Face Validity for Early Literacy Skills Indicators from Educators' Perspective

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Abstract
The purpose of this study was to determine the face validity of the Early Literacy Skills Indicators (ELSI), which are used to measure the early literacy skills of children aged 3 to 4. To achieve face validity for ELSI, the researchers conducted a descriptive survey of 21 educators. The researchers provided each educator with the Face Validity Questionnaire (Educator) and a complete copy of the ELSI, which included various media, including (i) the ELSI Handbook, (ii) the "Ta Ta House" Storybook, (iii) the Children Score Record Form, and (iv) the ELSI Microsoft Excel. Each educator was responsible for analysing all ELSI media for language, space and font size, clarity, and appropriateness in measuring children's early literacy skills. The study findings suggested that ELSI's face validity extended to all of these mediums. This suggests that ELSI has a high level of face validity when measuring children's early literacy skills. Thus, educators can utilise ELSI to assess the early literacy skills of children aged 3 to 4.
Keywords: Early Literacy Skills, Early Childhood, Evaluation Tools, Face Validity

Introduction
Accurately assessing early childhood development is a difficult endeavour. Most researchers emphasize that assessing early childhood is difficult since the development is quick, episodic, and significantly influenced by events, emotional states, and evaluation criteria (Epstein et al., 2004; Ruddell, 2006; Scates, 2014). Early childhood assessment differs from adult assessment because children have not yet fully mastered reading and writing skills (Wortham & Hardin, 2019). As a result, the selection of methods or tools to assess children is influenced

by the varied and unique early development of children. The assessment approach must be compatible with the child's level of mental, social, and physical development.

The similar issue happens when assessing children's early literacy skills. Early literacy skills include the fundamental abilities of reading, writing, and other literacy-related skills (Hall et al., 2003; Neuman & Roskos, 1997). When children are 3 to 4 years old, they enter the early reading skills period (Dunst et al., 2006). Early childhood literacy skills assessment is an important component of comprehensive early childhood programmes (Strickland & Ayers, 2007), and it has been extended to kindergarten (Bowman et al., 2001). Information about early reading skills mastery is sometimes understood as a reflection of all aspects of teaching in a programme (Strickland & Ayers, 2007).

Nonetheless, assessing children's literacy skills at each age level is difficult, particularly in early life (National Educational Psychological Service, 2016). This is due to the instability of early childhood reading concepts and skills, which are influenced by other areas of development such as physical, cognitive, and emotional. This makes assessing children's early literacy skills with established standard measurements challenging. Early reading skills assessment necessitates data from a number of methodologies that are ongoing and appropriate for children's growth.

As a result, the researchers developed the Early Literacy Skills Indicator (ELSI), a more efficient and complete early reading skills assessment tool for children aged 3+ to 4+ (Bacotang et al., 2020a, 2020b, 2021, 2022). The ADDIE-ELSI model serves as the framework for building ELSI, and it consists of five stages: analysis, design, development, implementation, and evaluation. ELSI can test children's early literacy skills holistically, including five components: language and communication, print awareness, phonological awareness, narrative comprehension, and early writing (Bacotang et al., 2017, 2023; Mohammed Isa et al., 2018).

To calculate a value, ELSI must meet psychometric requirements, which pertain to the accuracy of an assessment tool (Lonigan et al., 2011). Inaccurate decisions will benefit children less and affect further plans. According to Rouse and Fantuzzo (2006), a good early reading assessment instrument should have psychometric criteria that allow for screening the children who attend the childcare center or kindergarten and continuously monitor their progress.

One of the most important psychometric requirements for an assessment tool is validity, which refers to how well an assessment tool measures what it is designed to measure (Anastasi & Urbina, 2010; Cooper & Kiger, 2011; Helm, 2015; Marzano, 2018). Validity is also a sign of the study's accuracy, i.e. whether the study provides a genuine picture of the phenomenon under investigation (Talib, 2014).

