

ARTICLE

## Reading Assessment Literacy: Investigating Knowledge, Skills, and Conceptions of Chinese Junior High School EFL Teachers

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### ABSTRACT

Although assessment plays a critical role in English reading teaching, studies exploring teachers' reading assessment literacy are comparatively rare. This study investigated 199 Chinese junior high school EFL teachers' knowledge, skills, and conceptions of reading assessment through a questionnaire, which was validated through structural equation modeling (SEM). Results showed that the teachers reported pertinent knowledge, professional skills, and positive conceptions about English reading assessment, but some teachers still lacked certain educational assessment knowledge, failed to effectively select English reading materials and design reading assessment tasks, and neglected the impact of English reading assessment on the macro social environment. Implications were discussed concerning how to improve teachers' assessment literacy in English reading teaching.

**Keywords:** Reading Assessment Literacy; Chinese Junior High School EFL Teachers; Knowledge; Skills; Conceptions

## 1. Introduction

Assessment is the baton and wind vane of teaching, which is a crucial part of teaching<sup>[1]</sup>. Given the critical role of assessment in teachers' instructions, teachers' assessment

literacy has attracted researchers' attention. Lam claimed, "Teachers' assessment literacy encompasses the knowledge and skills they acquire for developing well-structured and effective assessment activities, and the conceptions teachers

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hold when assessing students' learning<sup>[2]</sup>."

Although assessment plays a critical role in classroom teaching, there has been little work done to explore teachers' assessment literacy in L2 reading, and there are few theoretically based tools that are specifically designed to survey teachers' reading assessment literacy. In response to the call for a more intensive focus on the specialized field of teachers' assessment literacy, this study seeks to construct a research model of junior high school EFL teachers' reading assessment literacy mainly based on the model formulated by Qiu and Lan<sup>[1]</sup>, as well as prior researches, aiming at assessing how junior high school EFL teachers in China comprehend, conceive, and implement classroom-based reading assessment. The constructs included in this research model were teachers' reading assessment knowledge, reading assessment skills, and reading assessment conceptions.

## 2. Literature Review

### 2.1. Language Assessment Literacy

Among the studies of language assessment literacy (LAL), a significant amount of work has been done to investigate the assessment literacy level and training needs of EFL teachers. Lan and Fan found, "The EFL teachers' assessment literacy was stuck at the functional level, and teachers wanted to improve their procedural and conceptual literacy through professional training<sup>[3]</sup>." Roslan et al. reported, "Teacher candidates lacked sufficient knowledge of language assessment literacy, and were in dire need of training<sup>[4]</sup>." Further, there are studies investigating various factors affecting language teachers' assessment literacy. Jiang explored the effect of university type, educational background, and training on college English teachers' assessment literacy<sup>[5]</sup>. Mansouri et al. examined the impact of institutional policies on EFL teachers' assessment literacy<sup>[6]</sup>. The findings discovered by Mansouri et al. revealed the impact of macro assessment environments, like school policies, on EFL teachers' assessment literacy<sup>[6]</sup>. The results from the study of Sun and Zhang revealed that "Teachers' major significantly affected college EFL teachers' assessment literacy, and assessment training can predict teachers' current assessment literacy level<sup>[7]</sup>."

Due to the uniqueness of language skill development, a significant amount of work has been done to investigate LAL in L2 writing and speaking. Crusan et al. found, "Teachers'

linguistic background and teaching experience had impacts on teachers' writing assessment literacy<sup>[8]</sup>." Lam employed questionnaires, observations, and interviews to investigate teachers' assessment literacy in L2 writing<sup>[2]</sup>. A theoretical framework of speaking assessment literacy was developed by Gao and Lin for secondary school EFL teachers, which clarified the five dimensions (theoretical knowledge, teaching methods, evaluation methods, scoring, and feedback) and the degree to which teachers should master<sup>[9]</sup>. A case study was carried out to explore the two senior high school EFL teachers' writing assessment literacy, which found that teachers' writing assessment literacy exhibited the characteristics of complexity and contextuality<sup>[10]</sup>. Lee and Mao considered that EFL teachers' feedback literacy was reflected in their knowledge, values, and competencies in the field of L2 writing, and identified the deficiencies and discrepancies in teachers' feedback literacy in writing<sup>[11]</sup>.

However, studies on LAL for specific skills, especially in the context of reading teaching, have not been adequately embraced by researchers. Thus, this study attempts to establish a theoretical model for investigating teachers' assessment literacy in reading, which is based primarily on the model formulated by Qiu and Lan as well as prior researches, aiming at investigating Chinese junior high school EFL teachers' reading assessment knowledge, reading assessment skills, and reading assessment conceptions<sup>[1, 12-15]</sup>.

### 2.2. Theoretical Background

In the early conceptualization, the language assessment literacy (LAL) of teachers presented a trend from the knowledge and skills needed for the proper formulation, selection, interpretation, and application of assessment to knowledge, skills, and principles that maintain a dynamic balance between practice and knowledge<sup>[16]</sup>.

Inbar-Lourie directly explored LAL among EFL teachers and proposed a relatively comprehensive framework, which included three dimensions: the why, the what, and the how<sup>[12]</sup>. Inbar-Lourie pointed out that LAL was a dynamic knowledge closely related to various aspects of language learning<sup>[12]</sup>. In order to obtain the "what" and implement the "how", an understanding of the context behind the practices is needed, that is, the "why", each rooted in language-related and educational theories and in testing cultures. However, Inbar-Lourie only constructed a knowledge base of LAL and

did not further explore it in practice<sup>[12]</sup>.

