to evaluate the school readiness of the children entering the first grade of elementary school. The study was conducted from August 2024 to January 2025 at Bintang Juara Islamic Elementary School. The ADDIE (Analysis, Design, Develop, Implement, Evaluate) model design was used in developing the instrument and the data were collected through interview, Focus Group Discussion, and observation. The result of this study is a Holistic Diagnostic Assessment for School Readiness (HDASR) instrument, designed to obtain a comprehensive profile of the children before they enter elementary school which offers valuable benefits by enhancing the understanding of individual developmental profiles and supporting personalized educational interventions. By integrating multiple domains of assessment, teachers can better address the diverse needs of learners and promote more effective teaching strategies.

INTRODUCTION

School readiness is a condition in which a child is prepared to enter formal education. School readiness is important in determining children's academic success and long-term wellbeing. It should be viewed as a comprehensive idea that consists of multidimensional set of skills and abilities to be mastered by the children, involving affective, cognitive, and psychomotor domains [1] [2] as well as self-care abilities [3] which allow the children to engage effectively during the learning process [4]. Children who are proficient in each of these areas will likely be successful during educational activities [5].

School readiness is the result of a child's contact with a variety of cultural and environmental experiences that optimize children's developmental outcomes. It covers the three main aspects: (1) ready children, which focus on the children's learning and development, (2) ready schools, focusing on the school atmosphere and procedures that facilitate a seamless transition for kids into elementary school, and

(3) ready families, emphasizing the attitudes and participation of parents and caregivers in the children's early education growth and school transition [6]. All those dimensions are essential and must work together, inseparable from the collaboration between teachers, parents, and the school so that children can successfully navigate this transition period [7].

One important period in a child's growth is when they go from preschool education to elementary school that requires careful preparation and support [8][9]. The Indonesian government has issued a policy regarding the transition period from preschool to elementary school that eliminates the requirement for reading, writing, and arithmetic tests in the admission of new students [10]. Based on the newest policy, as stated in the Ministry Regulation (Permendikdasmen) No. 3/2025 concerning the New Student Admission System (SPMB) [11], the admissions rules for new students' admission in Indonesia place a strong emphasis on chronological age as a prerequisite for school enrollment. However, chronological age alone cannot determine a child's readiness for school [12] as every child has a different pace in terms of growth and development process. Even if the children may be the same age, their physical, social, emotional, linguistic, and cognitive development can differ since each child grows and develops at a different rate [13]. Therefore, identifying a child's readiness for school should not only consider age appropriateness but also consider various other aspects of the child's development to provide a solid foundation for a child to successfully navigate the expectations of formal education.

As highlighted in the learning principles formulated by the Indonesian Ministry of Education, the education institution should consider the stages of development and achievement levels of students in both cognitive and non-cognitive aspects. This means that learning should be in line with the children's learning needs, reflecting their diverse characteristics and developmental progress [14]. To adjust the learning needs to the developmental level of the students, schools need to conduct assessments to map the students' developmental achievements and school readiness. Assessing school readiness is instrumental, as it helps identify children's strengths, weaknesses, and areas for development before entering formal education. In the Indonesian context, assessment of school readiness is typically done prior to a child's entry into elementary school and mostly used for decision-making for elementary school entry or delay [15]. However, the instruments used by most schools in Indonesia for assessing school readiness vary [16].

One of a well-known test used is the NST (Nijmeegse Schoolbekwaamheids Test). However, the administering of this test is limited to psychological institutions, restricting access for teachers and parents use [17]. The school readiness concept and assessment instrument were also formulated by Janus and Offrod [4][5]. They developed a measurement tool for school readiness called the Early Development Instrument (EDI) which encompasses 5 aspects of school readiness: (1) social-emotional development, (2) health and physical development, (3) language development and communication, (4) cognitive development and general knowledge, and (5) learning approach. In the form of a teacher-completed checklist, EDI is a relatively brief and simple tool to administer. Its results can be aggregated to different levels, making it easy to link with other population and community data. However, the EDI assessment required some adjustments to better fit the local educational and cultural context [18] and time-consuming [19].

