Adaptation of the Emotional Social Screening Tool for School Readiness (E3SR-R) for Preschoolers: Translation, Equivalence, and Validation Study in Indonesian

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Keywords:
Emotional
Social
School Readiness
Screening Tool
Preschoolers.

ABSTRACT

The Emotional Social Screening Tool for School Readiness (E3SR-R) is a screening instrument designed to assess emotional-social competence as a domain of school readiness. This study aimed to adapt the E3SR-R into Indonesian and to establish preliminary evidence of translation quality, linguistic equivalence, and content validity for use in the Indonesian context. Guided by the International Test Commission guidelines and the adaptation procedures proposed by Sousa and Rojjanasrirat (2011), the study was conducted in two main phases: translation and evaluative review. Assessment of translation quality and linguistic equivalence using the Quality of Translation and Linguistic Equivalence Checklist (QTLC), and estimation of inter-rater reliability using Cohen's Kappa. The result found that the Indonesian version of the E3SR-R was produced through a systematic and methodologically defensible adaptation process and demonstrated preliminary evidence of linguistic adequacy and content representativeness.

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1. INTRODUCTION

The Transition from preschool to primary school is a critical developmental period because children move from a relatively flexible, play-based environment into a more structured educational setting that demands greater behavioral, emotional,

and social adjustment [1], [2]. During this transition, children are expected to follow instructions, participate in structured learning, regulate their emotions in group situations, interact productively with peers, and build positive relationships with teachers, all of which require a sufficient level of school readiness [3], [4], [5]. School readiness is a multidimensional construct that includes cognitive, language, physical, and social-emotional domains, yet the social-emotional domain is especially central because it underlies children's capacity to adapt, learn, and function effectively in the school environment [6], [7], [8], [9], [10], [11]. Social-emotional competence has also been consistently associated with academic success, positive peer relations, and effective conflict resolution, indicating that children's early adjustment to school cannot be understood only from cognitive readiness alone [12], [13], [14], [15], [16].

In the Indonesian context, social-emotional readiness remains an important concern because preschool children still experience difficulties in social interaction, adjustment, and psychosocial functioning before entering formal schooling [17], [18], [19]. These difficulties are not trivial because inadequate social-emotional competence may increase the risk of school anxiety, behavioral problems, low learning motivation, and later mental health difficulties if not identified early and addressed appropriately [20], [21], [22]. For that reason, early screening through valid and reliable instruments is necessary to identify children who may need further support or intervention before the transition to school becomes problematic [13], [23], [24]. Research in this area remains very limited in quantitative contexts, and most existing studies have relied on general school readiness tests that often require specific expertise or professional licensing to administer [25], [26]. Several studies that developed similar instruments have emphasized the need for screening tools to assess social-emotional competence that are accessible, cost-efficient, and aligned with the curriculum [27], [28], [29], [30].

A psychological measurement instrument can be considered ready for use only when it demonstrates adequate validity and reliability through rigorous psychometric development and evaluation [23], [24], [31]. In cross-cultural settings, this process becomes more complex because instruments developed in one

linguistic and cultural context cannot be directly transferred to another without careful adaptation, as differences in language, norms, and social meanings may distort item interpretation and threaten validity [32], [33], [34], [35]. Therefore, adaptation into the target native language is necessary to support culture-fair assessment while maintaining conceptual equivalence, accessibility, and fairness [36], [37], [38].

Among the available instruments for assessing social-emotional readiness, the Emotional Social Screening Tool for School Readiness (E3SR) is particularly relevant because it was designed to assess children's emotional-social readiness as a functional and adaptive capacity that supports successful participation in formal schooling [22]. E3SR offers a more specific conceptual and operational focus on emotional-social school readiness, accompanied by a structured scoring and interpretation system that supports preventive decision-making in the transition to primary school [22]. Although E3SR has been adapted into Afrikaans and isiXhosa, an Indonesian version has not yet been established as a standardized screening instrument for preschool children [38], [39]. Accordingly, the present study adapts E3SR into Indonesian and positions linguistic equivalence as a necessary preliminary step before broader pilot testing, with the aim of ensuring that the translated instrument retains the same constructs and meanings as the original version in the Indonesian context [35], [40], [41], [42]. In addition, this study offers methodological novelty in adaptation psychological instrument research by explicitly applying the Quality of Translation and Linguistic Equivalence Checklist (QTLC) to evaluate both the translation process and the evidence of linguistic equivalence, thereby providing a more systematic and auditable framework for supporting culture-fair assessment especially when the instrument is to be used to inform educational decisions regarding preschoolers [43].