A three-dimensional LAL model was developed by Fulcher based on empirical research<sup>[13]</sup>. The bottom of this model is the practice of language testing, which necessitates the knowledge, skills, and competencies to plan, select, and implement language assessment. The middle layer is the assessment process, principles, and concepts, which means evaluators need to be familiar with the assessment process, and understand the principles and concepts that inform assessment practice. The highest level is contexts, which provide the philosophical basis for measuring students' learning. This model takes principle as an independent dimension, highlighting the importance of evaluators' evaluation concepts and moral norms in language assessment.

Xu and Brown reconceptualized teachers' assessment literacy (AL) and proposed a new conceptual framework<sup>[14]</sup>. Knowledge is the foundation of this model. The cognitive and emotional aspects of teachers continuously guide and influence the absorption and implementation of knowledge. Meanwhile, the macro social-cultural and micro institutional contexts constantly conflict with these factors, causing compromises and adjustments in TALiP until a balance is reached.

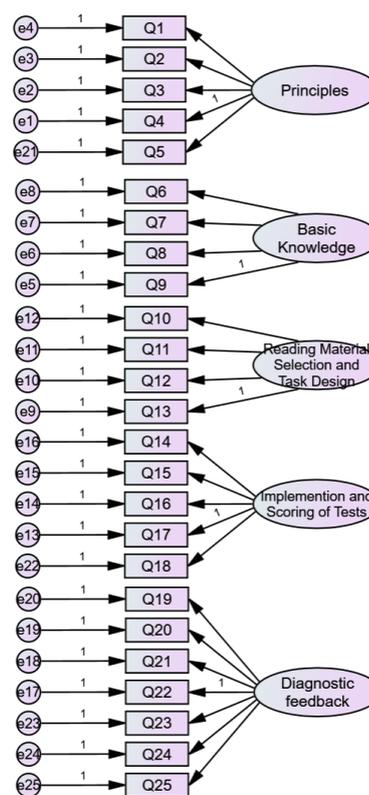
Due to the specific educational background in China, foreign LAL conceptual models may not be fully applicable to teaching practice at home. Therefore, based on theories and research methods on LAL abroad, domestic scholars have constructed conceptual models of LAL based on the teaching contexts in China.

The Language Teachers' Assessment Literacy model proposed by Lin consists of three dimensions: principles, knowledge, and skills, which determine the assessment literacy of language teachers<sup>[15]</sup>. The three dimensions are necessary for language teachers' assessment literacy.

A theoretical model was formulated by Qiu and Lan, which considered the context of Chinese college English reading teaching and included five factors in three core constructs (principles, knowledge, and skills)<sup>[1]</sup>. The definitions of the three constructs are summarized as follows: 1) Principles: This refers to "the theoretical basis and moral norms for guiding the development and employment of assessments". 2) Knowledge: This refers to "the knowledge system related to the educational measurement that supports assessment practice". 3) Skills: This refers to "the practices and abilities to design assessment, score, analyze data, and report

feedback".

As shown in **Figure 1**, the construct of principles includes one factor (principles), the construct of knowledge includes one factor (basic knowledge), and the construct of skills includes three factors (reading material selection and task design, implementation and scoring of tests, and diagnostic feedback). All the factors are different but influence each other, forming an independent but interrelated unity. The three constructs of knowledge, principles, and skills compose college English teachers' reading assessment literacy in China.



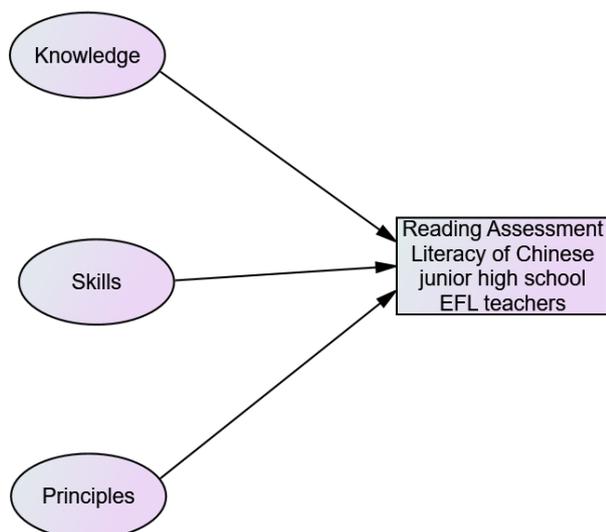
**Figure 1.** Theoretical model of reading assessment literacy for college English teachers.

### 2.3. Research Model and Hypotheses

A theoretical model of reading assessment literacy was established to assess how junior high school EFL teachers in China comprehend, conceive, and practice English reading assessment. In this model, junior high school EFL teachers' reading assessment literacy refers to the mastery of knowledge and skills in designing and practicing reading assessments effectively from which to apply assessment data to

promote teaching and learning, as well as the teacher’s conceptions in assessing students’ learning.

Based on the model formulated by Qiu and Lan as well as prior researches, this study established a theoretical model (Figure 2), in which some modifications were made<sup>[1, 12–15]</sup>.