Another instrument called School Readiness Instrument (SRI) [17] was used to assess early childhood development, particularly focusing on readiness for school from a neuroscience perspective. The SRI emphasizes domains like cognitive ability, emotional maturity, and social competence, using a structured framework that aligns with early childhood brain development. While the SRI provides a robust foundation for identifying school readiness indicators, it is more diagnostically oriented and primarily designed for preschool-age children preparing to enter formal education. In contrast, the present instrument expands its scope by targeting early-grade elementary students (ages 6–8), incorporating not only cognitive and socio-emotional aspects but also specific domains such as moral and religiosity, physical development, and language and communication domains. The Indonesian Ministry of Education has also created a school readiness assessment tool based on 5 dimensions to map school readiness in 12 provinces in Indonesia [20], however, the assessment was not well socialized and is not available for free.

Based on the availability and the feasibility of the tools used for assessing the school readiness, there is an arising need for the development of a holistic diagnostic assessment tool that includes affective, cognitive, and psychomotor aspects [21] as well as considering the contextual aspects of children's learning, the quality of the environment, and individual differences in the patterns of child development [22]. This tool could enhance the understanding of individual learning profiles and support tailored

educational interventions. By integrating multiple domains of assessment, teachers can better address the diverse needs of learners and promote more effective teaching strategies.

The purpose of this study is to develop a locally structured Holistic Diagnostic Assessment for School Readiness (HDASR) instrument for Bintang Juara Islamic Elementary School admission process. The HDASR will contain cognitive, social-emotional, and physical development assessment to provide a comprehensive evaluation of a child's school readiness with a simple and easy administration process. This instrument aims to provide the school with a more holistic view of all aspects of a child's preparedness for academic environment as well as his/her abilities and potential for a tailored educational program based on the children's profile, rather than functioning as the basis of school admission decision policy.

METHODOLOGY

The construction of HDASR instrument employs a Research and Development (R&D) approach following ADDIE model (Analysis, Design, Development, Implementation, Evaluation) which provide a methodical and empirically supported procedure [23].

During analysis step, a literature review and need analysis were conducted. The data were collected through Forum Group Discussion and interviews with preschool and elementary school teachers of Bintang Juara Islamic School, as well as field observation. Literature research is also obtained by examining the relevant materials such as policies related to school readiness assessment in Indonesia and the reports of the use of diagnostic assessment in Indonesia.

The HDASR design phase involved conceptualizing the content, organization, and scoring criteria of the instrument. The objectives are then formulated and tailored to the developmental stage of children between the ages of 6 to 8. In order to enhance the holistic view of the assessment, theories regarding early childhood school readiness were gathered as useful materials for constructing the indicators.

In the development step, the HDASR instrument is arranged in the form of a performance test using a rating scale between 0 (absence) and 1 (presence) with the criteria assessment. The HDASR indicator items were created and validated by early childhood education experts. The items are then revised based on the validator's suggestion. The initial pilot testing was carried out with a small sample of 10 kindergarten students at Bintang Juara Islamic Preschool and a reliability test was also conducted along with the limited trial.

The implementation phase included a broader field test employing 35 children ages 6-8 who enrolled at Bintang Juara Islamic Elementary School in the Academic Year of 2025/2026 to evaluate the instrument's reliability and validity.

Lastly, the evaluation phase focused on the analysis, reflection, revision, and improvement of the instrument based on the trial results and feedback from the teachers and experts.

RESULTS AND DISCUSSIONS

Initial data regarding perceptions of school readiness were obtained through a Focus Group Discussion (FGD) with preschool and elementary school teachers of Bintang Juara Islamic School, totaling 32 participants, consisting of 14 preschool teachers and 18 elementary school teachers. The demographic data of the teachers who participated in the FGD can be seen in Table 1.

TABLE 1. Teachers' Demographic Information (N=32)

| Descriptor | Preschool (PS) | Elementary (ET) |
|-----------------|----------------|-----------------|
| Number | | |
| Invited | 14 | 18 |
| Participated | 14 | 18 |
| Mean Age | | |
| Ages >40 | 3 | 0 |
| Ages 30-40 | 7 | 7 |
| Ages 20-29 | 4 | 11 |
| Sex | | |

| | | |
|-------------------------------------|--------|--------|
| Male | 0 | 3 |
| Female | 14 | 15 |
| Marital Status | | |
| Married | 11 | 9 |
| Single | 3 | 9 |
| Education Level | | |
| Diploma | 1 | 0 |
| Undergraduate Degree | 12 | 17 |
| Graduate Degree | 1 | 1 |
| Years of Teaching Experience | | |
| Mean | 8 | 5 |
| Range | 1 - 24 | 1 - 13 |

Based on the data of teachers who participated in the FGD, the average age of the teachers is above 30 years, with most of them being female and married. The educational background of the teachers mostly holds a bachelor's degree (91%), a diploma degree (3%), and a master's degree (6%). Meanwhile, in terms of teaching experience, teachers who teach in preschool have an average teaching experience that is longer compared to teachers who teach at the elementary school level.