Previous research indicates that the adaptation and validation of social-emotional instruments have been conducted both in Indonesia and abroad, but focused on different populations, measurement tools, and methodological objectives. In Indonesia, Utami et al. (2025) developed and validated a social-emotional competence instrument for Generation Z in Indonesia using the

CASEL framework, focusing on adolescents [44]. Srinatania et al. (2025) translated and validated the social-emotional development scale in Indonesian using the Ages and Stages Questionnaire: Social-Emotional (ASQ: SE) for children aged 6 to 60 months in Indonesia [45]. This instrument is more oriented toward monitoring general social-emotional development rather than specifically addressing social-emotional school readiness during the transition from preschool to elementary school. Desiningrum and Arywibowo (2024) adapted the Profile of Emotional Competence for Indonesian adolescents [46]. This study focused on intrapersonal and interpersonal emotional competencies in an older age group (ages 15–18) rather than on integrated social-emotional readiness in preschool children.

In the international context, there are several instruments that overlap with the topic of this study, but each has a different conceptual focus. The BUSSE-SR, developed by Bustin (2007), assesses preschool children's social-emotional school readiness through constructs such as self-awareness, self-regulation, empathy, social relationships, and coping skills, with a stronger emphasis on predicting school adjustment and achievement [27]. This instrument was later adapted in Iran as the Social Emotional School Readiness Scale (SESRS) by Sadhegi (2019), which demonstrated adequate validity and reliability while retaining the BUSSE-SR construct structure [47]. In addition, Ştefan et al. (2009) developed the Emotion Competence Screening for Preschoolers (SCE) and Social Competence Screening (SCS) to identify risks related to school readiness, early academic performance, and mental health [13].

The Emotional Social Screening Tool for School Readiness (E3SR) was originally developed by Munnik (2018) in South Africa as a teacher-administered, competency-based screening instrument to assess preschool children's school readiness in the emotional and social domains. Initially, the instrument comprised two domains, emotional competence and social competence, represented by nine subdomains and 56 items [22]. The emotional competence domain covered emotional maturity, emotional management, independence, positive sense of self, and mental well-being and alertness, while the social competence domain included social skills, pro-social behavior, compliance with rules, and communication.

Further research was conducted by [48] using post hoc analysis and exploratory factor analysis to reduce the instrument's structure to a more concise and parsimonious model, which became six main factors: Emotional Maturity, Emotional Management, Sense of Self, Social Skills, Readiness to Learn, and Communication. This revision involved merging Social Skills and Pro-social Behavior into one factor and integrating Independence, Mental Well-being, Alertness, and Compliance with Rules into Readiness to Learn. At the same time, the number of items was reduced without sacrificing important construct coverage, making the instrument more efficient while maintaining strong internal reliability. The E3SR also provides practical score interpretation categories, such as not competent, towards competence, and competency achieved, along with follow-up guidance for further investigation and intervention. These features make it useful not only as an assessment tool but also as an aid for early decision-making in preschool settings. The instrument has also been adapted into other languages, including Afrikaans and isiXhosa, through a rigorous adaptation process [49], [50].