**Figure 2.** Theoretical model of junior high school EFL teachers’ reading assessment literacy.

As shown in **Figure 2**, first, this model divided the reading assessment literacy of Chinese junior high school EFL teachers into three constructs: knowledge, skills, and conceptions. Second, the proposed model added knowledge of English educational assessment to the construct of knowledge. Third, because macro social-cultural and micro institutional contexts, which required language teachers to comprehend the mutual influence with society, institutions, and students, had been highlighted, the beliefs of English reading assessment were added to this model<sup>[14]</sup>. Considering both beliefs and principles subjective, focusing on the teachers’ attitudes towards assessments in L2 reading, the beliefs and the principles were integrated into the construct of conceptions. Fourth, this study only analyzed the main constructs (knowledge, skills, and conceptions) without considering the impacts of potential moderating variables (such as training experience, major, and highest degree). Finally, because scholars abroad and at home reported that EFL teachers lack assessment knowledge, skills, and conceptions, this study assumed that Chinese junior high school EFL teachers had a low level of reading assessment literacy<sup>[3, 4, 11]</sup>. Thus, the three hypotheses were proposed and tested:

**Hypothesis 1.** *The quantitative data revealed that Chinese junior high school EFL teachers’ mean score on knowledge of reading assessment is less than 3, which is at a low level.*

**Hypothesis 2.** *The quantitative data revealed that Chinese junior high school EFL teachers’ mean score on skills of reading assessment is less than 3, which is at a low level.*

**Hypothesis 3.** *The quantitative data revealed that Chinese junior high school EFL teachers’ mean score on conceptions of reading assessment is less than 3, which is at a low level.*

### 3. Method

This study adopted a quantitative approach to investigate the reading assessment literacy of Chinese junior high school EFL teachers. The quantitative data was collected by a questionnaire, which was adapted from the scale developed by Qiu and Lan and the reading assessment literacy items put forward by Lin<sup>[1, 15]</sup>. The quantitative data collected by the questionnaire focused on developing a research model to comprehensively assess what junior high school EFL teachers know about reading assessment, how they implement reading assessment, and their conceptions of reading assessment.

#### 3.1. Participants

The participants were 199 in-service junior high school EFL teachers in China. Specifically, 94 participants (47.24%) were male, and 105 (52.76%) were female. Nearly 65.83% of teachers had a bachelor’s degree, and 34.17% had a master’s degree in education, linguistics, or translation. The teaching experience of 61 participants (30.65%) was below 10 years; 83 (41.71%) was from 11 to 20 years; 55 (27.64%) was more than 20 years.

#### 3.2. Instrument

First, this study defined the components of teachers’ reading assessment literacy and established a theoretical model. In order to define the construct of Chinese junior high school EFL teachers’ reading assessment literacy, this study adopted a top-down approach. This study identified the main components in the construct according to the previous studies of LAL, designing a 25-item questionnaire concern-

ing Chinese junior high school EFL teachers' knowledge of English reading teaching and educational assessment, skills to design, implement, and use reading assessment, as well as conceptions of reading assessment<sup>[1]</sup>.

Second, this study piloted the initial questionnaire with 97 in-service junior high school EFL teachers. Exploratory factor analyses (EFA), using the 97 teachers' data for the questionnaire, revealed the basic structure of the questionnaire. It showed that the questionnaire had three factors, of which 7 items were deleted due to low factor loadings (<0.5) or cross-loading on two factors. Some teachers responded that there were too many items in the questionnaire and they had difficulty understanding some concepts, such as "assessment as learning", which affected the quality of the questionnaire. Given this, this study integrated 5 items into other items, leaving a collection of 13 items in the questionnaire.

For the final questionnaire, the first part inquired about demographic information, including age, gender, teaching experience, major, and highest degree. The second part involved 5 items to measure the construct of knowledge, including knowledge of English reading teaching and educational assessment. The third part involved 5 items to measure the construct of skills, including how teachers chose appropriate reading assessment materials and designed reading assessment activities, carried out and scored reading tests, as well as provided feedback in classroom reading assessments. The fourth part involved 3 items to measure the construct of conceptions, including beliefs and principles of English reading assessment.

The fifth part of the questionnaire consisted of five open-ended questions related to junior high school EFL teachers' attitudes toward their assessment in reading teaching and their reading assessment literacy. The information obtained would support and supplement the quantitative data. For participants to better understand the items, the questionnaire was translated from English to Chinese and double-checked by the researchers proficient in both Chinese and English.

### 3.3. Data Collection and Analysis

This study surveyed local junior high school English teachers in Jiangsu province. When collecting the data, this study adopted a professional platform Wenjuanxing. To be eligible, participants needed to be full-time EFL teachers in junior high schools, and part-time teachers were excluded.

One month later, 206 questionnaires were completed and sent back. After review, 199 questionnaires were regarded as valid and could be used for data analysis.

Firstly, Confirmatory factor analysis (CFA) was carried out by Analysis of Moment Structure (AMOS) version 26 to test the validity, reliability, and model fit between the data and the factor structure of the theoretical model, and the interrelationships between the constructs and the path of the model were revealed by the Structural Equation Modeling (SEM).

To verify validity and reliability, this study calculated the values of factor loadings, composite reliability (CR), average variance extracted (AVE), and Cronbach's alpha, which were commonly used to determine convergent validity, discriminant validity, and reliability<sup>[17]</sup>. The fit of the theoretical model can be evaluated by multiple fit indices, including Chi-square to its degree of freedom ( $\chi^2/df$ ), goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), comparative fit index (CFI), Tucker-Lewis index (TLI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR)<sup>[18-21]</sup>.

Secondly, the answers of respondents were analyzed by SPSS version 25 with descriptive statistics about junior high school EFL teachers' reading assessment literacy, where means and standard deviations were reported in the findings.

## 4. Results

### 4.1. Development of the Reading Assessment Literacy Model for Chinese Junior High School EFL Teachers

#### 4.1.1. Validity and Reliability Analysis of the Model

The convergent validity, reliability, and discriminant validity of the theoretical model were verified by CFA. The value of the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.868 (>0.6), and the P-value of Bartlett's sphericity test adequacy was below 0.001, showing that the data could be used for factor analysis.

Convergent validity was assessed by considering a range of indexes: factor loading, composite reliability (CR), and average variance extracted (AVE). The standardized factor loadings should be greater than or equal to 0.5<sup>[22]</sup>. The values of CR and AVE should be higher than 0.7 and 0.5 re-

spectively<sup>[23]</sup>. If the values of Cronbach’s Alpha are higher than 0.7, the reliability is considered acceptable<sup>[24]</sup>.

