

English teachers' writing assessment literacy: Surveying teachers' knowledge, beliefs, and practises in China

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ABSTRACT: Writing assessment literacy (WAL) constitutes an integral part of language teachers' professional competence, and yet insufficient attention has been paid to the WAL of English as a foreign language (EFL) teachers from non-English-speaking countries. This study surveyed the knowledge, beliefs, and practises in writing assessment of 219 tertiary EFL teachers from China. Data were collected through a Likert-scale WAL Survey and analysed quantitatively with a focus on the WAL level of tertiary EFL teachers in China and the influence of their demographic characteristics. This was the first study exploring the relationship among different dimensions of WAL, namely, teachers' levels of knowledge, beliefs, and practises in writing assessment. The findings indicated that Chinese tertiary EFL teachers' WAL depicted a relatively positive picture. Teachers' training experiences, as well as academic degrees, had significant effects on teachers' WAL. Furthermore, teachers' writing assessment knowledge, as well as teachers' beliefs were two significant predictors of their writing assessment practises.

Keywords: language assessment literacy, writing assessment, teacher knowledge, teacher beliefs, teacher training

La competencia de evaluación de la escritura de los profesores de inglés: Estudio de los conocimientos, creencias y prácticas de los profesores en China

RESUMEN: La competencia en la evaluación de la escritura (WAL) forma parte integral de la habilidad profesional de los docentes de idiomas. Sin embargo, no se ha prestado suficiente atención a la WAL de los docentes del inglés como lengua extranjera (EFL) de los países no anglófonos. En el presente estudio se analizaron los conocimientos, las creencias y las prácticas en la evaluación de la escritura de los 219 profesores de EFL de nivel superior en China. Se recogieron los datos mediante una encuesta WAL con escala de Likert. Luego se analizaron cuantitativamente con un enfoque en el nivel de la WAL de los encuestados y la influencia que tenían sus características demográficas. Este es la primera investigación que explora la asociación y la relación entre las diferentes dimensiones de la WAL, concretamente, los niveles de conocimiento, las creencias y las prácticas de los profesores en la evaluación de la escritura. Los resultados mostraron que el nivel de conocimientos de los profesores chinos de EFL era relativamente positivo y que, a su vez, estaba significativamente influenciado por su experiencia docente y sus formación académica. Además, sus conocimientos y creencias eran dos factores significativos de sus prácticas de evaluación de la escritura.

Palabras clave: Competencia de evaluación lingüística, evaluación de la escritura, conocimientos del profesor, creencias del docente, formación del profesorado

1. INTRODUCTION

Language assessment literacy (LAL), defined as ‘the knowledge, skills, and principles that stakeholders involved in assessment activities are required to master in order to perform assessment tasks’ (Inbar-Lourie, 2017, p. 257), is an integral part of language teachers’ professional competence. A sound understanding of language assessment can help teachers plan, design, administer, and interpret the results of assessment tasks as well as communicate with different stakeholders, such as students and parents (Fulcher, 2012). Insufficient LAL, in contrast, may lead to poorly designed language assessments and invalid decisions based on assessment results (Crusan et al., 2016).

There are copious studies on teachers’ LAL, such as the studies of Baker (2016), Harding and Kremmel (2020), Kremmel and Harding (2019, 2020), and Taylor (2013). Writing assessment literacy (WAL), a subcategory of LAL, has also attracted scholarly attention during these years, because writing is one of the most challenging skills in English as a foreign language (EFL) education (Bai et al., 2020). Also, assessing and commenting on students’ writing is one of the main challenges for language teachers (Zhang, 2016). So far, a few studies have investigated teachers’ assessment literacy in writing assessment. For instance, Crusan et al. (2016) investigated the WAL of 702 tertiary English teachers globally, though 78% of whom came from English-speaking countries, and found that teachers’ linguistic backgrounds and teaching experiences significantly influenced their writing assessment knowledge, beliefs, and practises. More recently, Lam (2019) explored the assessment literacy regarding writing assessment of 66 secondary English teachers in Hong Kong and found that teachers were familiar with classroom writing assessment but had insufficient understanding of assessment as learning.

Existing investigations of teachers’ assessment literacy in writing assessment are dominated by studies in English-speaking countries or areas. However, though language teachers in non-English-speaking countries teach a foreign language to the vast majority of EFL learners, their WAL has received relatively limited attention. Little is known about their competence in writing assessment and how their learning, training, and working experiences exert an influence. Furthermore, although teachers’ WAL comprises different dimensions which may influence each other, prior investigations failed to explore the association and interplay between them.