All the teachers participating in the FGD agree that school readiness plays an important part in children's successful transition into formal education. Most teacher participants from the elementary school level consider school readiness as the academic abilities possessed by the child, but some teachers also state that self-regulation, emotional management, social skills, and communication are signs that the child is ready to enter formal education. Some opinions also link a child's age with school readiness.

However, the perspective of preschool teachers is more comprehensive in perceiving children's readiness for school, encompassing various developmental aspects such as physical-motor development, socio-emotional development, language skills, basic literacy and numeracy, and even moral and religious development. There is a slight difference in the perspective of school readiness due to the demands at the elementary school level, which are indeed more focused on cognitive and academic aspects. The teachers' perceptions of children's readiness to learn are summarized in Figure 1.

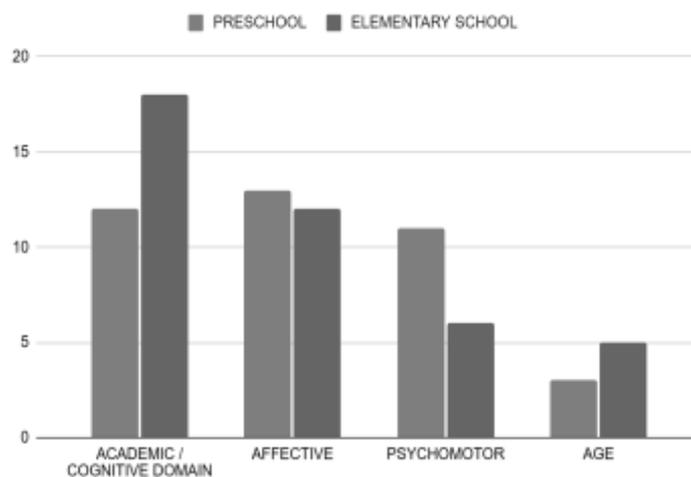


FIGURE 1. Bintang Juara Islamic School Teachers' Perception of School Readiness

The indicators of Holistic Diagnostic Assessment for School Readiness (HDASR) assessment were formulated based on the teacher FGD results and the references from the qualifications proposed by the Indonesian government [24][25]: (1) the curriculum in grade one of elementary school and (2) standards of developmental attainment level for children aged 6-8 years. The analysis results in several accomplishments in child development and school readiness which are based on research findings that address five areas: general knowledge and cognitive abilities according to age, emotional well-being and

positive attitudes to new experiences, age-appropriate language skills, social competence, and physical well-being and motor development [26][27].

In addition to the Islamic value underlying Bintang Juara Islamic School as a private religious elementary school, the child's comprehension and implementation of morals and religious values are also recognized as markers of school readiness. The moral and religiosity aspect added in HDASR instrument is the contextualization of the school readiness assessment developed by Sekolah Islam Bintang Juara.

Based on the analysis of the learning objectives and development stages as well as the input from teacher FGD, the domains, sub-domains, and indicators for HDASR tool are drafted. The initial draft of the content was evaluated by an expert validator using qualitative item analysis techniques since this instrument is designed on a non-test basis. This method follows the naturalistic paradigm and enables deducing meaning from text data [28].

Based on the content validity results, the less valid items are changed by replacing it in accordance with the validator's notes and input, adding the example of the child's performance, or altering the sentence structure to better prompt the indicator resulting in 5 domains, 17 sub-domains, and 49 indicators as illustrated in Table 2 below.

