

Pilot Study of Reading and Writing Anxiety Among Chinese EFL Majors by English Proficiency Level

Hu Kangna^{1*}, Ain Nadzimah Abdullah², Mohamad Ateff Md Yunos³

^{1, 2 & 3} School of Education, Taylor's University

¹ 0364821@sd.taylors.edu.my

² Ain_Nadzimah.Abdullah@taylors.edu.my

³ Ateff.Yusof@taylors.edu.my

**Corresponding author*

Received: 29 May 2025

Article history:
Accepted: 24 June 2025

Published: 1 October 2025

DOI: <https://doi.org/10.24191/ijmal.v9i4.6797>

Abstract

This pilot study presents preliminary findings from a doctoral project investigating reading and writing anxiety among English as a Foreign Language (EFL) majors at a Chinese university. The primary aim was to assess the feasibility, reliability, and validity of two adapted instruments: the Chinese versions of the Foreign Language Reading Anxiety Inventory (Zoghi, 2012) and the Second Language Writing Anxiety Inventory (Cheng, 2004). These instruments respectively measure top-down, bottom-up, and classroom-related reading anxiety, as well as cognitive, somatic, and avoidance-related writing anxiety. A total of 30 undergraduate English majors were selected through purposive sampling, and subsequently grouped by English proficiency using their National College Entrance Examination (NCEE) scores. Statistical analyses, including Cronbach's alpha and exploratory factor analysis, indicated strong internal consistency and structural validity for both scales. Several low-performing items were revised or removed based on item-total correlation, expert and participant feedback. The findings confirm the instruments' suitability for large-scale deployment and provide insights into anxiety patterns among learners with different proficiency levels. Implications for instrument refinement and targeted pedagogical interventions are also discussed.

Keywords: *Reading Anxiety, Writing Anxiety, EFL learners, Instrument Validation, English Proficiency, Chinese university students*

Introduction

English language proficiency has become a key criterion for academic success in Chinese universities, particularly for English majors. However, despite rigorous preparation for the National College Entrance Examination (NCEE), many Chinese students enter university with insufficient skills for academic reading and writing in English. Hence, some universities in China have adopted a holistic teaching approach that integrates the previously separate English reading and writing courses into a cohesive programme for English majors. This integration, though pedagogically beneficial, may inadvertently heighten anxiety among EFL students—a growing concern (Elovskaya et al., 2019; Zhu, 2021). These skill gaps often lead to elevated levels of anxiety, especially in tasks requiring extended focus, complex processing, and exposure to unfamiliar vocabulary and cultural references.

Reading anxiety in EFL contexts commonly emerges from learners' difficulties with decoding texts, grasping main ideas, or navigating unfamiliar genres. Similarly, writing anxiety arises from concerns about

Universiti Teknologi MARA, Vol. 9, No. 4, 2025

grammar accuracy, coherence, and fear of negative evaluation, all of which are exacerbated by academic expectations. While reading and writing anxiety have been widely studied as separate constructs, limited research has examined their combined presence or interaction within Chinese university settings.

Moreover, proficiency level is a potentially important moderator of language anxiety, yet its role remains under-explored. This pilot study was conducted to validate adapted Chinese versions of two established instruments: the Foreign Language Reading Anxiety Inventory (EFLRAI) (Zoghi, 2012) and the Second Language Writing Anxiety Inventory (SLWAI) (Cheng, 2004), for use among Chinese EFL undergraduates. The study also aimed to provide initial insights into the relationship between anxiety and language proficiency in preparation for a full-scale doctoral investigation.

Literature Review

This study draws on prior research into foreign language reading and writing anxiety, particularly within EFL contexts. The literature reveals that these anxieties are multidimensional and often shaped by linguistic proficiency, cognitive processing demands, and classroom experiences.