To bridge these research gaps, the present study intends to investigate the WAL of tertiary EFL teachers in China, examining the influence of demographic characteristics on their WAL as well as the relationship among these teachers’ knowledge, beliefs, and practises in writing assessment. The results of the present study provide information about tertiary EFL teachers’ assessment literacy regarding writing assessment in a non-English-speaking context and inform the designs of both future postgraduate programmes in Teaching English as a second or foreign language (TESOL) and in-service professional training courses. Additionally, the results could help education policymakers better understand teachers’ professional competence in writing assessments, provide teachers with more opportunities to improve their abilities, and incorporate the assessment literacy requirements into EFL teacher qualifications. Finally, the findings could raise university administrators’ awareness about the significance of teachers’ assessment literacy and urge them to offer a supportive environment for teachers’ professional development.

2. LITERATURE REVIEW

2.1. LAL levels and WAL levels

Over the past decade, much research has been done to investigate teachers' LAL (e.g., Kiomrs et al., 2011; Önalán & Gürsoy, 2020; Tsagari & Vogt, 2017; Vogt & Tsagari, 2014; Weng & Shen, 2022). Most of these studies showed that the majority of teachers display a relatively low level of LAL (e.g., Berry et al., 2017; Lam, 2019; Xu & Brown, 2017). For example, Vogt and Tsagari (2014) conducted a mixed-methods study in seven European countries to examine 853 foreign language teachers' LAL. The findings indicate that most foreign language teachers' assessment literacy is underdeveloped and untrained. They were generally familiar with the development and design of traditional forms of language tests but knew little about alternative assessments. Several other studies have also reported that teachers misunderstood language assessment (Berry et al., 2017; Kiomrs et al., 2011), lacked relevant theoretical knowledge (Xu & Brown, 2017), or could not appropriately interpret the scores (Kim et al., 2020).

In recent years, it has become common to teach and assess different language skills separately, and the LAL for specific language skills seems more relevant to language teachers' assessment tasks. Given that writing assessment is regarded as one of the weakest links in language assessment (Zhang, 2016), several attempts have been made to look into teachers' LAL in writing assessment. Crusan et al. (2016) first surveyed the WAL of 720 university English writing teachers in 41 countries. The results indicated that most respondents had sufficient knowledge of writing test design, rubric use, portfolios, and source-based writing tasks, whereas many respondents still knew little about rubric design. Similar results can be found in Lam's (2019) investigation, which studied 66 secondary English teachers in Hong Kong through questionnaires, interviews, and classroom observations. The findings showed that the majority of secondary school English teachers in Hong Kong were knowledgeable about classroom writing assessments, whereas some still had a superficial understanding of assessment as learning. Current research on teachers' assessment literacy regarding writing assessment has mainly been conducted in English-speaking countries or areas. Given that LAL and WAL are highly contextualised and may vary from context to context, more research in non-English-speaking areas is necessary.

2.2. Teachers' knowledge, beliefs, and practises

Previous research has attempted to identify dimensions of LAL and a number of studies reached the consensus that LAL comprises assessment knowledge, beliefs about assessment and assessment practises (e.g., Davies, 2008; Fulcher, 2012; Giraldo, 2020; Inbar-Lourie, 2008). Regarding the assessment knowledge base teachers should have, the American Federation of Teachers, the National Council on Measurement in Education, and the National Education Association (1990) first developed seven standards of teacher competence for assessing students, such as selecting appropriate assessment approaches for instructional purposes, designing assessment methods effective for instructional decisions, and communicating and interpreting the assessment results with different stakeholders. Due to the unique

complexities of *language* assessment, in the following decades, the literature has centred on the assessment knowledge specifically required for language teachers (Brindley, 2001; Taylor, 2013). For instance, Brindley (2001) suggested that language teachers should have a solid understanding of the social context of language assessment, the meaning of language proficiency, the ways of administering and analysing language test results, the purposes and usage of tests, and the application of language tests. Taylor (2013) also pointed out that classroom teachers should have sufficient knowledge of language pedagogy, technical skills, and local assessment practises.

Aside from the knowledge about general language assessment, efforts have also been made to identify teachers' must-have knowledge in EFL writing assessment. Weigle (2007) suggested that EFL writing teachers should have a solid knowledge of designing and administering classroom writing assessments as well as preparation for large-scale writing assessments. Narrowing the scope to classroom writing assessment, Lee (2017) also listed teachers' essential knowledge, such as understanding the purposes of writing classroom assessments, the ways to conduct different classroom writing assessment tasks, the uses of feedback, and the interpretation of test results that future instruction will be based on.