Validity defines how relevant the information gathered is to the decision at hand (Russell & Airasian, 2012). According to Idris (2013), high validity indicates that the findings gained are founded on facts or evidence and can provide proper rationale. An assessment tool is valid when its construction fulfils or establishes the function and objective of its design.

In general, there are three categories of validity evidence: content-related evidence, criterion-related evidence, and consequential evidence (McMillan, 2014). The three types of validity evolve over time into six more specific types of validity, namely (i) face validity; (ii) criterion validity; (iii) construct validity; (iv) content validity; (v) internal validity; and external validity (Chua, 2011; Ibrahim, 2017; Maruyama & Ryan, 2014; Idris, 2013; Talib, 2013). Most previous studies suggest that face validity, content validity, criterion validity, and construct validity are required for the construction of assessment instruments (Cooper & Kiger, 2011; McAfee, 2016; Hanafi, 2016; Zaidon et al., 2014; Wortham & Hardin, 2019). However, this study only discusses the ELSI's face validity.

Face validity is the amount to which an assessment tool may be viewed to be true for measuring a skill by the majority of people (Anastasi & Urbina, 2010; Chua, 2011; Creswell & Guetterman, 2019; Maruyama & Ryan, 2014; Ibrahim, 2017; Idris, 2013). Face validity can be strengthened by displaying a face that is relevant and appropriate in relation to the target population (Anastasi & Urbina, 2010). Face validity was obtained by having various experts review the assessment instrument in terms of language, writing space and size, clarity, and appropriateness in evaluating the content and skills examined (Amin, 2015; Zaidon et al., 2014).

Methodology
To gain the face validity for ELSI, the researchers conducted a descriptive survey of 21 educator. The researchers must calculate the frequency and percentage of agreement for each aspect and item to establish the face validity. According to Tuckman and Waheed (1981) and Sidek and Jamaludin (2005), a score of 70 percent is considered to be a high level of validity when calculated using the following formula:

$$\frac{\text{Total Expert Score}}{\text{Maximum Score}} \times 100\% = \text{Validity}$$

The researcher supplied the Face Validity Questionnaire (Educator) for ELSI, as well as a complete copy of ELSI containing various media, including (i) the ELSI Handbook; (ii) the "Ta Ta House" Storybook; (iii) the Children Score Record Form; and (iv) the ELSI's Microsoft Excel. Each educator was responsible for reviewing all ELSI media in terms of language, writing space and size, clarity, and suitability for measuring children's early literacy skills. Educators graded these on a five-point scale of 1 (Strongly Disagree), 2 (Disagree), 3 (Not Sure), 4 (Agree), or 5 (Strongly Agree).

Results
The researchers determined the ELSI's face validity which consisted of the ELSI Handbook, "Ta Ta House" Storybook, Children Score Record Form, and ELSI Microsoft Excel.

ELSI Handbook
The ELSI Handbook had a high total face validity of 86.45 percent. According to the findings, Item 2 (The language used in the ELSI Handbook is easy for educators to understand.) and Item 3 (The font size used in the ELSI Handbook is suitable for educators.) had the highest face validity of 88.60 percent (high level). Meanwhile, Item 4 (The ELSI Handbook is free from

spelling and grammatical errors.) had the lowest face validity of 83.80 percent (high level). Table 1 shows the face validity findings for the ELSI Handbook.