Foreign Language Reading Anxiety

Foreign Language Reading Anxiety (FLRA) refers to the discomfort learners experience when engaging with texts in a foreign language, commonly due to unfamiliar vocabulary, complex syntax, or culturally embedded content (Muhlis, 2017; Saito et al., 1999). FLRA is now understood as a multidimensional construct involving cognitive, emotional, and behavioural reactions (Capan & Karaca, 2013; Horwitz et al., 1986). High levels of FLRA have been associated with reduced comprehension, lower motivation, and increased task avoidance, especially among lower-proficiency learners (Brantmeier, 2005; Sellers, 2000).

To measure FLRA, the Foreign Language Reading Anxiety Scale (FLRAS) developed by Saito et al. (1999) remains a foundational tool. Zoghi (2012) extended this work by developing the English as a Foreign Language Reading Anxiety Inventory (EFLRAI), which incorporates dimensions more relevant to EFL learners, namely, top-down reading anxiety (difficulty extracting main ideas), bottom-up reading anxiety (word- and sentence-level processing), and classroom reading anxiety (anxiety triggered by reading aloud or teacher correction). These refinements have enhanced the contextual sensitivity of FLRA assessment tools (Guimba & Alico, 2015; Zoghi & Alivandivafa, 2014).

Foreign Language Writing Anxiety

Foreign Language Writing Anxiety (FLWA) refers to apprehension and avoidance behaviours linked to writing tasks in a second language, particularly when such tasks are associated with evaluation (Daly &

Miller, 1975; Hassan, 2001). FLWA has been conceptualised as comprising cognitive anxiety (e.g., fear of negative evaluation), somatic anxiety (e.g., physiological symptoms), and avoidance behaviours (e.g., reluctance to write), all of which impact learners' academic performance (Cheng, 2004; Rezaei & Jafari, 2014).

Several instruments have been developed to assess FLWA. While the Writing Apprehension Test (Daly & Miller, 1975) and Writing Anxiety Questionnaire (McKain, 1991) contributed to early understanding, they were limited by issues of construct validity and unidimensionality. The Second Language Writing Anxiety Inventory (SLWAI), developed by Cheng (2004), addresses these gaps by measuring three distinct subtypes of anxiety. It has demonstrated high reliability across diverse EFL populations, with Cronbach's alpha values typically above 0.90 (Cheng, 2004; Kirmizi & Kirmizi, 2015; Zhang, 2011).

Although numerous studies have linked lower English proficiency with higher levels of FLWA and FLRA (Cheng, 2004; Sellers, 2000), few have examined these constructs in tandem within a single study or explored their relationship in the Chinese EFL university context. This gap underscores the need for validated, culturally adapted instruments that can reliably capture the nuances of reading and writing anxiety among this population.

Theoretical Frameworks of Reading and Writing Anxiety

This study is grounded in cognitive-affective theories of second language acquisition (SLA), which posit that emotional factors such as anxiety can significantly affect learners' processing of input and output in a second language. Notably, Tobias's (1979) three-stage model and Krashen's (1982) Affective Filter Hypothesis offer complementary perspectives on how anxiety interferes with learning.

Tobias (1979) argues that anxiety impairs attention, encoding, and retrieval, making it harder for learners to process reading and writing tasks. Similarly, Krashen (1982) suggests that a high affective filter, triggered by fear, embarrassment, or lack of confidence, blocks language input from reaching the learner's cognitive faculties. These frameworks help explain why anxious learners may struggle to comprehend texts or avoid writing altogether.

Horwitz et al. (1986) further conceptualise Foreign Language Anxiety (FLA) as a situation-specific construct linked to fear of negative evaluation and self-perceptions of inadequacy in the language classroom. When applied to reading and writing, this theory accounts for the behavioural manifestations of anxiety, such as reluctance to participate or procrastinate on writing tasks, which can hinder academic success. Together, these theories justify the multidimensional structure of the instruments used in this study, which capture anxiety's cognitive, somatic, and behavioural components. They also support the rationale for exploring how proficiency levels mediate learners' affective responses to language tasks.