Despite the widespread recognition of the significance of teachers' knowledge of assessment, knowledge alone cannot sufficiently prepare teachers to assess students' language abilities. Teachers' beliefs and practises also constitute key components of their LAL (e.g., Davies, 2009; Fulcher, 2012; Giraldo, 2020; Xu & Brown, 2016). Some studies have found that teachers' knowledge and beliefs would influence their practises (Askew & Askew, 1997; Ernest, 1989; Wilkins, 2008). A few studies have also examined the association between teachers' beliefs about language assessment and their assessment practises (e.g., Brown et al., 2009; Rogers et al., 2007; Wang et al., 2020). Brown et al. (2009) investigated nearly 300 teachers from primary and secondary schools in Hong Kong and found that there was a clear alignment between their assessment beliefs and their practises. In contrast, Wang et al. (2020) surveyed 136 Chinese EFL college teachers and discovered that their belief-practice discrepancies outweighed the alignments. So far, prior research has mainly paid attention to the association between assessment beliefs and practises, whereas the role of assessment knowledge and the relationship among assessment knowledge, beliefs, and practises have been relatively neglected.

2.3. Influences of demographic characteristics

In addition to investigating teachers' LAL or WAL levels, several studies have explored the influences of teachers' demographic characteristics on LAL and offered contradictory findings (e.g., Afshar & Ranjbar, 2021; Crusan et al., 2016; Xu & Brown, 2017). An example of this is the study carried out by Xu and Brown (2017) in China. In this study, the researchers adapted the Teacher Assessment Literacy Questionnaire (Plake et al., 1993) to survey 891 tertiary English teachers in China and explore the influence of demographic characteristics such as gender and academic qualification on teachers' LAL. The results showed that no single demographic characteristics had a significant effect on these teachers' LAL. However, interpretation of the results requires caution. The analysis of the psychometric characteristics of this survey showed that only a limited number of items were valid. The reason might have

been that the constructs of the Teacher Assessment Literacy Questionnaire were developed in the U.S. context about 20 years ago and could not adequately reflect the LAL profiles and demographic characteristics of Chinese teachers at present.

Similarly, Crusan et al.'s (2016) aforementioned study investigated tertiary language teachers all over the world and examined the impacts of background factors on their WAL. The findings showed that the country of origin and the years of teaching could significantly influence language teachers' WAL. The teachers from non-English-speaking countries displayed a significantly higher level of assessment knowledge and employed more assessment methods than the teachers from English-speaking countries. This might have been because more assessment training programmes were available for language teachers in non-English-speaking countries and improved their WAL. Furthermore, the teachers with 3-5 years of teaching experience reported a significantly higher level of assessment knowledge than the teachers with 11-20 years of teaching experience. The reason might have been that pre-service teacher training has evolved over time. Therefore, the newly recruited teachers might have received more advanced training and obtained more assessment knowledge.

More recently, Afshar and Ranjbar (2021) also examined the LAL of 50 Iranian teachers who taught English for academic purposes, including language teachers and content teachers. It was found that the field of study, university degree, and assessment training experiences significantly predicted the LAL of these teachers. To be more specific, the language teachers, the PhD degree holders, and the teachers with training experience had a greater understanding of language assessment than their counterparts. All in all, the review of relevant studies indicated that there has been little agreement on what demographic characteristics would affect LAL. There is still abundant room for further studies.

To sum up, several noticeable knowledge gaps have been identified from the review of prior studies. First, more investigations need to be undertaken in non-English-speaking countries or areas to assess teachers' WAL levels. Second, the association among language assessment knowledge, beliefs, and practises needs to be re-examined. Third, further work concerning the impact of language teachers' demographic characteristics on LAL/WAL is required due to the controversy surrounding the issue. Therefore, to fill these gaps, this study has sought to investigate the WAL of tertiary EFL teachers in the mainland of China. Three research questions are proposed:

RQ1 What is the WAL level of tertiary EFL teachers in China?

RQ2 Whether and how do the demographic characteristics (i.e., gender, tier of university, teaching experience, degree and major, academic title, training experience) influence the WAL of tertiary EFL teachers in China?

RQ3 Does a relationship exist among these EFL teachers' levels of knowledge, beliefs, and practises in writing assessment?

3. METHOD

A survey was conducted in this study in order to determine the WAL levels of Chinese tertiary EFL teachers, the influences of their demographic characteristics, and the potential relationships between various WAL constructs. This study employs a survey because it al-

lows the researcher to collect a large number of responses on a variety of topics in a brief period of time (Creswell, 2014). The obtained questionnaire responses were analysed using IBM SPSS Statistics 26.

3.1. Participants

A combination of simple random sampling and snowball sampling methods was used to recruit participants who worked as EFL teachers in Chinese universities. The researcher administered the online survey to different tiers of universities across China via emails and WeChat. In addition, some participants sent the survey link to their colleagues, friends, and alumni. Since this snowball sampling method may lead to bias, the researcher attempted to select different levels of universities from her social contacts and try to address this problem. Additionally, in order to be taken into consideration, the responders had to fulfil the criteria, which included having teaching expertise in writing instruction and working as a full-time EFL teacher in their English Department. Those who did not fit into this category would not have their response taken into consideration. In total, 260 Chinese tertiary EFL teachers completed the survey. There were 41 teachers who reported that they had no experience with teaching writing courses; their responses were removed. The responses from the other 219 teachers were then kept for research purposes.