2. METHOD

This study was guided by the International Test Commission guidelines for cross-cultural instrument adaptation and, combined with the adaptation steps proposed by Sousa and Rojjanasrirat, organized this process into seven steps [40], [41]. Within this framework, the processes of translation, adaptation, and validation are understood as lengthy and staged procedures that cannot be adequately completed in a single simple step, as they require careful planning, rigorous methodological decision-making, and repeated evaluation until the expected equivalence is achieved. Therefore, instrument adaptation studies may be conducted in multiple phases or divided into several interconnected studies, provided that each study clearly specifies the stages that have been completed and those that will be addressed in subsequent research. Accordingly, this study was conducted in two main phases, namely the translation, followed by the evaluation of Translation Quality, Linguistic Equivalence, Content Validity, and Final Synthesis. A similar framework has been employed in two previous adaptation

studies conducted by Adams (2022) and Reddi (2024) [38], [39]. These phases were selected because they represent the foundational stages required before broader empirical and psychometric testing can be undertaken in the Indonesian target population.

2.1 Participants

Conceptually, the target population of this study comprised preschool children aged 4 to 7 years who were in the transition phase to primary school and were enrolled in preschool education, including formal kindergarten settings, community-based institutions with independent curricula, and home-based private schooling. In its intended use, the Indonesian version of the E3SR-R is designed to be completed by teachers or other significant adults who are sufficiently familiar with the child's behavioral patterns and characteristics through daily interaction in educational settings.

However, because this study focused on the early stages of instrument adaptation, it did not yet involve large-scale field data collection from preschool children as the primary respondents. Instead, the participants in this study consisted of translators performing forward and backward translation, independent reviewers, and an expert panel during the translation, linguistic equivalence, and validation processes.

2.2 Data Collection

Data were collected in two phases: translation and validation. In Phase 1, data consisted of the original E3SR-R, forward-translated versions, a synthesized Indonesian draft, back-translated versions, and comparison notes across language versions. These materials were then evaluated using the QTLC to assess translation quality and linguistic equivalence. In Phase 2, data were collected through expert review of the Indonesian version, in which experts evaluated item relevance, clarity, cultural-linguistic appropriateness, and conceptual consistency, while also providing revision suggestions. The expert ratings were then analyzed using Aiken's V to generate item-level evidence of content validity.

2.3 Data Analysis

Data analysis was conducted using descriptive methods and limited quantitative approaches. Descriptive analysis was used to examine the forward-translation results, back-translation results, as well as

feedback from reviewers and experts regarding language clarity, terminological accuracy, and cultural appropriateness. Quantitative analysis was performed on three main aspects, namely linguistic equivalence using QTLC, conceptual-content validity using Aiken's V, and inter-rater reliability using Cohen's Kappa. Thus, the findings at this stage are positioned as preliminary evidence that the Indonesian version of the E3SR-R is linguistically adequate and content-representative before proceeding to further psychometric testing, such as EFA, CFA, or concurrent validity, in subsequent studies.