Methodology

This pilot study adopted a quantitative, cross-sectional design to assess the reliability, validity, and contextual appropriateness of two adapted anxiety measurement tools (the English as a Foreign Language Reading Anxiety Inventory (EFLRAI) and the Second Language Writing Anxiety Inventory (SLWAI) among Chinese EFL undergraduates. The instruments were translated into Mandarin and refined based on expert feedback and psychometric analysis.

Participants

A purposive sample of 44 third-year English majors was recruited from Hubei University of Automotive Technology (HUAT), a provincial university in China with curriculum features and learner demographics similar to the intended main research site (H University). After excluding incomplete or inconsistent responses, 30 valid cases were retained for analysis.

Participants ranged in age from 19 to 21 and had no prior study or travel experience in English-speaking countries. All had completed the National College Entrance Examination (NCEE), ensuring a comparable academic baseline. Gender distribution was skewed, with 26 females and 4 males, reflecting the broader demographic pattern among English majors in China.

To explore variations in anxiety by English proficiency, participants were divided into two groups based on their NCEE English scores. Students scoring equal to or above the sample mean ($M = 111.2$) were categorised as high proficiency, while those scoring at or below this threshold were categorised as low proficiency.

Instruments and Procedure

The pilot questionnaire consisted of four parts: (1) demographic background, (2) self-reported NCEE English scores, (3) the EFLRAI, and (4) the SLWAI. The EFLRAI (Zoghi, 2012) includes 27 items measuring three sub-constructs: Top-down Reading Anxiety (TRA), Bottom-up Reading Anxiety (BRA), and Classroom Reading Anxiety (CRA)(see Table 1). The SLWAI (Cheng, 2004) consists of 22 items assessing Cognitive Anxiety (CA), Somatic Anxiety (SA), and Avoidance Behaviour Anxiety (AA) (see Table 2).

Table 1: Sub-Constructs of the EFLRAI (27 Items)

Sub-construct	Item Numbers	Number of Items
Top-down Reading Anxiety (TRA)	Question 1-7	7
Bottom-up Reading Anxiety (BRA)	Question 8-21	14

Classroom Reading Anxiety (CRA)	Question 22-27	6
---------------------------------	----------------	---

Table 2: Sub-Constructs of the SLWAI (22 Items)

Sub-construct	Items (N=22)	Number of Items
Cognitive Anxiety (CA)	1, 3, 7, 9, 14, 17, 20, 21	8
Somatic Anxiety (SA)	2, 6, 8, 11, 13, 15, 19	7
Avoidance Behaviour Anxiety (AA)	4, 5, 10, 12, 16, 18, 22	7

The instruments underwent a rigorous translation and back-translation process, conducted by two bilingual language professionals. Expert reviewers in applied linguistics evaluated the Chinese versions for semantic, cultural, and conceptual equivalence. Necessary revisions were made to enhance clarity, contextual relevance, and item readability. The final versions were administered online using the Wenjuanxing platform. Participation was voluntary and anonymous. Ethical clearance and informed consent were obtained prior to data collection.

Data Analysis

Data were analysed using IBM SPSS Statistics Version 29. Descriptive statistics were computed to assess central tendencies and variability. Internal consistency of each subscale was evaluated using Cronbach’s alpha, with 0.70 as the minimum acceptable threshold (George & Mallery, 2024). Corrected Item-Total Correlations (CITC) were also examined to identify problematic items; values below 0.30 were flagged for potential revision or deletion.

Construct validity was assessed through Exploratory Factor Analysis (EFA). The Kaiser-Meyer-Olkin (KMO) measure and Bartlett’s Test of Sphericity were used to determine sampling adequacy and factorability. Factor loadings were analysed to confirm alignment between items and theoretical sub-constructs. Items that exhibited low loadings or cross-loadings were revised or removed in consultation with experts.

Results

Reliability of the Research Instruments

The internal consistency of the Chinese versions of the EFLRAI and SLWAI was evaluated using Cronbach’s alpha. Both instruments exceeded the conventional reliability threshold of $\alpha = 0.70$, indicating strong internal consistency and suitability for further use.