As shown in Table 1, the 219 teachers comprised 171 women and 48 men. Of these, 80.8% had a master's degree, followed by 13.2% of teachers who held a PhD degree. In terms of these teachers' majors, 63.5% of the teachers majored in English with TESOL emphasis. The institutions teachers worked for spread over four different tiers of universities. More than half of the teachers had taught for more than 11 years, and 61.6% were ranked as lecturers.

3.2. Instrument

A survey instrument on the WAL of tertiary EFL teachers in China was adapted from Crusan et al.'s (2016) validated Writing Assessment Literacy Survey. The items which were not suitable for the Chinese university context were modified or excluded. The adapted survey comprised two parts. The first part elicited participants' demographic information, including gender, tier of university, teaching experience, degree and major, academic title, training experiences, and their preferred writing assessment strategies. The second part included three sections with 26 five-point Likert-scale items, from 1 (strongly disagree) to 5 (strongly agree), related to teachers' WAL level. The three sections are as follows: writing assessment knowledge (7 items), beliefs in writing assessment (13 items), and writing assessment practises (6 items). The example items include: "I comprehend the concept of scoring rubrics" (writing assessment knowledge); "scoring of writing is always inaccurate" (belief in writing assessment); and "I integrate writing with other skills when I design writing exams" (writing assessment practises).

The survey was translated into Chinese, the first language of the teachers. To ensure the content validity of the survey, three language assessment experts were invited to examine the theoretical rationale and the accuracy of wording of original items. Following that, four PhDs specialising in language assessment were recruited to further check the clarity of the items.

3.3. Data analysis

To answer the first research question, descriptive statistics were used to profile tertiary English writing teachers' knowledge, beliefs, and practises in writing assessment. To answer the second research question, inferential statistics tests, namely, t-tests and Kruskal-Wallis tests, were conducted to examine whether the demographic characteristics had an influence on teachers' knowledge, beliefs, and practises concerning writing assessment. To answer the third research question, correlation analysis and multiple regression analyses were run to examine the relationship among writing assessment knowledge, beliefs, and practises.

Table 1. *Demographic information of participants*

		N	%
<i>Gender</i>	Female	171	78
	Male	48	22
<i>Degree</i>	Bachelor's	13	5.9
	Master's	177	80.8
	Doctorate	29	13.2
<i>Major</i>	English (with TESOL emphasis)	139	63.5
	English	69	31.5
	Others	11	5
<i>Institution</i>	First-Tier University	29	13.2
	Second-Tier University	49	22.4
	Third-Tier University	67	30.6
	Fourth-Tier University	74	33.8
<i>Years of Teaching</i>	Less than 2 years	15	6.8
	3 to 5 years	29	13.2
	6 to 10 years	46	21
	11 to 20 years	85	38.8
	More than 21 years	44	20.1
<i>Title</i>	Teaching assistant	23	10.5
	Lecturer	135	61.6
	Associate Professor	51	23.3
	Professor	10	4.6
<i>English writing instruction training</i>	Yes	162	74
	No	57	26
<i>Formal assessment training</i>	Yes	112	51.1
	No	107	48.9
<i>Writing assessment training</i>	Yes	85	38.8
	No	134	61.2

4. RESULTS

The survey had good internal consistency reliability with an overall Cronbach’s alpha of 0.867 and 0.768 (beliefs), 0.888 (knowledge) and 0.742 (practise) for each subscale. In this section, the descriptive data is first discussed to show teachers’ knowledge, beliefs, and practises concerning writing assessment. Then the results from inferential analysis about the effects of demographic characteristics on WAL and the relationships among different dimensions of WAL are reported.

4.1. Writing assessment knowledge, beliefs, and practises

4.1.1. Writing assessment knowledge

Before analysing teachers’ writing assessment knowledge, their assessment training experiences, which constitute an important part of their professional development and assessment knowledge, should be analysed. According to Table 1, 74% of the participants reported that they had received English writing instruction training, and 51.1% received formal assessment training from various sources, such as graduate- or undergraduate-level courses, professional conferences, pre-service or in-service training, and internships. However, only 38.8% of participants had attended the training focusing on writing assessments.