TABLE 2. Domains, Sub Domains and Example of Indicators of HDASR

| Domains | Sub-Domains | Examples of indicator |
|-------------------------------|-------------------------------|--|
| Moral & Religiosity (MR) | Moral | Saying and responding to greetings with clear pronunciation. |
| | Religiosity | Practicing daily prayer recitations. |
| Physical Development (PD) | Gross motor skill | Walking steadily on a balance beam. |
| | Fine motor skill | Tying shoelaces with assistance. |
| Language & Communication (LC) | Receptive language skill | Performing activities according to information or instructions from others. |
| | Expressive language skills | Using complete sentences. |
| Social-Emotional (SE) | Trust | Comfortably separated from parents. |
| | Autonomy | Eating and drinking independently. |
| | Initiative | Choosing activities because they find them interesting, not just because their friends are doing them. |
| | Resilience | Trying to use various methods to solve the problem. |
| | Self-Concept | Distinguishing between personal belongings and others' belongings. |
| | Self-Esteem | Displaying their work and/or describing their creation. |
| | Social Skill | Willing to wait for their turn and take turns. |
| Cognitive (C) | Socialization | Following rules or group agreements. |
| | Knowledge of Physical Objects | Identifying geometrical objects |
| | Logical-Mathematical Thinking | Grouping objects based on variables or characteristics of the objects. |
| | Literacy Activities | Reading the words or sentences found on the cover and in the reading book |

The total 49 indicators were scored based on 0 and 1 scoring system, in which 0 = if the indicator is not performed (absence) and 1 = when the child is performing according to the indicator (presence). The assessment was meant to be carried out on a performance test in a play-based setting. The test administrator or observer planned some play-based activities to observe the children's performance on each indicator, such as football game and obstacle race to elicit the gross motor skills, puzzle play, journaling activities, and chores to evaluate the fine motor skills. The variety of play activities provided are not only used to observe a specific aspect, but also allows to continuously observe other indicators.

Ten children in Bintang Juara Islamic Preschool were involved in an initial small group trial using HDASR instruments. The sample was divided into two group categories: the children with low and high development achievement. The results of the initial trial showed that children having higher development achievement obtain high HDASR scores (98, 96, 95, 91, 90), while children with lower development got lower scores of 80, 80, 78, 78, and 66 which indicates the suitability of the instrument.

To assess the consistency of classification between two raters (observer 1 and observer 2), the reliability was tested together with initial small group trial using the Cohen's Kappa coefficients to measure the degree of agreement of two assessors [29]. A crosstabulation was conducted on 490 cases, with ratings categorized dichotomously (0 = absence, 1 = presence). The scores were analyzed using SPSS resulting in the following data.

TABLE 3. Crosstabulation

| | | OBSERVER1 | | Total | |
|------------------|-------------|--------------------|--------|--------|--------|
| | | .00 | 1.00 | | |
| OBSERVER2 | .00 | Count | 56 | 7 | 63 |
| | | % within OBSERVER2 | 88.9% | 11.1% | 100.0% |
| | | % within OBSERVER1 | 100.0% | 1.6% | 12.9% |
| | 1.00 | Count | 0 | 427 | 427 |
| | | % within OBSERVER2 | 0.0% | 100.0% | 100.0% |
| | | % within OBSERVER1 | 0.0% | 98.4% | 87.1% |
| Total | | Count | 56 | 434 | 490 |
| | | % within OBSERVER2 | 11.4% | 88.6% | 100.0% |
| | | % within OBSERVER1 | 100.0% | 100.0% | 100.0% |

Based on Table III, the analysis revealed a high level of agreement between the two observers. Of the 490 items rated, the two observers agreed on 483 cases, yielding a raw agreement rate of 98.57%. Full agreement was observed for all 427 cases where both raters classified the item as present (1.00), and for 56 cases where both raters classified the item as absent (0.00). Disagreement occurred in only 7 instances, where OBSERVER2 classified an item as absent (0.00), while OBSERVER1 classified it as present (1.00). There were no cases in which the opposite pattern occurred.

Given the high level of agreement and the limited scope of discrepancy, the inter-rater reliability can be considered strong. Furthermore, to account for chance agreement, a Cohen's Kappa coefficient was computed as a supplementary analysis as presented in the following table.