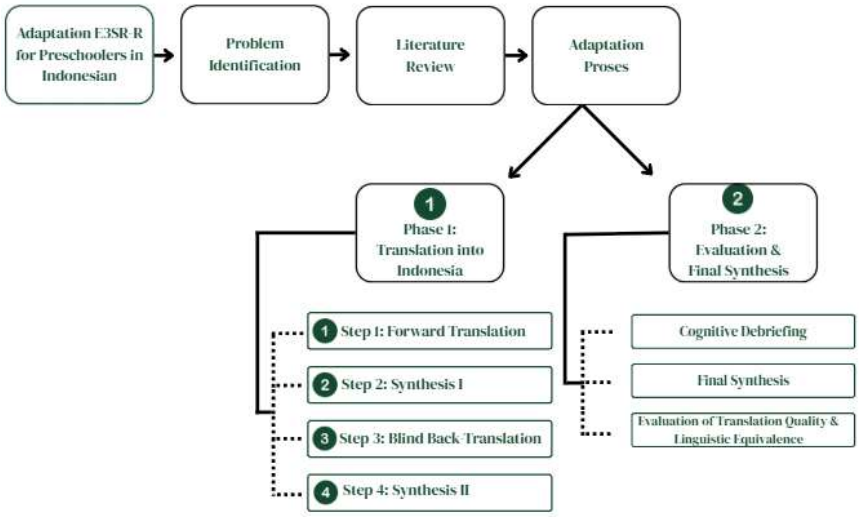

Figure 1. Research Procedure

3. RESULTS

3.1 Phase 1: Translation of the Emotional Social Screening Tool for School Readiness into Indonesian

Phase 1 focused on producing an Indonesian version of the E3SR-R that preserved the conceptual meaning of the original instrument and was culturally appropriate in the target language [40], [41]. In this phase, the translation process followed four sequential steps, namely forward translation, synthesis I, blind back-translation, and synthesis II. The primary purpose of this phase was to generate a pre-final Indonesian version of the E3SR-R that had undergone systematic linguistic checking before entering the evaluative phase [41].

Step 1: Forward Translation (Translation of the original instrument into the target language)

The original English version of the E3SR-R was translated into Indonesian by three independent translators. In accordance with recommended adaptation procedures, all three translators were bilingual and bicultural, each bringing complementary expertise. Translator 1 was fluent in the Indonesian language and had a strong familiarity with the Indonesian language and cultural context. Translator 2 was a practicing psychologist with substantial expertise in educational and developmental psychology, ensuring the accuracy of psychological terminology and construct domains. Translator 3 was a bicultural language expert, well-versed in colloquial expressions, cultural nuances, and everyday usage of the Indonesian language. Each translator worked independently, without discussion or influence from the research team, and the resulting drafts were coded as TL-1, TL-2, and TL-3.

Table 1. Demographics of the Forward Translators

Translator	**1**	**2**	**3**
Proffesion	Lecturer and researcher in the field of linguistics	Lecturer and practitioner in the field of linguistics and translation.	Lecturer and educational psychologist.
Area of expertise	Linguistics and Cultural Studies	Translation studies, English literature, and cross-cultural communication within the fields of linguistics and humanities	Learning processes and psychological assessment in educational settings.
Years of experience in translation	**6**	**11**	**6**

Table 1 presents the demographic profiles of the three translators. All translators were experienced professionals with relevant knowledge and expertise in translation-related work. Each translator was responsible for translating the 71 items and phrases in the E3SR-R. The inclusion of Translator 3, with expertise in colloquial language, further strengthened the forward-translation process by providing an additional basis for resolving discrepancies and improving the linguistic appropriateness of the Indonesian draft.

Step 2: Synthesis I (Comparison of the three translated versions of the instrument)

In this step, the translated versions in forward translation were systematically compared to produce a single synthesized Indonesian draft. An independent reviewer (R1) compared the translations item by item to identify linguistic differences, semantic inconsistencies, and contextual mismatches. The comparison of the translations employed a three-category coded system, used by [38] and [39], which included a qualitative descriptive, an interpretation, and an action (Table 2).

Table 2. Category of comparison translations

Description of translation	Interpretation	Action
Identical	Identical or nearly identical, indicating that the meaning is equivalent to the source item.	Accept the item as an appropriate translation.
Similar, but not identical	The meaning is retained, although wording or sentence structure differs.	Select the version that best reflects the meaning of the source document.
Vast discrepancies	The meaning differs, changes, or contains a semantic error.	Mark the item for further discussion and evaluation until consensus is reached.

A second independent reviewer (R2) was involved to review the recommendations of R1. Any disagreements were resolved through discussion until consensus was reached and the most appropriate wording for inclusion in TL-4. This step was intended to minimize bias, reduce translation error, and ensure semantic and conceptual consistency with the source instrument.