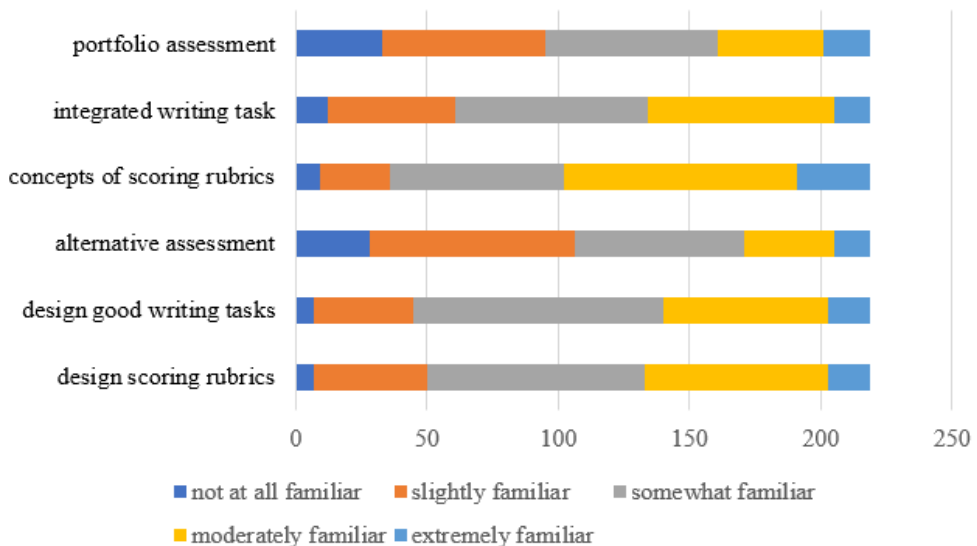


Figure 1. Teachers’ writing assessment knowledge

Regarding teachers’ familiarity with writing assessment knowledge, according to the 5-point Likert scale, the mean score of seven aspects of writing assessment knowledge was 3.07, which indicated that the participants were ‘somewhat familiar’ with the WAL know-

ledge. Of the data collected (see Figure 1), 83% of the participants reported that they were familiar (i.e., 'somewhat familiar', 'moderately familiar', or 'extremely familiar') with the concept of scoring rubrics. Participants were also familiar with designing good writing tasks (79%), designing scoring rubrics (77%), and the concept of integrated writing tasks (72%). On the contrary, only around half of the participants had knowledge of portfolio assessment (56%) and the concept of alternative assessment (48%).

4.1.2. *Writing assessment beliefs*

Beliefs about writing assessments comprise another part of teachers' WAL. The survey examined participants' beliefs from three perspectives: beliefs about the accuracy of writing assessment, beliefs about the writing assessment methods, and beliefs about some general issues of assessing writing.

Regarding the accuracy of writing assessments, participants held various views. Although 51% of the participants considered the scores of writing assessments were subjective, 54% of the participants still held that writing exams could provide a good estimate of students' writing ability.

In terms of the beliefs about writing assessment methods, surprisingly, 81% of participants regarded self-assessment as an effective method to assess students' writing ability. Integrated writing assessments were also favoured by 63% of participants. Although essay writing is frequently used in final examinations in Chinese universities, only 43% of the participants considered it the best way to assess writing. Compared with large-scale writing exams, only 37% held that teacher-made tests were better.

Participants were also asked about their views on some general issues concerning writing assessment. Most participants held positive attitudes towards writing assessments. Most participants regarded conducting assessments as an important ability for writing teachers (93%), believing that assessment played a significant role in writing instruction (82%) and could bring about good feedback (91%). When it comes to writing scoring, 53% of the participants believed that content should account for more weight than the accuracy (grammar) of a piece of writing.

4.1.3 *Writing assessment practises*

Regarding the practises in writing assessment, participants were asked about their approaches to classroom writing assessment. As indicated in Figure 2, 75% of participants reported that they would use scoring rubrics to evaluate students' work. 57% of the participants would discuss students' writing performance in the writing assessment with colleagues. Presently, teachers are not always the assessors of students' writing. Computer technology seemed prevalent in writing assessments and was adopted by 63.5% of the participants. Consistent with teachers' positive attitudes towards the effectiveness of self-assessment (see 5.1.2), 60.3% of the participants required students to do so.

Overall, the data indicated that teachers had a certain level of writing assessment knowledge and were capable of conducting diverse writing assessment techniques. Though their beliefs about writing assessments differed, the majority held a positive view.