TABLE 4. Symmetric Measures

| | | Value | Asymptotic Standard Error ^a | Approximate T ^b | Approximate Significance |
|----------------------|-------|-------|--|----------------------------|--------------------------|
| Measure of Agreement | Kappa | .933 | .025 | 20.701 | .000 |
| N of Valid Cases | | 490 | | | |

The Cohen's Kappa value of 0.933 indicates an almost perfect level of agreement, according to the interpretation of Cohen Kappa value [29]. It confirms that the consistency between raters exceeds what would be expected by chance and meets the criteria for excellent agreement.

To ensure that the developed instrument effectively measured the intended constructs, both validity and reliability analyses were conducted. These analyses covered five key domains: Moral and Religiosity (MR), Physical Development (PD), Language & Communication (LC), Socio-Emotional Skills (SE), and Cognitive (C). A total of 49 items were tested using data collected from the large-scale trials involving 35 children ages 5-7 who enrolled at Bintang Juara Islamic Elementary School in the Academic Year of 2025/2026.

The results of the construct validity test using Pearson correlation revealed that all items across five measured domains met the acceptance criteria, with r-values surpassing the r-table threshold of 0.334 (N = 35, $\alpha = 0.05$). These results indicate that the items are valid and accurately represent the constructs they are intended to measure. The data obtained from the trials are presented as follows.

TABLE 5. Result of Validity Test using Pearson Product-Moment Correlation

| Moral & Religiosity (MR) | | Physical Development (PD) | | Language & Communication (LC) | | Social-Emotional (SE) | | Cognitive (C) | |
|--------------------------|---------|---------------------------|---------|-------------------------------|---------|-----------------------|---------|---------------|---------|
| Item | r value | Item | r value | Item | r value | Item | r value | Item | r value |
| MR 1 | 0.403 | PD 1 | 0,613 | LC 1 | 0,789 | SE 1 | 0,545 | C1 | 0.625 |
| MR 2 | 0.597 | PD 2 | 0,553 | LC 2 | 0,805 | SE 2 | 0,723 | C 2 | 0.630 |
| MR 3 | 0.672 | PD 3 | 0,743 | LC 3 | 0,695 | SE 3 | 0,382 | C 3 | 0.407 |
| MR 4 | 0.822 | PD 4 | 0,743 | LC 4 | 0,781 | SE 4 | 0,589 | C 4 | 0.434 |
| MR 5 | 0.745 | PD 5 | 0,399 | | | SE 5 | 0,372 | C 5 | 0.518 |
| MR 6 | 0.461 | PD 6 | 0,743 | | | SE 6 | 0,547 | C 6 | 0.655 |
| MR 7 | 0.549 | PD 7 | 0,658 | | | SE 7 | 0,801 | C 7 | 0.822 |
| MR 8 | 0.684 | PD 8 | 0,574 | | | SE 8 | 0,801 | C 8 | 0.487 |
| MR 9 | 0.757 | PD 9 | 0,626 | | | SE 9 | 0,723 | C 9 | 0.755 |
| MR 10 | 0.586 | PD 10 | 0,535 | | | SE 10 | 0,704 | C 10 | 0.739 |
| | | | | | | SE 11 | 0,801 | C 11 | 0.645 |
| | | | | | | SE 12 | 0,520 | C 12 | 0.541 |
| | | | | | | SE 13 | 0,431 | | |

Notably, several items achieved very high correlation values, such as MR4 ($r = 0.822$), LC2 ($r = 0.805$), SE7 ($r = 0.801$), and C7 ($r = 0.822$), suggesting a strong alignment between the items and the overall test construct. These high correlations reflect that the items effectively measure the intended latent variables and contribute meaningfully to the total score. Even the items with relatively lower r values, such as MR1 ($r = 0.403$), PD5 ($r = 0.399$), and SE5 ($r = 0.372$), still exceeded the r table threshold, indicating acceptable levels of item discrimination. These findings suggest a well-constructed instrument with consistent internal alignment across its components.

Therefore, based on the empirical evidence from this analysis, all 49 items included in the instrument are considered valid for further use in measuring the targeted learning constructs among elementary students. Future testing may consider confirmatory factor analysis to further validate the item grouping and underlying dimensions.