Table 3. Results of Synthesis I

Category	Section		Recommendation		Action
	Demographic	E3SR Item	R1	R2	
Identical	10	32	Adopt into TL4 draft	Approved	Adopted into TL4 draft
Similar, but not identical	14	15	Identified the most appropriate versions	Approved	Recommended version adopted into the TL4 draft
Vast discrepancies	-	-	-	-	-
Total	**24**	**47**	-	-	-

To facilitate reporting, the demographic section and the screening items of the E3SR-R were presented separately. Table 3 summarises the comparison of the forward-translation results. The table shows both the degree of correspondence among the three translated versions and the decisions made for each item. A total of 42 items and phrases were translated identically, comprising 10 items in the demographic section and 32 items in the screening section, and were therefore transferred directly into the fourth translation draft (TL-4). In addition, 29 items and phrases, consisting of 14 items from the demographic section and 15 items from the screening section, were judged to be semantically equivalent despite differences in wording or sentence structure. For these items, the preferred translations were selected and incorporated into TL-4. Accordingly, TL-4 served as the pre-final

Indonesian translation draft for the subsequent back-translation process.

In the demographic section, the comparison showed that most items fell into the similar but not identical category. This indicates that the three translators generally preserved the core meaning of the source items, while differing in lexical choice and sentence structure. For example, the item “Section A: Demographics” was rendered as both “Bagian A: Demografi” and “Bagian A: Informasi Demografis”, with the latter selected because it was considered clearer and more commonly used in the context of Indonesian assessment instruments. A similar pattern was observed for the item “Personal Information of Learner”, which was translated as “Data Pribadi Peserta Didik”, “Informasi Pribadi Anak”, and “Data Pribadi Pelajar”. Following reviewer synthesis, “Informasi Pribadi Anak” was selected because it was simpler, more natural, and easier for the intended users, namely preschool teachers, to understand. Variation in the demographic section was not limited to synonym choice, but also reflected considerations of cultural appropriateness and contextual relevance in the Indonesian setting. For instance, the item “Learner’s ethnic group” was translated as “Suku peserta didik” and “Suku bangsa”. After review and synthesis, “suku bangsa” was selected as the more appropriate option because it is more formal, neutral, and culturally acceptable in Indonesian. This choice was also considered more suitable given the wide ethnic diversity in Indonesia, where identification refers not merely to a “tribe” in a narrow sense, but to a broader sociocultural background. In addition, the use of the word suku on its own may sound overly direct and, in certain contexts, may carry sensitive or potentially discriminatory connotations.

Some demographic items also revealed more substantial differences because the translators emphasized different aspects of meaning. This was evident in the trauma-related item, where one version was relatively literal, namely “Apakah saat ini terdapat trauma dalam kehidupan peserta didik atau apakah ada riwayat trauma?”, while another version was more descriptive, namely “Apakah saat ini anak mengalami/memiliki riwayat pengalaman yang berpotensi menimbulkan dampak traumatis?” The latter was selected because it was more explicit, easier to understand, and

better aligned with the reporting of children's psychosocial experiences. A similar pattern was observed in the item Did the learner return to normal levels of functioning?, for which the final wording, "Apakah anak telah kembali menunjukkan keberfungsian sehari-hari sesuai dengan tahap perkembangannya?", was preferred because it was more specific, developmentally appropriate, and less rigid than the more literal expression kembali ke tingkat fungsi normal.

In the screening section, the comparison was likewise dominated by items classified as similar but not identical. Most of the differences reflected variation between more literal translations and more natural Indonesian formulations. For example, the item "Is able to place him/herself in the shoes of others" was translated as "Mampu menempatkan diri di posisi orang lain", "Anak mampu menunjukkan empati terhadap orang lain", and "Anak mampu menempatkan dirinya pada posisi orang lain". The final version retained the core construct of empathy while using a more communicative formulation for teachers, namely "Anak mampu menempatkan dirinya pada posisi orang lain (misalnya menghibur teman yang sedang sedih atau terluka)". Similar patterns were found in other items relating to responsibility, acceptance of correction, emotional awareness, emotional expression, and communication skills, where reviewers tended to select wording that was clearer, more natural, and more operational for the intended users of the instrument. Nevertheless, some screening items required closer examination because translation differences had the potential to broaden, narrow, or shift the construct being measured. For instance, in the item "Accepts correction/discipline", the translation "Mau menerima kritik/disiplin" was considered too direct and insufficiently contextualized for early childhood settings, whereas "Anak dapat menerima arahan, koreksi, atau pendisiplinan dari guru" was preferred because it better reflected classroom practice. In the item "Able to identify emotions", one translator added the element "menyebutkan" and included additional examples such as "marah", requiring reviewers to ensure that these additions did not alter the scope of the original construct. Likewise, the item Able to communicate emotional experiences to teacher or caregiver showed substantial variation in the examples used, ranging from "Tadi di sekolah ngapain? to bagaimana harimu?"