Factor loadings of 13 items in **Table 1** were all above 0.5. The CR values of the three constructs were 0.081, 0.831, and 0.765, all higher than 0.7. The AVE values of 0.500 and 0.512 (>0.5) were gained for the construct of skills and conceptions. The AVE value for the construct of knowledge was in the range of 0.4-0.5, which was also acceptable because Fornell and Larcker found, “If the AVE value was smaller than 0.5, but the CR value was greater than 0.6, the convergent validity was still acceptable”<sup>[17]</sup>. The Cronbach’s Alpha values of 13 items were all greater than 0.7, indicating that the constructs had acceptable internal consistency<sup>[25]</sup>.

To verify the discriminant validity, this study compared the fit of three-factor, two-factor, and one-factor models. From **Table 2**, it can be seen that the three-factor model (knowledge, skills, conceptions) has the best fit among all models because the  $\chi^2/df$  was lower than 3, CFI and GFI were both greater than 0.9, and RMSEA was below 0.08. The difference of the values of  $\chi^2$  between the three-factor model and other models is significant ( $p < 0.001$ ), proving that the discriminant validity of the reading assessment literacy model is ideal.

#### 4.1.2. Fit Analysis of the Model

The model fit was verified by multiple fitting indices, in which values of  $\chi^2/df$  should be less than 3, GFI and AGFI should be greater than 0.8, CFI and TLI should be more than 0.9, and RMSEA and SRMR should be lower than 0.08<sup>[18, 26–28]</sup>.

According to **Table 3**, the results of CFA suggested that the hypothesized model and the empirical data had an ideal fit. The value of  $\chi^2/df$  (2.206) was less than 3. Values of GFI (0.918) and AGFI (0.874) were higher than 0.8. Values of CFI (0.933) and TLI (0.911) were above 0.9. Values of RMSEA (0.078) and SRMR (0.039) were lower than 0.08.

**Figure 3** displays the path of the reading assessment literacy model for Chinese junior high school EFL teachers.

### 4.2. Status of Chinese Junior High School EFL Teachers’ Reading Assessment Literacy

#### 4.2.1. Knowledge

This study investigated two categories of information regarding teachers’ knowledge base in reading assessment.

The first dealt with the knowledge base of teachers in the teaching of English reading. The second related to the knowledge about several crucial concepts in educational assessment.

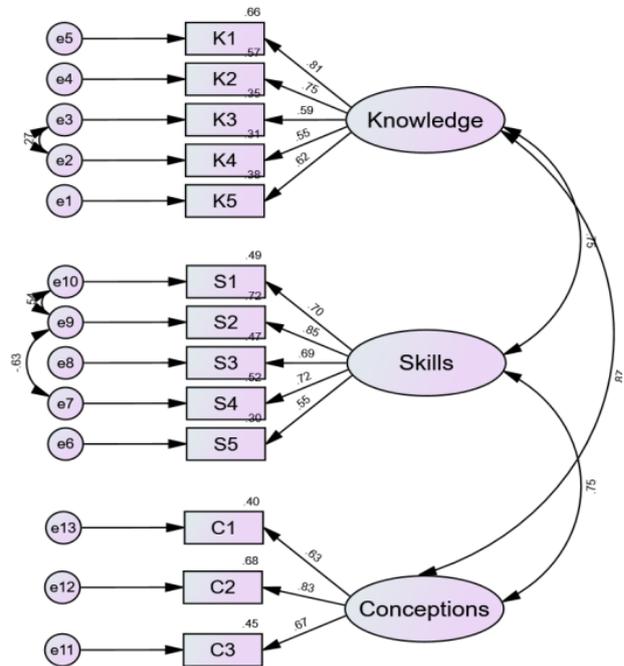


Figure 3. Structural model results.

The descriptive statistics of the knowledge part are presented in **Table 4**. The average score of junior high school EFL teachers in knowledge was 19.64, 78.56% of the full score (25). The mean values of all items were greater than 3. Among all the items, 2 items had an average score of over 4 points, and the average scores of other items ranged from 3.68 to 3.93, which reached the qualified level, indicating that the majority of junior high school EFL teachers had considerable knowledge about English reading teaching and educational assessment. Therefore, Hypothesis 1 was not supported.

Among all the items, the item which scored highest was “I know that English reading micro skills (such as understanding words’ meanings, summarizing main points) jointly affect students’ reading process.” (Mean = 4.09), aligned with “Level 3 of language skills” stipulated in the *English Curriculum Standards for Compulsory Education (2022 Edition)*<sup>[29]</sup>, which required students to judge and summarize the author’s viewpoint of the text, and infer the meaning of new words from written discourse based on context and word formation.

**Table 1.** Convergent validity and reliability of the reading assessment literacy model.

| Construct   | Items | Factor Loading | CR    | AVE   | Cronbach's Alpha |
|-------------|-------|----------------|-------|-------|------------------|
| Knowledge   | K1    | 0.616          | 0.801 | 0.451 | 0.811            |
|             | K2    | 0.554          |       |       |                  |
|             | K3    | 0.588          |       |       |                  |
|             | K4    | 0.752          |       |       |                  |
|             | K5    | 0.811          |       |       |                  |
| Skills      | S1    | 0.552          | 0.831 | 0.500 | 0.805            |
|             | S2    | 0.722          |       |       |                  |
|             | S3    | 0.686          |       |       |                  |
|             | S4    | 0.846          |       |       |                  |
|             | S5    | 0.700          |       |       |                  |
| Conceptions | C1    | 0.673          | 0.756 | 0.512 | 0.760            |
|             | C2    | 0.827          |       |       |                  |
|             | C3    | 0.631          |       |       |                  |