To assess the internal consistency of the instrument across its five domains, a reliability analysis was conducted using Cronbach's Alpha. According to [30], a Cronbach's Alpha value above 0.7 is considered acceptable, while values above 0.8 indicate good reliability. The analysis showed that all domains reached acceptable to good reliability levels. The MR and C domains had Cronbach's Alpha values of 0.825, reflecting good internal consistency. The SE domain showed a value of 0.772, which is within the acceptable to good range. Both PD and LC domains yielded 0.744, indicating acceptable reliability.

These results demonstrate that the instrument is consistent and reliable for assessing the targeted developmental aspects in early-grade learners. Table 6 summarizes the reliability coefficients for each domain.

TABLE 6. Cronbach's Alpha per Domain

| Aspect | Cronbach's Alpha | Number of Items | Interpretation |
|-------------------------------|------------------|-----------------|-----------------|
| Moral & Religiosity (MR) | 0.825 | 10 | Good |
| Physical Development (PD) | 0.744 | 10 | Acceptable |
| Language & Communication (LC) | 0.744 | 4 | Acceptable |
| Socio-Emotional Skills (SE) | 0.772 | 13 | Acceptable-Good |
| Cognitive (C) | 0.825 | 12 | Good |

Based on the validity and reliability analysis conducted in this study, the developed instrument demonstrated strong psychometric properties across all assessed domains. All items showed Pearson correlation coefficients (r -values) exceeding the critical value of 0.334 ($N = 35$, $\alpha = 0.05$), indicating that each item is valid in measuring its intended construct. Furthermore, the reliability analysis using Cronbach's alpha revealed satisfactory internal consistency across all subscales, with values ranging from

0.744 to 0.825. The strong item-total correlations and adequate Cronbach's Alpha coefficients across all domains support the use of this instrument in further research and educational assessments involving elementary students.

In correlation with the students' readiness, HDASR was effective in capturing variations in student readiness across multiple developmental dimensions. The student readiness results revealed that children displayed relatively strong performance in physical development, socio-emotional and language and communication aspects but varied in cognitive growth and moral and religiosity aspects. These findings demonstrate the instrument's sensitivity in identifying domains where learners may require additional support, confirming its practical utility for instructional planning and targeted or differentiated educational interventions.

Despite the promising results, several limitations should be acknowledged. First, the relatively small sample size ($N = 35$) may limit the generalizability of the findings. The participants were selected from a specific educational context, which may not fully represent the broader diversity of early-grade student populations in terms of socio-economic status, language background, and regional education policies.

Second, the instrument relies primarily on observational and self-report data, which may introduce subjective bias. The absence of triangulated data sources, such as interviews with teachers or analysis of student performance tasks, limits the depth of interpretation regarding the causes behind readiness gaps.

In light of these findings and limitations, several recommendations are proposed for future research. First, it is essential to replicate the study with larger and more diverse samples from multiple schools, regions, and educational systems to examine the instrument's cultural and contextual adaptability. Cross-validation using confirmatory factor analysis (CFA) is also recommended to strengthen the structural validity of the instrument.

Second, integrating qualitative approaches—such as interviews with teachers and parents, classroom observations, and longitudinal case studies—can provide a more comprehensive picture of student readiness and its influencing factors. Such methods would enhance understanding of how readiness evolves over time and how it relates to student performance.

Third, future studies could explore the predictive validity of the instrument by assessing its ability to forecast academic achievement, persistence in STEM programs, or socio-emotional growth over time. Additionally, adapting the tool into a digital or mobile-based format could facilitate broader implementation and real-time feedback in blended or remote learning environments.

CONCLUSION

The Holistic Diagnostic Assessment for School Readiness (HDASR) instrument has been tested for its reliability and validity resulting in the appropriateness of its use to measure the school readiness in children ages 6 - 8 according to the development five key domains: Moral & Religiosity (MR), Physical Development (PD), Language & Communication (LC), Socio-Emotional Skills (SE), and Cognitive (C). The instrument's application in the field revealed its effectiveness in identifying areas of student strength and developmental need.

The alignment between validity findings and student readiness outcomes further supports the instrument's practical relevance for educators aiming to tailor instruction and interventions. This tool offers practicality and convenience as several indicators can be observed simultaneously through various play-based activities during the assessment to elicit the children's performance. In addition, no special training is required to use this test instrument, so its use is not limited to professionals only. The teachers can use this instrument to get a comprehensive profile of the children to personalize the teaching process and resources to their specific needs.