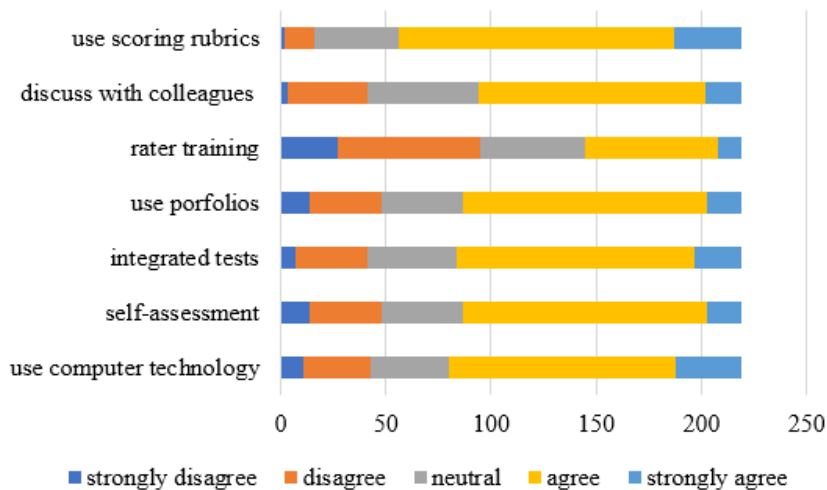


Figure 2. Teachers' writing assessment practises

4.2. Effects of demographic characteristics

To address the second research question, inferential statistics were conducted to examine whether demographic characteristics, namely, gender, tier of university, teaching experience, academic degree, major, academic title, or training experience, influenced EFL teachers' WAL.

4.2.1. Effects of teacher training

As shown in Table 1, participants reported their participation in three types of training, including writing instruction training, language assessment training, and writing assessment training. Descriptive statistics including mean and standard deviation have shown that teachers who have been trained used more writing assessment methods and had more writing assessment knowledge than others. The inferential analyses were as follows.

The Effect of Writing Instruction Training. The effects of writing instruction training on teachers' knowledge, beliefs, and practises concerning writing assessment were tested by independent sample t-tests. Before the t-test, the required assumptions of the independent sample t-test were checked. Based on skewness and kurtosis values (i.e., skew < |2.0| and kurtosis < |9.0|; Schmider et al., 2010), all samples were shown to be normally distributed. Additionally, the assumption of homogeneity of variances was tested and satisfied via Levene's test, and the error variances of the dependent variables were equivalent.

The results of independent sample t-tests indicated that the average *writing assessment knowledge* of teachers who received writing instruction training ($M = 3.1698, SD = 0.815$) was significantly higher than the level of the untrained teachers ($M = 2.781, SD = 0.766$), $t(217) = 3.148, p < 0.005$. The difference between the means was 0.389 on a 5-point Likert scale and Cohen's d was estimated at 0.485, which is close to a medium effect according to Cohen's (1992) guidelines.

Furthermore, the participants who took the writing instruction training ($M = 3.371$, $SD = 0.662$) also displayed significantly higher levels of writing assessment practises than those who were not trained ($M = 3.105$, $SD = 0.518$), $t(217) = 2.751$, $p < 0.01$. The difference between the two groups was 0.266 on the Likert scale and the Cohen's d was 0.424, also close to a medium effect (Cohen, 1992). No significant difference was observed between the writing instruction training and the assessment beliefs, $t(217) = -0.161$, $p = 0.872$.

The Effects of Assessment Training and Writing Assessment Training. The effects of assessment training and writing assessment training on teachers' knowledge, beliefs, and practises were also investigated by t-tests, given that the data were normally distributed, and the homogeneity of variances was tested and satisfied. The results indicated the significant effects of the assessment training on teachers' WAL. Similarly, the trained teachers displayed significantly higher levels of writing assessment knowledge ($M = 3.277$, $SD = 0.852$) than the untrained ones ($M = 2.850$, $SD = 0.724$), $t(217) = 3.981$, $p < .001$. Cohen's d was 0.538. The levels of trained teachers' writing assessment practises ($M = 3.409$, $SD = 0.638$) were also significantly higher than the practise level of the untrained teachers ($M = 3.190$, $SD = 0.619$, $t(217) = 2.587$, $p < 0.010$). Cohen's d was estimated at 0.350.

Similarly, the teachers who had attended writing assessment training also displayed significantly higher levels of knowledge and practises than their untrained counterparts. For the effect on teachers' knowledge, Cohen's d was 0.816, which is a large effect (Cohen, 1992). For the effect on teachers' practises, a medium effect was found with a Cohen's d of 0.646 (Cohen, 1992). However, both assessment training and writing assessment training had no significant effects on teachers' beliefs about writing assessment.

In summary, all three types of training significantly influenced teachers' writing assessment knowledge and practises. The writing assessment training had the largest effect size.

4.2.2. *Effects of academic degrees*

Given that the data for different academic degree holders' WAL were not normally distributed and that there were three levels of academic degrees which were ordinal variables, Kruskal-Wallis tests were conducted to explore the effects of teachers' academic degrees (i.e., bachelor, master, and PhD) on teachers' writing assessment knowledge, beliefs, and practises. The results of the Kruskal-Wallis tests revealed a statistically significant difference in writing assessment knowledge across teachers with different levels of academic degrees, $\chi^2(2, N = 219) = 8.196$, $p < 0.05$, whereas no significant difference was found between the writing assessment beliefs and writing assessment practises among different academic degree holders.