**Table 2.** Discriminant validity of the reading assessment literacy model.

| Model | $\chi^2$           | df     | $\chi^2/df$ | CFI   | GFI   | RMSEA | Model Comparison | $\Delta\chi^2$ | $\Delta df$ |
|-------|--------------------|--------|-------------|-------|-------|-------|------------------|----------------|-------------|
| 1     | Three-factor model | 130.15 | 59          | 2.206 | 0.933 | 0.078 |                  |                |             |
| 2     | Two-factor model 1 | 190.08 | 61          | 3.116 | 0.878 | 0.103 | 2 vs. 1          | 59.93***       | 2           |
| 3     | Two-factor model 2 | 204.16 | 61          | 3.346 | 0.865 | 0.109 | 3 vs. 1          | 74.01***       | 2           |
| 4     | One-factor model   | 219.17 | 62          | 3.535 | 0.851 | 0.113 | 4 vs. 1          | 89.02***       | 3           |

\*\*\*  $p < 0.001$ .

In contrast, the mean value of the item “I know the definitions, procedures, advantages and disadvantages of various assessment methods (such as portfolio assessment, self-assessment and peer assessment).” was relatively low (Mean = 3.68), suggesting that Chinese junior high school EFL teachers lacked a certain level of educational assessment knowledge.

#### 4.2.2. Skills

This section described Chinese junior high school EFL teachers’ reading assessment skills in terms of how teachers chose appropriate reading assessment materials, designed reading assessment activities, carried out and scored reading tests, as well as provided feedback in classroom reading assessments.

The descriptive statistics of the skills part are presented in **Table 5**. The average score of junior high school EFL teachers in skills was 19.75, 79% of the full score (25). The mean values of all items were greater than 3, revealing that Chinese junior high school EFL teachers had a professional level of skills in classroom reading assessment. Therefore, Hypothesis 2 was not supported.

Among all the items, the item which scored highest was “I can provide decision-making basis for English read-

ing teaching based on the information from reading assessment, take targeted remedial measures, and promote students’ learning through assessment.” (Mean = 4.10). This result showed that Chinese Junior high school EFL teachers could analyze and summarize the information collected from reading assessment during the teaching, and provide feedback to students, thereby promoting students’ learning.

In contrast, the mean value of the item “I can choose proper English reading materials based on students’ English language proficiency, control the difficulty of reading assessment tasks, and gradually help students build confidence.” was relatively low (Mean = 3.86), which suggested that Chinese junior high school EFL teachers could not effectively select English reading materials and design reading assessment tasks.

#### 4.2.3. Conceptions

This section targeted beliefs and principles Chinese junior high school EFL teachers had about reading assessment, which were closely connected to knowledge and skills and a critical piece of reading assessment literacy.

The descriptive statistics of the conceptions part are presented in **Table 6**. The average score of junior high school EFL teachers in conceptions was 12.18, 81.2% of the full

**Table 3.** Fit of the reading assessment literacy model.

| Indices        | $\chi^2/df$ | GFI   | AGFI  | CFI   | TLI   | RMSEA | SRMR  |
|----------------|-------------|-------|-------|-------|-------|-------|-------|
| Criteria       | <3          | >0.8  | >0.8  | >0.9  | >0.9  | <0.08 | <0.08 |
| Research Model | 2.206       | 0.918 | 0.874 | 0.933 | 0.911 | 0.078 | 0.039 |

**Table 4.** Teachers' reading assessment knowledge.

| Items  | Means | Standard Deviations |
|--|-------|---------------------|
| I know that English reading micro skills (such as understanding words' meanings, and summarizing main points) jointly affect students' reading process.                            | 4.09  | 0.88                |
| I know that English reading strategies can help students understand the meaning of texts, and students can control the problem-solving process by using Englishreading strategies. | 4.01  | 0.94                |
| I know that students' individual factors, such as English language proficiency and learning strategies, can affect their English reading comprehension.                            | 3.93  | 0.97                |
| I know that schemas play a key role in English reading comprehension.  | 3.93  | 0.85                |
| I know the definitions, procedures, advantages and disadvantages of various assessment methods (such as portfolio assessment, self-assessment and peer assessment).                | 3.68  | 0.85                |

score (15). As shown in **Table 6**, the mean values of all items were greater than 4, showing that the vast majority of teachers recognized the impact of reading assessment on students and school policies, and paid attention to ethical and moral issues when implementing reading assessment. Therefore, Hypothesis 3 was not supported.

Among all the items, the item which scored highest was “I believe that when implementing reading evaluation, EFL teachers should pay more attention to ethical and moral issues to avoid misuse and bias.” (Mean = 4.12). This result showed that Chinese Junior high school EFL teachers could use standard assessment criterion and make a more objective assessment to ensure fairness in English reading assessment, which valued the emotional experience of students in reading assessment.

By comparison, the mean value of the item “I believe that my personal belief in English reading assessment may have an impact on school assessment policies.” was relatively low (Mean = 4.02), which indicated that Chinese junior high school EFL teachers failed to recognize the impact of English reading assessment on the macro social environment.

## 5. Discussion

This study attempted to construct a research model of reading assessment literacy for Chinese junior high school EFL teachers and assess the current status of their reading

assessment literacy. Based on the results, the three constructs composing reading assessment literacy of Chinese junior high school EFL teachers were knowledge, skills, and conceptions. While many teachers qualified themselves as English reading assessors with pertinent knowledge, professional skills, and positive conceptions, they also lacked certain educational assessment knowledge, failed to select appropriate reading materials and design reading assessment tasks, and neglected the effect of English reading assessment on the macro social environment.