Reviewers ultimately selected the version that most closely reflected the construct of emotional experience rather than merely recounting daily activities.

Overall, the comparison of the three forward translations indicates that all versions generally preserved the core meaning of the source instrument, although a process of synthesis and consensus discussion was still required to resolve differences in wording, sentence structure, clarity, and cultural appropriateness. In other words, the main issue at this stage was not failure to translate meaning, but rather the need to identify the Indonesian wording that was most accurate, natural, comprehensible for teachers, and conceptually equivalent to the original version.

Step 3: Blind back-translation of the preliminary translated version of the instrument

The synthesized Indonesian draft (TL-4) was translated back into the source language by two independent translators who had not participated in the forward-translation stage and had no access to the original instrument. This step was intended to identify possible ambiguity, semantic drift, or distortion of meaning in the translated version. The resulting back-translated versions were labeled BTL-1 and BTL-2 for use in the next comparison stage. The demographic profiles of the two back-translators are summarised in Table 4.

Table 4. Demographics of the Back-Translators

Translator	**1**	**2**
Proffesion	Lecturer and sworn translator assessor	Lecturer and clinical psychologist.
Area of expertise	Translation, Cross-Cultural Studies	Clinical psychology, psychological assessment, and therapeutic interventions.
Years of experience in translation	20	8

Step 4: Synthesis II (Comparison of the two back-translated versions of the instrument)

The back-translated versions (BTL-1 and BTL-2) were compared with each other and with the original version of the E3SR-R to evaluate the extent to which the translated items preserved the intended meaning of the source instrument. This comparison focused on wording, sentence structure, meaning, and relevance. This comparison was conducted through a multidisciplinary review process involving the research team and reviewers in order to identify ambiguities and discrepancies across versions. If discrepancies can't be adequately resolved, problematic items are revised and retranslated as necessary. The results of the back-translation comparison process are presented in Table 5. A total of 21 items or phrases were classified under Category 1 (11 demographic and 10 screening), indicating that the meaning was captured clearly and consistently across the back-translations. These items were interpreted as fully equivalent and were therefore retained without revision in the final Indonesian version. A further 48 items or phrases were classified under Category 2 (11 demographic and 37 screening), indicating that the translations differed in phrasing or idiomatic expression but remained semantically equivalent. Because no distortion of meaning was identified, these items were retained in the final Indonesian version. Thus, a total of 22 items in the demographic section and 47 items in the screening section of the pre-final Indonesian version were adopted in the final Indonesian version.

Category 3 was assigned to 2 items or phrases in the demographic section, suggesting that the meaning of the construct differed across the back-translations and that the Indonesian version was not yet fully equivalent to the original English source. These items were therefore marked for further review and revision to improve semantic clarity and strengthen equivalence with the source instrument.

Table 5. Results of Synthesis II

Category	Section		Recommendation		Action
	Demographic	**E3SR Item**	**R1**	**R2**	
Identical	**11**	**10**	Adopt into the final draft	Approved	Set as final draft
Similar, but not identical	**11**	**37**	Identified the most appropriate versions	Approved	Recommended version adopted into the final draft
Vast discrepancies	**2**	**-**	Discuss with R2	Approved	Consult between reviewers and researchers to determine the most appropriate version.
Total	**24**	**47**	-	**-**	