Despite its strengths, this study faced limitations in terms of sample size and contextual diversity. As such, further research is needed to refine the instrument, expand its applicability across varied educational settings, and explore its predictive capabilities through longitudinal analysis. With continued development, this instrument holds promise as a strategic tool for supporting equitable and data-driven instruction in early childhood education.

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REFERENCES

1. C. Blair and C. C. Raver, "School Readiness and Self-Regulation: A Developmental Psychobiological Approach," *Annu Rev Psychol*, vol. 66, no. 1, pp. 711–731, Jan. 2015, doi: 10.1146/annurev-psych-010814-015221.
2. S. A. Denham, "Social-Emotional Competence as Support for School Readiness: What Is It and How Do We Assess It?," *Early Educ Dev*, vol. 17, no. 1, pp. 57–89, Jan. 2006, doi: 10.1207/s15566935eed1701_4.
3. M. A. Cingi, "School Readiness in USA, Germany and Finland," in *Transforming Early Childhood Education: Technology, Sustainability, and Foundational Skills for the 21st Century*, Özgür Yayınları, 2024. doi: 10.58830/ozgur.pub534.c2196.
4. M. Janus and D. R. Offord, "Development and psychometric properties of the Early Development Instrument (EDI): A measure of children's school readiness.," *Can J Behav Sci*, vol. 39, no. 1, pp. 1–22, 2007, doi: 10.1037/cjbs2007001.
5. M. Janus and D. Offord, "Readiness to learn at school," *ISUMA: Canadian Journal of Policy Research*, vol. 1, pp. 71–75, Apr. 2000.
6. P.R. Britto, *School Readiness: A Conceptual Framework*. New York: NY: UNICEF, 2012.
7. J. L. Epstein, *School, Family, and Community Partnerships*. Routledge, 2018. doi: 10.4324/9780429493133.
8. S. Maulani and S. Mutiara, "Transisi PAUD SD : Implementasi Program pengenalan Sekolah Dasar di Taman Kanak-Kanak," *JURNAL BUNGA RAMPAI USIA EMAS*, vol. 9, p. 265, Apr. 2023, doi: 10.24114/jbrue.v9i2.52619.
9. M. Mamonto, S. Ilyas, U. Bafadal, and R. Rusmayadi, "Gerakan Transisi Paud Ke SD Menyenangkan: Menciptakan Lingkungan Belajar Yang Positif," *Jurnal Ilmiah Cahaya Paud*, vol. 6, pp. 42–49, Apr. 2024, doi: 10.33387/cahayapd.v6i2.7570.
10. Direktur Jenderal PAUD, *Surat Edaran Nomor 0759/C/HK.04.01/2023 tentang Penguatan Transisi Pendidikan Anak Usia Dini ke Sekolah Dasar Kelas Awal*. Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, 2023.
11. Kementerian Pendidikan Dasar dan Menengah, *Peraturan Menteri Pendidikan Dasar dan Menengah Nomor 3 Tahun 2025 tentang Sistem Penerimaan Murid Baru*. Kementerian Pendidikan Dasar dan Menengah, 2025.
12. E. Graue, J. Kroeger, and C. Brown, "Living the 'Gift of Time,'" *Contemporary Issues in Early Childhood*, vol. 3, no. 3, pp. 338–353, Oct. 2002, doi: 10.2304/ciec.2002.3.3.3.
13. D. Stipek, "At What Age Should Children Enter Kindergarten? A Question for Policy Makers and Parents," *Soc Policy Rep*, vol. 16, no. 2, pp. 1–20, Jun. 2002, doi: 10.1002/j.2379-3988.2002.tb00018.x.
14. Yogi Anggraena et al., *Panduan Pembelajaran dan Asesmen Pendidikan Anak Usia Dini, Pendidikan Dasar, dan Menengah*. Badan Standar, Kurikulum, dan Asesmen Pendidikan, Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Republik Indonesia, 2022.
15. A. AL-Rawafi, "Does Preschool Education in Indonesia Meet the Quality Standards?," in *Proceedings of the International Conference on Early Childhood Education and Parenting 2019 (ECEP 2019)*, Paris, France: Atlantis Press, 2020. doi: 10.2991/assehr.k.200808.004.
16. R. Pangestuti, H. Agustiani, S. Cahyadi, and A. L. Kadiyono, "Indonesian children's readiness for elementary school: a preliminary study to the holistic approach to school readiness," *Pedagogika*, vol. 132, no. 4, pp. 99–114, May 2019, doi: 10.15823/p.2018.132.6.