Table 1
Face Validity of the ELSI Handbook (N = 21)

No.	Item	Min	%	Level
1.	The ELSI Handbook format is suitable for educators.	4.24	84.80	High
2.	The language used in the ELSI Handbook is easy for educators to understand.	4.43	88.60	High
3.	The font size used in the ELSI Handbook is suitable for educators.	4.43	88.60	High
4.	The ELSI Handbook is free from spelling and grammatical errors.	4.19	83.80	High
	Total Score	4.32	86.45	High

"Ta Ta House" Storybook
The "Ta Ta House" Storybook had a high total face validity of 87.03 percent. Based on the findings, Item 2 (The language used in the "Ta Ta House" Storybook is suitable for children aged 3+ to 4+.) and Item 7 (The "Ta Ta House" Storybook uses colors (orange, yellow, blue, purple, and green) that are suitable for children aged 3+ to 4+) had the highest face validity of 90.40 percent (high level). Item 4 (The size of the "Ta Ta House" Storybook (A4 size) is suitable for children aged 3+ to 4+.) had the lowest face validity of 82.80 percent (high level). Table 2 shows the face validity findings for the "Ta Ta House" Storybook.

Table 2
Face Validity of "Ta Ta House" Storybook (N = 21)

No.	Item	Min	Percentages (%)	Level
1.	The "Ta Ta House" Storybook format is suitable for children aged 3+ and 4+.	4.38	87.60	High
2.	The language used in the "Ta Ta House" Storybook is suitable for children aged 3+ to 4+.	4.52	90.40	High
3.	The "Ta Ta House" Storybook is free from spelling and grammatical errors.	4.33	86.60	High
4.	The size of the "Ta Ta House" Storybook (A4 size) is suitable for children aged 3+ to 4+.	4.14	82.80	High
5.	The font size used in the "Ta Ta House" Storybook is suitable for children aged 3+ and 4+.	4.24	84.80	High
6.	The total number of pages of the "Ta Ta House" Storybook (12 pages) is suitable for children aged 3+ to 4+.	4.33	86.60	High
7.	The "Ta Ta House" Storybook uses colors (orange, yellow, blue, purple, and green) that are suitable for children aged 3+ to 4+.	4.52	90.40	High
	Total Score	4.35	87.03	High

Children Score Record Form

The researchers discovered that the Children Score Record Form had a high total face validity of 86.68 percent. Item 3 (The font size used in the Children Score Record Form is suitable for educators.) had the highest face validity of 89.60 percent (high level). Meanwhile, Item 1 (The Children Score Record Form format is suitable for educators.) has the lowest face validity of 84.80 percent (high level). Table 3 shows the face validity findings for the Children Score Record Form.

Table 3
Face Validity of Children Score Record Form (N = 21)

No.	Item	Min	Percentage (%)	Level
1.	The Children Score Record Form format is suitable for educators.	4.24	84.80	High
2.	The language used in the Children Score Record Form is easy for educators to understand.	4.33	86.60	High
3.	The font size used in the Children Score Record Form is suitable for educators.	4.48	89.60	High
4.	The Children Score Record Form is free from spelling and grammatical errors.	4.33	86.60	High
5.	The answer space in the Children Score Record Form is in accordance with the expected response/answer.	4.29	85.80	High
Total Score		4.33	86.68	High

ELSI Microsoft Excel

The researchers found that the total face validity of ELSI Microsoft Excel was high at 93.32 percent. The findings showed the highest face validity was 94.20 percent (high level) for Item 2 (The language used in ELSI Microsoft Excel is easy for educators to understand.), and Item 3 (The font size used in the ELSI Microsoft Excel is suitable for educators.). Meanwhile, the lowest face validity was 92.40 percent (high level) for Item 1 (The ELSI Microsoft Excel format is suitable for educators.), and Item 4 (The ELSI Microsoft Excel is free from spelling and grammatical errors.) Table 4 shows the face validity findings for the ELSI Microsoft Excel.