3.2 Phase 2: Evaluation of Translation Quality, Linguistic Equivalence, Content Validity, and Final Synthesis

After the pre-final Indonesian version had been produced through the translation and synthesis procedures in Phase 1, the study proceeded to Phase 2, which focused on evaluating the adequacy of the translation process, the degree of linguistic equivalence, and the content validity of the translated instrument. Unlike Phase 1, which was primarily concerned with producing and refining the translated version, Phase 2 addressed whether the

resulting Indonesian items were methodologically acceptable, linguistically equivalent, conceptually relevant, and culturally appropriate. This phase consisted of cognitive debriefing conducted by 7 panel experts, followed by a final synthesis of expert comments and revision decisions, and a formal evaluation of translation quality and linguistic equivalence using QTLC. The Kappa statistic was used to establish inter-rater reliability.

3.2.1 Cognitive Debriefing (Expert review by 7 panel experts)

In the present study, cognitive debriefing was operationalized through an expert review involving seven panel experts. This step was essential as the study was still in the early stage of adaptation and had not yet included large-scale field testing with monolingual respondents from the target population. The panel consisted of experts from relevant fields, including educational psychology, psychometrics, early childhood education, kindergarten teaching, and developmental psychology. Their role was to ensure that the Indonesian version of the E3SR-R was not only conceptually accurate but also understandable, culturally appropriate, and suitable for use in the Indonesian educational context. The seven experts evaluated the Indonesian version of the E3SR-R in terms of three main criteria: relevancy, clarity of wording, and cultural and linguistic appropriateness. The expert review revealed a high level of content validity, as reflected in Aiken's V coefficients across all three dimensions. The findings indicated that the translated instrument was generally considered representative of the intended constructs and adequately aligned with the linguistic and cultural context of Indonesia. Furthermore, no substantial macro-level revisions were deemed necessary. An overview of the panel's demographics is provided in Table 6.

Table 6. Demographics of Panelists

Area of expertise	Job title or vocation	Experience in years
Psychological assessment in education.	Psychologist, Lecturer	12
Child Development Therapy	Psychologist, Lecturer	8
Child development	Lecturer	12

Area of expertise	Job title or vocation	Experience in years
Early childhood education and classroom-based learning practices.	Teacher	5
Early childhood education, teacher assessment, and early childhood learning practices.	Principal	21
kindergarten and early childhood learning practices.	Teacher	5
Psychological measurement and the development of psychological assessment tools.	Psychometrist, Lecturer	5

3.2.1 Final Synthesis of Expert Comments and Revision Decisions

Following the expert review, a final synthesis was conducted to integrate all expert comments, notes, and recommendations regarding the translated items. In the present study, this synthesis was carried out by the researcher together with the supervisor in order to reconcile the qualitative feedback from the seven experts and determine the most appropriate revision decisions. The output of this step was a final Indonesian version of the E3SR-R based on integrated judgments of the expert panel. Although no major revisions were deemed necessary, the experts' review process generated several useful suggestions and notes to improve precision and respondent comprehension. These recommendations were important for ensuring that future users of the instrument would be able to interpret the items accurately and consistently. For instance, in the demographic section, the item “Learner’s ethnic group” was considered culturally sensitive and less relevant in the Indonesian context. Similarly, the items referring to home

language/mother tongue and language of instruction at pre-school revealed that the original response categories were not fully adequate for Indonesia's multilingual context. The panel therefore recommended adapting these categories to Indonesian and regionally relevant languages, such as Javanese, Minang, Batak, and others.

In the screening section, one of the items, "Is able to give peers a turn to start or play," was also noted as potentially ambiguous, particularly because the idea of "giving someone a chance" could be interpreted less directly by respondents. To improve clarity, the experts suggested simplifying the wording so that it more clearly reflected the familiar concept of taking turns or queuing. These recommendations were considered and adopted because they enhanced the linguistic accuracy, cultural relevance, and practical clarity of the Indonesian version of the E3SR-R.