Knowledge was one of the constructs constituting Chinese junior high school EFL teachers' reading assessment literacy. Earlier studies on English teachers' reading assessment literacy and other studies on LAL in general also confirmed that<sup>[1, 14, 15]</sup>. The results showed that Chinese junior high school EFL teachers were considerably knowledgeable about English reading teaching and educational assessment. This finding was similar to Lam's study in writing context, where Hong Kong secondary teachers had considerable knowledge about writing assessment theories<sup>[2]</sup>. One possible cause could be that nearly 65.83% teachers involved in this study had a bachelor's degree, 34.17% having a master's degree. The majority of teachers majored in English education. Therefore, almost all teachers had received systematic training on English reading teaching. This would encourage Chinese junior high school EFL teachers to learn and master the knowledge of reading assessment.

**Table 5.** Teachers’ reading assessment skills.

| Items  | Means | Standard Deviations |
|--|-------|---------------------|
| I can provide decision-making basis for English reading teaching based on the information from reading assessment, take targeted remedial measures, and promote students’ learning through assessment. | 4.10  | 0.79                |
| I can design proper testing points around the important information in the texts when formulating English reading comprehension tests.   | 4.01  | 0.83                |
| I can use statistical data to summarize, analyze, and explain the results of English reading assessment.   | 3.90  | 0.98                |
| I can use statistical data to verify the validity and reliability of English reading assessments.  | 3.88  | 0.91                |
| I can choose proper English reading materials based on students’ English language proficiency, control the difficulty of reading assessment tasks, and gradually help students build confidence.       | 3.86  | 0.92                |

**Table 6.** Teachers’ reading assessment conceptions.

| Items  | Means | Standard Deviations |
|--|-------|---------------------|
| I believe that when implementing reading evaluation, EFL teachers should pay more attention to ethical and moral issues to avoid misuse and bias.  | 4.12  | 0.80                |
| I believe that English reading assessment is not only a means of evaluation, but also a classroom activity that promotes students’ learning and may have an impact on their learning motivation. | 4.04  | 0.79                |
| I believe that my personal belief in English reading assessment may have an impact on school assessment policies.  | 4.02  | 0.87                |

However, compared to the knowledge of English reading teaching, Chinese junior high school EFL teachers lacked a certain level of educational assessment knowledge. It was possibly because educational assessment knowledge for EFL teachers not only included declarative knowledge, but also procedural knowledge, thus teachers could only firmly grasp educational assessment knowledge through hands-on practice in classroom reading assessment.

Skills was the second important construct of reading assessment literacy for Chinese junior high school EFL teachers, which was consistent with other studies of English teachers’ reading assessment literacy and of LAL in general<sup>[1]</sup>. This finding implies that Chinese junior high school EFL teachers had a professional level in implementing classroom reading assessment, especially in providing assessment feedback to students. This result was different from Zhang and Zhou’s<sup>[31]</sup>, which showed that EFL teachers’ level of assessment literacy was low, particularly in the communication and feedback of assessment results. Presumably it was because diagnostic assessments such as formative assessments had gradually emerged in recent years, providing new ideas for

teachers’ assessment in classroom teaching.

In contrast, Chinese junior high school EFL teachers failed to effectively select English reading materials and design reading assessment tasks. Multiple-choice test is easy to answer and grade, making it the most common form in English exam to evaluate students’ reading ability<sup>[32]</sup>. Most junior high school EFL teachers choose to evaluate students’ reading ability in the form of standardized multiple-choice tests, while ignoring individual differences in students’ English proficiency. One teacher expressed her concern with selecting reading materials and designing assessment tasks as individual differences were not covered:

“Most reading assessments are presented in the form of multiple-choice tests, which are relatively monotonous and fail to consider the students’ differences in language proficiency. Improvement is needed.”

In an exam-driven context in which multiple-choice test has become a predominant form of reading assessment, teachers’ autonomy and ability in the selection of reading materials and the design of tasks are greatly hindered. This

dilemma can also be found in international language teachers, who also expressed their concerns about the balance between large-scale testing and classroom assessment that focuses on students' differences<sup>[13]</sup>.

Conceptions was also a significant construct of Chinese junior high school EFL teachers' reading assessment literacy. This result aligned with Lam's research on LAL in L2 writing and other studies on LAL in general<sup>[2, 33]</sup>. One finding was that the vast majority of teachers recognized the impact of reading assessment on students and school policies, and paid attention to ethical and moral issues when implementing reading assessment. This result could also be explained by Lam's study<sup>[2]</sup>. When it came to implementing English reading assessments, the identity of teachers as assessors had undergone a transformation, where students became participants and collaborators in assessment activities<sup>[29]</sup>.

By comparison, Chinese junior high school EFL teachers did not fully recognize the impact of English reading assessment on the macro social environment. There is one possible explanation for such result that the teachers in this study may not have realized the environmental impact of reading assessment, given the teachers are entirely focused on the students when implementing reading assessment. The direct purpose of reading assessment for teachers is to enhance students' reading ability, which will reduce their attention to macro environment. One teacher stated that:

“Massive assessments are provided to evaluate students' reading ability and to improve their reading speed and accuracy.”

The results of the study examine the components of reading assessment literacy for junior high school EFL teachers. In the present study, teachers reported a relatively high level of reading assessment literacy in knowledge, skills, and conceptions, which both confirms and contradicts the findings of researchers who found a low level of assessment literacy among teachers<sup>[1, 2, 30, 31, 33]</sup>.