To further compare the assessment knowledge levels of different academic degree groups, follow-up pair-wise comparisons were conducted with a series of post-hoc Mann-Whitney U tests among these three groups. The results (the z score for each comparison, effect size $[r]$, and p -value) of the post-hoc tests are presented in Table 2, and significant differences in assessment knowledge levels were found between the PhD group and the master's group as well as between the PhD group and the bachelor group. Further comparison showed that the teachers with PhD degrees displayed significantly higher knowledge levels (Mean rank = 141.3) than those with master's degrees (Mean rank = 105.4)._

Table 2. *Pairwise comparisons of three selected academic degree groups on writing assessment knowledge*

WAL DIMENSION	PAIRWISE COMPARISON	Z	r	p
Writing assessment knowledge	Bachelor & Master	0.058	0.004	0.954
	Bachelor & PhD	2.188	0.337	0.029*
	Master & PhD	-2.785	0.194	0.005*

* $p < 0.05$.

4.3. The relationship among teachers' knowledge, beliefs, and practises of writing assessment

Correlation analyses were first conducted to examine the relationship among knowledge, beliefs, and practises, and statistically significant correlations were found. The highest correlation ($r = 0.55$) was found between knowledge and practises. The correlation between knowledge and beliefs was 0.28 and the correlation between beliefs and practises was 0.39. Then stepwise regression analyses were used to investigate the extent to which teachers' knowledge of and beliefs about writing assessments could predict teachers' writing assessment practises.

The results showed that both teachers' writing knowledge and their beliefs about writing assessment were significant predictors of their writing practises. As indicated in Table 3, Model 1 includes only the knowledge variable, indicating that knowledge significantly predicted practise ($R^2 = 0.30$, $F(1, 217) = 93.17$, $p = 0.000$). After adding the belief variable, Model 2 also reached a significant level ($R^2 = 0.36$, $F[1, 216] = 20.92$, $p = 0.000$). It shows that both knowledge and beliefs can significantly predict practise, and knowledge contributes more to the equation. In other words, as indicated by Table 4, the higher the teacher's knowledge level, the better the practise, $\beta = 0.37$, $t = 8.41$, $p = 0.000$; the higher the degree of belief, the better the practise will be, $\beta = 0.40$, $t = 4.57$, $p = 0.000$. Knowledge and beliefs explained 36% ($R^2 = 0.36$) of the total variance of the levels of teachers' writing assessment practises. According to the guidelines of Cohen (1992), it would belong to the large effect size.

In summary, the findings showed that teacher training significantly influenced teachers' writing assessment knowledge and practises, and academic degrees significantly affected teachers' writing assessment knowledge. However, no significant influence was found with other variables.

Table 3. *The model summary table with R square and change in R square for each model*

MODEL	R	R SQUARE	ADJUSTED R SQUARE	STD. ERROR OF THE ESTIMATE	CHANGE STATISTICS				
					R square change	F change	df1	df2	Sig. F change
1	.548 ^a	0.3	0.3	0.53	0.3	93.17	1	217	0
2	.602 ^b	0.36	0.36	0.51	0.06	20.92	1	216	0

a. Predictors: (Constant), knowledge

b. Predictors: (Constant), knowledge, beliefs

c. Dependent Variable: practises

Table 4. *Regression coefficients of teachers' knowledge, beliefs on teachers' writing assessment practises*

VARIABLE	MODEL 1			MODEL 2		
	B	β	SE	B	β	SE
Constant	1.99***		0.14	0.71*		
Knowledge	0.43***	0.55	0.05	0.37***	0.48	0.04
Beliefs				0.40***	0.26	0.09
R ²	0.30				0.36	
R ²					0.06***	

Note. N =219. The researcher examined the impact of teachers' knowledge and beliefs on teachers' assessment practises. In Model 1, the researcher entered the variable of knowledge to predict teachers' practises. In Model 2, the researcher entered beliefs as a predictor.

*p <0.05, **p <0.01, ***p < 0.001

5. DISCUSSION

This study investigated 219 Chinese tertiary EFL teachers' WAL in terms of knowledge, beliefs, and practises of writing assessment. Since the sample size is relatively small, the findings of this study cannot represent all university teachers in China, but they may indicate a possibility or a trend. Supporting the finding of Crusan et al. (2016), this present study showed that these EFL teachers were relatively familiar with writing assessment knowledge and writing assessment methods and held varying beliefs about writing assessment. The teachers also reported that these teachers would discuss writing assessment outcomes with their colleagues, which aligns with the perspective of Lam (2019), although the discussion among colleagues might prevent teachers from being exposed to more innovative assessment measures (Lam, 2019; Lan & Fan, 2019; Vogt & Tsagari, 2014).