3.2.3 Evaluation of Translation Quality and Linguistic Equivalence

The final evaluation of Phase 2 used the Quality of Translation and Linguistic Equivalence Checklist (QTLC) to assess both the translation process and the degree of linguistic equivalence [43]. The translation section examined the adequacy of the process, including the qualifications of the translators, the procedures followed, and the management of discrepancies. The linguistic equivalence section focused on comparing the source version, target version, and back-translated versions to ensure semantic correspondence. QTLC scores were classified into three categories: poor, good, and excellent.

Inter-rater reliability showed a perfect agreement, with a Kappa coefficient (Kappa = 1.0), indicating consistent evaluations across raters. The Section A score of 29 indicated that qualified translators with relevant experience were involved, ensuring that the translation process adhered closely to ITC guidelines. Meanwhile, the Section B score of 39 reflected excellent alignment between the source and back-translations, confirming a high degree of linguistic equivalence. These findings demonstrate that the adaptation process was methodologically rigorous and compliant with ITC standards, reinforcing the quality of the final Indonesian version of the E3SR-R.

4. DISCUSSION

This study suggests that the Indonesian adaptation of the E3SR-R is understood as the result of a cross-cultural adaptation process rather than a mere language conversion [22]. In adaptation research, the central concern is not only whether the target version reproduces the wording of the source instrument, but whether it preserves semantic, idiomatic, experiential, and conceptual equivalence so that the adapted version continues to reflect the same construct in a culturally meaningful way [48]. This perspective is strongly supported in the broader adaptation literature, which emphasizes that rigorous translation procedures, systematic review, and careful documentation are essential to reduce distortion of meaning and strengthen the defensibility of the adapted instrument [51], [52], [53].

This research also reinforces the importance of viewing emotional-social functioning as an integral part of school readiness rather than a secondary complement to cognitive preparedness [54]. Prior literature has consistently shown that successful school entry is shaped not only by early cognitive skills, but also by emotional regulation, social responsiveness, behavioral adjustment, and the capacity to engage productively in learning environments [13], [22], [27]. In this sense, the relevance of the E3SR-R in the Indonesian context lies in its potential to support a broader understanding of school readiness, one that includes children's emotional and social preparedness as central developmental resources for later adjustment and participation in formal schooling [7], [10], [12].

The study further indicates that early adaptation evidence should not be overextended into claims of full psychometric readiness. Even when an adapted version appears conceptually appropriate, and its content has been judged relevant, broader empirical testing remains necessary to determine whether the instrument functions consistently and meaningfully in actual use [22], [43]. This is also echoed in the wider adaptation and testing literature, which argues that equivalence at the translation stage is only one part of a larger validation process [55]. Accordingly, the current contribution of the Indonesian E3SR-R is best understood as providing a strong initial foundation for subsequent reliability

testing, structural analysis, and applied validation in more diverse respondent groups [52], [53] [56].

5. CONCLUSION

This study concludes that the Indonesian adaptation of the E3SR-R has achieved an important early stage of instrument development through a structured and rigorous adaptation process. The procedures used in this study support the view that the resulting Indonesian version is linguistically adequate, conceptually aligned with the source instrument, and sufficiently representative of the intended construct domain to proceed to the next stage of validation. Rather than indicating that the instrument is already fully validated, the present findings provide preliminary support for its use as a translated and culturally adapted version that is ready for broader psychometric testing.

The study also highlights that instrument adaptation should be understood as more than translation alone. The combination of forward translation, synthesis, blind back-translation, expert review, QTLC evaluation, and inter-rater agreement assessment strengthened the methodological defensibility of the adaptation process. In this respect, the Indonesian version of the E3SR-R may serve as a promising foundation for future studies examining internal consistency, factor structure, and other forms of empirical validity in Indonesian preschool contexts.

Overall, this study contributes to the development of culturally and linguistically appropriate assessment tools for emotional-social school readiness in Indonesia. The adapted Indonesian E3SR-R has the potential to support future educational assessment and early identification efforts, particularly when used by teachers or other significant adults who are familiar with children's behavior in everyday learning environments. Further research is needed to confirm its psychometric properties and broader applicability across diverse Indonesian settings.

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