The EFLRAI (27 items) achieved a Cronbach’s alpha of 0.902, suggesting excellent reliability. Similarly, the SLWAI (22 items) yielded a Cronbach’s alpha of 0.882, reflecting good reliability. These

results support the internal coherence of the instruments and validate their use in the subsequent full-scale study.

Reliability Results of Reading Anxiety

Each EFLRAI subscale demonstrated acceptable to strong reliability. The Top-down Reading Anxiety (TRA) subscale recorded a Cronbach's alpha of 0.762; the Bottom-up Reading Anxiety (BRA) subscale reached 0.852; and the Classroom Reading Anxiety (CRA) subscale yielded 0.737. These values indicate that the subscales are sufficiently consistent for measuring their respective constructs among Chinese EFL learners. The results are presented in Table 3.

Table 3: Reliability of EFLRAI Subscales (Chinese Version)

Subscales	Number of Items	Cronbach's Alpha
Top-down Reading Anxiety (TRA)	7	0.762
Bottom-up Reading Anxiety (BRA)	14	0.852
Classroom Reading Anxiety (CRA)	6	0.737

To assess the internal consistency of the instruments, Corrected Item-Total Correlation (CITC) was examined as a key diagnostic indicator. CITC reflects the degree to which an item aligns with the overall construct it intends to measure (Pallant, 2020). Values above .30 are generally deemed acceptable (Field, 2018), while lower values may indicate poor item-fit and warrant revision or removal, particularly if their deletion improves Cronbach's alpha (DeVellis, 2016). Items TRA1 ($r = .224$), BRA21 ($r = .254$), and CRA26 ($r = .176$) fell below the recommended CITC threshold of .30, indicating weak item-scale alignment. Items BRA17 and CRA25 showed marginal values and were flagged for revision.

Based on psychometric evidence, expert input, and participant feedback, the three lowest-performing items (TRA1, BRA21, CRA26) were removed. BRA17 and CRA25 were revised to improve clarity and conceptual alignment. These adjustments strengthened the internal reliability of the refined scale (see Table 4).

Table 4: Item-Total Statistics of Reading Anxiety

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
TRA1	88.57	178.185	.224	.	.903
TRA2	88.67	172.506	.475	.	.898
TRA3	88.67	170.644	.533	.	.897
TRA4	88.33	170.782	.510	.	.898
TRA5	88.37	172.585	.467	.	.898
TRA6	88.37	170.999	.572	.	.897
TRA7	88.33	175.678	.335	.	.901
BRA8	88.87	164.947	.687	.	.894
BRA9	88.30	177.114	.320	.	.901
BRA10	88.37	173.137	.468	.	.899
BRA11	88.83	173.730	.353	.	.901
BRA12	88.80	171.200	.437	.	.899
BRA13	88.83	165.523	.617	.	.895
BRA14	88.97	165.344	.556	.	.897
BRA15	89.57	170.323	.473	.	.898
BRA16	88.47	171.499	.612	.	.896
BRA17	88.90	172.162	.436	.	.899
BRA18	89.77	172.392	.362	.	.901
BRA19	88.93	163.720	.741	.	.893
BRA20	89.33	166.644	.551	.	.897
BRA21	88.67	176.989	.254	.	.902
CRA22	89.57	164.323	.572	.	.896
CRA23	89.37	165.826	.611	.	.895
CRA24	89.27	169.789	.509	.	.898
CRA25	88.97	173.275	.393	.	.900
CRA26	90.33	180.989	.176	.	.903
CRA27	89.27	167.582	.555	.	.897

Reliability Results of Writing Anxiety

As indicated in Table 5, the SLWAI's three subscales also demonstrated satisfactory internal consistency. Cognitive Anxiety (CA) achieved a Cronbach's alpha of 0.822; Somatic Anxiety (SA), 0.813; and Avoidance Behaviour Anxiety (AA), 0.774. These results indicate that each subscale reliably measures its intended dimension of writing anxiety.