## 6. Limitations and Suggestions for Future Research

This study relies on quantitative data and thus is not exempt from limitations. Firstly, the questionnaire is distributed and completed through an online platform, which

lacks qualitative data from interviews or classroom observations. Secondly, this study partly adopts the research method and instrument employed by Qiu and Lan<sup>[1]</sup>, but some adaptations are also made. In particular, apart from the principles teachers should follow in their assessments, this study also considers the attitudes and beliefs teachers hold towards reading assessment. Lastly, due to the limited time and the academic ability of the researcher, the research sample in this study is limited to 199 junior high school EFL teachers from Jiangsu province in China, which limits the generalizability of the findings.

According to the limitations mentioned above, some suggestions are proposed for further study. Firstly, further studies can incorporate quantitative and qualitative methods, such as interviews or classroom observations, which will enrich the data and provide deeper insights into teachers' assessment practices and challenges. Secondly, more original research tools need to be developed to draw context-specific conclusions. Lastly, further studies should increase the number of research participants by choosing teachers from different schools and different provinces.

## 7. Conclusion and Implications

This study has explored the constructs that constitute the model of Chinese junior high school EFL teachers' reading assessment literacy and the level of Chinese junior high school EFL teachers' knowledge, skills, and conceptions in the context of reading assessment. The major findings are summarized as follows. The three constructs composing reading assessment literacy of Chinese junior high school EFL teachers were knowledge, skills, and conceptions. While the teachers reported pertinent knowledge, professional skills, and positive conceptions about English reading assessment, some Chinese junior high school EFL teachers still lacked certain educational assessment knowledge, failed to effectively select English reading materials and design reading assessment tasks, and neglected the impact of English reading assessment on the macro social environment.

In light of the findings and analyses, this study suggests several pedagogical implications for language teachers and administrators to facilitate the development of Chinese junior high school EFL teachers' reading assessment literacy. First, through reflection, teachers can improve their assess-

ment judgments when evaluating reading, master procedural knowledge of educational assessment, and finally conduct reading assessment independently. Therefore, strengthening teachers' reflections on reading assessment may help to contribute to the enhancement of their reading assessment literacy. For example, teachers can do self-reflection by setting up work portfolios, keeping work diaries, writing educational essays, and conducting educational action research. Second, as suggested by results, principals can provide teachers opportunities for attempting to jointly develop assessment policies for schools and make the assessment of students' reading ability by teachers an important part of evaluating teachers' teaching. For instance, schools can regularly hold teacher conferences, which can not only allow teachers to share reading assessment strategies, but also provide opportunities for teachers to express their opinions and suggestions on school assessment policies. All these efforts can raise teachers' awareness of the macro environmental impact of reading assessment and externally motivate them to effectively carry out reading assessment. Third, Lam suggested making teachers' assessment literacy a mandatory part of teacher training qualifications, which would have a positive impact on teaching and learning in teacher training programmes<sup>[34]</sup>. Making reading assessment literacy a component of teacher certification would legitimize the measurement of reading assessment literacy in normal education and in-service training.

## Author Contributions

Conceptualization, L.Z. and F.S.; methodology, F.S.; formal analysis, L.Z.; investigation, L.Z. and F.S.; data curation, L.Z.; writing-original draft, L.Z., F.S., and Y.F.; writing-review & editing, L.Z., F.S., and Y.F.; supervision, F.S. and Y.F.; project administration, Y.F.

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## Institutional Review Board Statement

Ethical approval was not required in accordance with laws, regulations, and institutional requirements. Completion of the survey implied the participants' informed consent.

## Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

## Data Availability Statement

The data that support the findings of this study are available from the corresponding author, SFD, upon reasonable request.

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## Conflicts of Interest

The authors declare no conflict of interest.

## References

- [1] Qiu, X.F., Lan, C.S., 2022. Scale Formulation and Validity Verification of College English Teachers' Reading Assessment Literacy. *Foreign Language World*. 5, 63–70.
- [2] Lam, R., 2019. Teacher Assessment Literacy: Surveying Knowledge, Concepts and Practices of Classroom-Based Writing Assessment in Hong Kong. *System*. 81, 78–89. DOI: <https://doi.org/10.1016/j.system.2019.01.006>
- [3] Lan, C.S., Fan, S.Y., 2019. Developing Classroom-Based Language Assessment Literacy for In-Service EFL Teachers: The Gaps. *Studies in Educational Evaluation*. 61, 112–122. DOI: <https://doi.org/10.1016/j.stueduc.2019.03.003>
- [4] Roslan, R., Nishio, Y., Jawawi, R., 2022. Analyzing English Language Teacher Candidates' Assessment Literacy: A Case of Bruneian and Japanese Universities. *System*. 111, 102934. DOI: <https://doi.org/10.1016/j.system.2022.102934>