A closer look at the findings shows that the tertiary EFL teachers in this study were unfamiliar with the concept of portfolio assessment and seldom put it into practise. A highly possible explanation may be the large class sizes in Chinese universities. There are about 30 students (English majors) to 70 students (non-English majors) in one class. Therefore, these teachers may not have sufficient time or energy to comment on so many students' writing portfolios. Additionally, most of these EFL teachers may not have access to portfolio assessment training. Therefore, they lack professional knowledge and experience in portfolio assessment (Zhang, 2009). This finding agreed with those of Ataie-Tabar et al. (2019), Lam (2019), and Lan and Fan (2019), who also reported that in Asian countries, EFL teachers normally were unfamiliar with portfolio assessment and lacked interest and experience.

Another important finding was that, in this study, these teachers' training experiences significantly influenced their assessment knowledge and practises. Echoing some prior studies (Afshar & Ranjbar, 2021; DeLuca et al., 2013; Lam, 2015), in this study, the writing assessment knowledge and practise level of the teachers who participated in the training were significantly higher than those of the untrained teachers. One possible reason might be that these training programmes covered the knowledge required for these teachers' daily writing assessment. After participating in the training programmes, teachers would have many opportunities to put what they had learnt into practise and in turn deepen their understandings, thereby enhancing the levels of their writing assessment knowledge and practises. That could also explain why the *writing* assessment training programmes had the greatest impact.

It was also found that these teachers' academic degrees significantly affected their knowledge of writing assessments. The teachers with doctoral degrees reported significantly higher levels of writing assessment knowledge than those with master's or bachelor's degrees; this result corroborated those of Afshar and Ranjbar (2021). Given that writing ability is one of the major criteria for admitting PhD students, and much of the writing training was provided by PhD programmes, the PhD-holding teachers in this study might have a more thorough understanding of writing and possess a stronger writing assessment ability than their master's/bachelor's-holding counterparts.

In this study, teachers' knowledge, beliefs, and practises of writing assessment correlated significantly with each other. Furthermore, both teachers' writing assessment knowledge and their beliefs had significant predictive effects on their writing assessment practises, and writing assessment knowledge enjoyed a higher degree of prediction. The teachers who were more knowledgeable about writing assessments, were more likely to transfer their knowledge into their writing assessment practises. Additionally, they would be more capable of evaluating their own practises and adjusting their assessment plans. And the teachers who held more positive attitudes about writing assessment would attempt to adopt more writing assessment methods. Such findings were somewhat in line with Askew and Askew (1997), Ernest (1989), and Wilkins (2008), who noted that teachers' knowledge and beliefs had a direct influence on teachers' practises.

6. CONCLUSION

The present study was intended to investigate teachers' WAL level and its association with teachers' demographic characteristics such as gender, the tier of university, teaching experience, degree and major, academic title, and training experiences. Additionally, it was

the first study to explore the relationship between teachers' writing assessment knowledge, beliefs, and practises. The findings have presented a relatively positive picture of teachers' WAL. Teachers' training experiences and academic degrees can significantly affect their WAL, whereas other demographic characteristics might not exert a significant influence. In addition, teachers' writing assessment knowledge and beliefs are two significant predictors of their writing assessment practises, which underscores the importance of teachers' mastery of writing assessment knowledge and their positive beliefs about writing assessments.

Some implications could therefore be proposed. First, compared with general assessment training and writing instruction training, a training programme specifically focusing on writing assessment could be an effective method to improve teachers' WAL because it could provide teachers with writing assessment knowledge and methods that could be put into practise in their daily teaching. Second, the writing assessment training should be added to master/bachelor-level TESOL programmes. Therefore, teachers with different levels of academic degrees would have chance to develop their WAL before they worked as teachers. Third, to improve teachers' competence in writing assessment, future training programmes should integrate teachers' knowledge, beliefs, and practises training as a whole to maximise the effectiveness of the training programmes. Fourth, EFL teachers should try their best to become familiar with alternative assessments, such as portfolios, which were found to be lacking by teachers in the current study. Finally, university administrations should provide EFL teachers with more space and opportunities to incorporate innovative writing assessment forms into their classes, therefore, teachers can accumulate useful experiences and inform future teaching.

7. LIMITATIONS

This study is not exempt from limitations. First, the participants who would choose to respond to the survey might tend to be interested in writing assessments. Therefore, it is possible that their WAL level would be relatively higher than the average level of EFL university teachers. Second, this study adopted close-ended survey items, which may have limited the scope of teachers' responses. Future research could collect data through open-ended questionnaires and interviews which would gather more detailed and in-depth information. Third, teachers might not have the ability to appropriately evaluate their assessment literacy in the writing assessment context, so the self-reported data might be inaccurate. More data sources such as classroom observation or tests of WAL should be included to provide more objective information and triangulate with each other as well. Finally, the sample size is relatively small, and the majority of the respondents came from eastern China, which has a relatively more advanced education system than other regions of China. Therefore, caution is warranted when interpreting the findings of this study, as the characteristics and the small size of the sample may limit these findings' generalisability.

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