Table 4
Face Validity of ELSI Microsoft Excel (N = 21)

No.	Item	Min	Percentage (%)	Level
1.	The ELSI Microsoft Excel format is suitable for educators.	4.62	92.40	High
2.	The language used in the ELSI Microsoft Excel is easy for educators to understand.	4.71	94.20	High
3.	The font size used in the ELSI Microsoft Excel is suitable for educators.	4.71	94.20	High
4.	The ELSI Microsoft Excel is free from spelling and grammatical errors.	4.62	92.40	High
5.	The answer space in the ELSI Microsoft Excel is in accordance with the expected response/answer.	4.67	93.40	High
Total Score		4.67	93.32	High

As a result, the ELSI, which contained the ELSI Handbook, "Ta Ta House" Storybook, Children Score Record Form, and ELSI Microsoft Excel, had a high face validity. This suggests that the ELSI had a strong face validity when it comes to measuring early literacy skills in children aged 3 to 4.

Discussion
Findings from the study indicated that the ELSI, which includes the ELSI Handbook, "Ta Ta House" Storybook, Children Score Record Form, and ELSI Microsoft Excel had a high face validity. The font size and language used were suitableand easy to read by educators or children, which were the highest face validity characteristic of ELSI. This explains why ELSI has a strong face validity and how it can ensure that children's reading skills are accurately assessed (Reynolds et al., 2009).

The ELSI's high face validity also demonstrates that it is generally valid for measuring early literacy skills in children aged 3+ to 4+ (Anastasi & Urbina, 2010; Creswell & Guetterman, 2019; Maruyama & Ryan, 2014). Furthermore, this discovery explains why ELSI has a face display that is relevant, acceptable, and appropriate for children aged 3 to 4 (Anastasi & Urbina, 2010).

The study involved 21 educators as respondents, hence the high face validity shown by ELSI met the requirement as stated by Ghafar (2000). He argued that product evaluation requires at least six to nine assessors, as has been done in various previous research (e.g., Ali & Mahamod, 2016; Saper et al., 2016; Saleh & Jusoh, 2015; Mohamed Isa et al., 2017). Additionally, the validity of assessment tools used to assess children's progress is decided by the tool's user, notably the educator (McMillan, 2014; Russell & Airasian, 2012). All educators involved in this study worked in the childcare centres or government kindergartens. Majority of them had relevant academic qualification specializing in early childhood education with 6 to 15 years of teaching experience.

This study described the technique for assessing face validity, one of the psychometric criteria for ELSI. This was conducted to ensure that ELSI can accurately assess children's early

literacy skills. As a result, other researchers who want to determine the face validity of an evaluation instrument might use this study as a guide.

Conclusion and Future Agenda

The primary finding of this study is the high face validity of the Early Literacy Skills Indicator (ELSI) assessment tool, which consists of the ELSI Handbook, "Ta Ta House" Storybook, Children Score Record Form, and ELSI Microsoft Excel. The ELSI components were found to be appropriate, clear, and accessible for assessing early literacy skills in children aged three to four. The font size and language used were highlighted as key aspects of face validity, ensuring ease of use for both educators and children. This finding emphasizes the value of ELSI as a comprehensive and efficient assessment tool for assessing early literacy skills in educational settings.

Furthermore, the face validity assessment conducted in this study revealed that ELSI, which included the ELSI Handbook, "Ta Ta House" Storybook, Children Score Record Form, and ELSI Microsoft Excel, had high face validity. The components of ELSI were discovered to be suitable, clear, and appropriate for assessing early literacy skills in young children. The font size and language used were specifically highlighted as important aspects of face validity, ensuring accessibility and ease of use for both educators and children.

Other than that, the validation process included 21 educators, which strengthened the findings' validity and met the requirements for robust evaluation. Educators, who are the primary users of assessment tools, provided valuable feedback on ELSI's suitability and effectiveness for assessing early literacy skills in a variety of educational settings.

This study contributes to the field of early childhood education by presenting a systematic approach to evaluating the face validity of assessment tools, with a particular emphasis on early literacy skills. Researchers and educators might employ this study's methodology and findings to evaluate the face validity of other early childhood assessment instruments. Ultimately, ELSI is an effective tool for educators and researchers to accurately assess and monitor children's early literacy skills, allowing for specific measures and promoting beneficial improvements in early childhood development.

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