- [5] Jiang, J.L., 2019. College English Teachers' Assessment Literacy and Influencing Factors. *Foreign Language World*. 6, 18–26.
- [6] Mansouri, B., Molana, K., Nazari, M., 2021. The Interconnection Between Second Language Teachers' Language Assessment Literacy and Professional Agency: The Mediating Role of Institutional Policies. *System*. 103, 102674. DOI: <https://doi.org/10.1016/j.system.2021.102674>
- [7] Sun, H., Zhang, J., 2022. Assessment Literacy of College EFL Teachers in China: Status Quo and Mediating Factors. *Studies in Educational Evaluation*. 74. DOI: <https://doi.org/10.1016/j.stueduc.2022.101157>
- [8] Crusan, D., Plakans, L., Gebril, A., 2016. Writing Assessment Literacy: Surveying Second Language Teachers' Knowledge, Beliefs, and Practice. *Assessing Writing*. 28, 43–56. DOI: <http://dx.doi.org/10.1016/j.asw.2016.03.001>
- [9] Gao, M., Lin, D.L., 2021. On Secondary School English Teachers' Speaking Assessment Literacy: Theoretical Basis and Content Components. *Basic Foreign Language Education*. 23(6), 10–17.
- [10] Zhang, L.T., Yang, L.X., 2023. Exploring the Status Quo of High School English Teachers' Writing Assessment Literacy: A Case Study. *Foreign Language Education in China*. 3, 64–72. DOI: <https://doi.org/10.20083/j.cnki.fleic.2023.03.064>
- [11] Lee, I., Mao, Z.C., 2024. Writing Teacher Feedback Literacy: Surveying Second Language Teachers' Knowledge, Values, and Abilities. *Journal of Second Language Writing*. 63, 101094. DOI: <https://doi.org/10.1016/j.jslw.2024.101094>
- [12] Inbar-Lourie, O., 2008. Constructing a Language Assessment Knowledge Base: A Focus on Language Assessment Courses. *Language Testing*. 25(3), 385–402. DOI: <https://doi.org/10.1177/0265532208090158>
- [13] Fulcher, G., 2012. Assessment Literacy for The Language Classroom. *Language Assessment Quarterly*. 9(2), 113–132. DOI: <https://doi.org/10.1080/15434303.2011.642041>
- [14] Xu, Y.T., Brown, G.T.L., 2016. Teacher Assessment Literacy in Practice: A Reconceptualization. *Teaching and Teacher Education*. 58, 149–162. DOI: <http://dx.doi.org/10.1016/j.tate.2016.05.010>
- [15] Lin, D.L., 2019. A Reference Framework for Language Assessment Literacy of Primary and Secondary English Teachers. *Foreign Language Teaching and Research Press*.
- [16] Davies, A., 2008. Textbook Trends in Teaching Language Testing. *Language Testing*. 25(3), 327–347. DOI: <https://doi.org/10.1177/0265532208090156>
- [17] Fornell, C., Larcker, D.F., 1981. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*. 18(1), 39–50. DOI: <https://doi.org/10.2307/3151312>
- [18] Forza, C., Filippini, R., 1998. TQM Impact on Quality Conformance and Customer Satisfaction: A Causal Model. *International Journal of Production Economics*. 55(1), 1–20. DOI: [https://doi.org/10.1016/S0925-5273\(98\)00007-3](https://doi.org/10.1016/S0925-5273(98)00007-3)
- [19] Kline, R.B., 2005. *Principles and Practice of Structural Equation Modeling*, 2nd ed. Guilford Press: New York, NY, USA.
- [20] Steiger, J.H., 2007. Understanding the Limitations of Global Fit Assessment in Structural Equation Modeling. *Personality and Individual Differences*. 42(5), 893–898. DOI: <https://doi.org/10.1016/j.paid.2006.09.017>
- [21] Schumacker, R.E., Lomax, R.G., 2010. *A Beginner's Guide To Structural Equation Modeling*, 3rd ed. Routledge: New York, NY, USA.
- [22] Hair, J.F., 2006. *Multivariate Data Analysis*, 6th ed. Pearson Prentice Hall: Upper Saddle River, NJ, USA.
- [23] Awang, Z., 2015. *SEM Made Simple: A Gentle Approach to Learning Structural Equation Modelling*. MPWS Rich Publication: Selangor, Malaysia.
- [24] Hair, J.F., Black, W.C., Babin, B.J., et al., 2010. *Multivariate Data Analysis*, 7th ed. Pearson Prentice Hall: New York, NY, USA.
- [25] Nunnally, J.C., Bernstein, I.H., 1994. *Psychometric Theory*, 3rd ed. McGraw-Hill: New York, NY, USA.
- [26] Hu, L., Bentler, P.M., 1999. Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*. 6(1), 1–55. DOI: <https://doi.org/10.1080/10705519909540118>
- [27] McDonald, R.P., Ho, M.R., 2002. Principles and Practice in Reporting Structural Equation Analyses. *Psychological Methods*. 7(1), 64–82. DOI: <https://doi.org/10.1037/1082-989X.7.1.64>
- [28] Fan, X., Sivo, S.A., 2007. Sensitivity of Fit Indices to Model Misspecification and Model Types. *Multivariate Behavioral Research*. 42(3), 509–529. DOI: <https://doi.org/10.1080/00273170701382864>
- [29] Ministry of Education, 2022. *English Curriculum Standards for Compulsory Education*, 2022 ed. Beijing Normal University Publishing Group: Beijing, China.
- [30] Giraldo, F., 2018. Language Assessment Literacy: Implications for Language Teachers. *Profile: Issues in Teachers' Professional Development*. 20(1), 179–195. DOI: <https://doi.org/10.15446/profile.v20n1.62089>
- [31] Zhang, Y.D., Zhou, W.Y., 2017. An Empirical Research on Teachers' Pre-Service Assessment Literacy of Elementary and Secondary School in Shanghai. *Educational Measurement and Evaluation*. 9, 42–48. DOI: <https://doi.org/10.16518/j.cnki.ema.2017.09.007>
- [32] Cheng, X.T., Xie, S.Y., Yao, S.Z., 2023. Strategies for Optimizing Test Formats Based on the Assessment Principles in the New English Curriculum Standards. *Journal of China Examinations*. 11, 30–36. DOI: <https://doi.org/10.19360/j.cnki.11-3303/g4.2023.11.004>

- [33] Gao, X.Y., Sheng, Y.Q., 2023. Language Teachers' Assessment Literacy: Connotation, Framework and Prospect. *Foreign Language Research*. 40(6), 44–51. DOI: <https://doi.org/10.13978/j.cnki.wyyj.2023.06.014>
- [34] Lam, R., 2015. Language Assessment Training in Hong Kong: Implications for Language Assessment Literacy. *Language Testing*. 32(2), 169–197. DOI: <https://doi.org/10.1177/0265532214554321>