17. R. Fitri and M. Reza, "The school readiness instrument (SRI): assessment of early childhood in the neuroscience perspective," in *Proceedings of the 2nd International Conference on Education Innovation (ICEI 2018)*, Paris, France: Atlantis Press, 2018. doi: 10.2991/icei-18.2018.110.
18. S. Georg, C. Bosle, J. E. Fischer, and F. De Bock, "Psychometric properties and contextual appropriateness of the German version of the Early Development Instrument," *BMC Pediatr*, vol. 20, no. 1, p. 339, Dec. 2020, doi: 10.1186/s12887-020-02191-w.
19. A. Mousavi and V. Krishnan, "Setting the Scope for Early Child Development Instrument (EDI): A Psychometric Re-examination of the Tool with Alberta Data," *Soc Indic Res*, vol. 122, no. 3, pp. 925–944, Jul. 2015, doi: 10.1007/s11205-014-0711-x.
20. W. Nurhayati, "Pengembangan Instrumen Kesiapan Bersekolah dan Pemetaan Kesiapan Bersekolah pada Anak Usia Dini di Indonesia," *Indonesian Journal of Educational Assesment*, vol. 1, no. 1, p. 11, Feb. 2019, doi: 10.26499/ijea.v1i1.4.
21. A. Kholiq, "How is Piaget's Theory Used to Test The Cognitive Readiness of Early Childhood in School?," *Indonesian Journal of Early Childhood Education Studies*, vol. 9, no. 1, pp. 24–28, Jun. 2020, doi: 10.15294/ijeces.v9i1.37675.
22. M. K. C. Nair, R. Radhakrishnan, and B. O. Olusanya, "Promoting school readiness in children with developmental disabilities in LMICs," *Front Public Health*, vol. 11, Feb. 2023, doi: 10.3389/fpubh.2023.993642.
23. R. M. Branch, *Instructional Design: The ADDIE Approach*. Boston, MA: Springer US, 2009. doi: 10.1007/978-0-387-09506-6.
24. K. R. dan T. Kementerian Pendidikan, *Peraturan Menteri Pendidikan, Kebudayaan, Riset, dan Teknologi Nomor 12 Tahun 2024 tentang Kurikulum pada Pendidikan Anak Usia Dini, Jenjang Pendidikan Dasar, dan Jenjang Pendidikan Menengah*. Jakarta: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, 2024.
25. K. dan A. P. Kepala Badan Standar, *Keputusan Kepala BSKAP Kemendikbudristek Nomor 032/H/KR/2024 tentang Capaian Pembelajaran pada Pendidikan Anak Usia Dini, Jenjang Pendidikan Dasar, dan Jenjang Pendidikan Menengah pada Kurikulum Merdeka*. Jakarta: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi, 2024.
26. S. L. Kagan, "Readiness Past, Present, and Future: Shaping the Agenda.," *Young Child*, vol. 48, pp. 48–53, 1992, [Online]. Available: <https://api.semanticscholar.org/CorpusID:142026527>
27. Canada. H. R. D. Canada. A. R. Branch, G. Doherty, and G. Doherty-Derkowski, *Zero to Six: The Basis for School Readiness*. in Research paper. Human Resources Development Canada, Applied Research Branch, 1997. [Online]. Available: <https://books.google.co.id/books?id=zqjEHAAACAAJ>
28. H.-F. Hsieh and S. E. Shannon, "Three Approaches to Qualitative Content Analysis," *Qual Health Res*, vol. 15, no. 9, pp. 1277–1288, Nov. 2005, doi: 10.1177/1049732305276687.
29. M. L. McHugh, "Interrater reliability: the kappa statistic," *Biochem Med (Zagreb)*, pp. 276–282, 2012, doi: 10.11613/BM.2012.031.
30. D. George and P. Mallery, *SPSS for Windows Step by Step: A Simple Guide and Reference, 11.0 Update*. Allyn and Bacon, 2003. [Online]. Available: <https://books.google.co.id/books?id=AghHAAAAMAAJ>