These findings align with previous studies. Cheng (2002; 2004) and Zhang (2011) confirmed the strong internal consistency of the SLWAI, with reported full-scale Cronbach's alpha values reaching as high

as 0.91. Similarly, Kirmizi (2015) also highlighted the high reliability of the SLWAI and its subscales. Thus, the Chinese version of the SLWAI was considered reliable and appropriate for the main study.

Table 5: Reliability of SLWAI Subscales (Chinese Version)

Subscales of SLWAI	Number of Items	Cronbach's Alpha
Cognitive Anxiety (CA)	8	0.822
Somatic Anxiety (SA)	7	0.813
Avoidance Behaviour Anxiety (AA)	7	0.774

Table 6: Item-Total Statistics of Writing Anxiety

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
WACA1	67.17	120.420	.428	.777	.878
WASA2	66.83	120.144	.471	.869	.877
WACA3	66.93	115.306	.640	.902	.871
WAAA4	66.73	127.237	.129	.747	.885
WAAA5	67.10	118.162	.585	.906	.874
WASA6	67.57	117.357	.589	.754	.873
WACA7	67.40	120.248	.391	.855	.879
WASA8	67.70	118.562	.444	.789	.878
WACA9	66.93	114.064	.652	.905	.871
WAAA10	67.33	112.161	.751	.899	.867
WASA11	67.33	116.092	.588	.896	.873
WAAA12	66.77	116.668	.561	.792	.874
WASA13	67.03	117.689	.550	.868	.874
WACA14	67.43	116.116	.595	.852	.873
WASA15	67.97	120.930	.427	.812	.878
WAAA16	68.00	122.345	.423	.818	.878
WACA17	66.73	121.030	.413	.883	.878
WAAA18	66.77	125.495	.210	.827	.883
WASA19	67.93	119.237	.470	.769	.877
WACA20	67.17	122.006	.306	.887	.882
WACA21	67.13	113.706	.618	.796	.872
WAAA22	67.13	129.361	.007	.792	.888

CITC analysis revealed three items that failed to meet the 0.30 criterion (WAAA4, $r = 0.129$; WAAA18, $r = 0.210$; and WAAA22, $r = 0.007$) (see Table 6). Notably, removing WAAA22 increased the overall alpha from 0.882 to 0.888. Consequently, all three items were deleted, raising the SLWAI's final alpha to 0.896. These modifications enhanced both reliability and construct clarity.

Validity of the Research Instruments

Two forms of validity were assessed: face/content validity and construct validity. An expert in ESL and Applied Linguistics reviewed the instruments for clarity, cultural appropriateness, and conceptual alignment. Feedback led to minor revisions of several items to improve readability and contextual fit.

Construct validity was examined using Exploratory Factor Analysis (EFA). For the EFLRAI, all subscales met the required thresholds: KMO values exceeded 0.60 (TRA = 0.679, BRA = 0.618, CRA = 0.723), and Bartlett's Test of Sphericity was highly significant ($p < .001$ for all). The SLWAI also showed

strong construct validity, with KMO values above 0.60 (CA = 0.727, SA = 0.808, AA = 0.616) and significant Bartlett's Test results ($p < .001$). These results confirm that the revised instruments exhibit robust structural validity in the pilot context.

Construct Validity of EFLRAI

The Construct Validity results for the Chinese version of the EFLRAI are presented in Table 7.

Table 7: Construct Validity: KMO and Bartlett's Test for EFLRAI Subscales (Chinese Version)

Subscale of RA	KMO Value (KMO>0.6)	Bartlett's Test (p-value)
Top-down Reading Anxiety (TRA)	0.679	0.000
Bottom-up Reading Anxiety (BRA)	0.618	0.000
Classroom Reading Anxiety (CRA)	0.723	0.000

All three EFLRAI subscales demonstrated strong construct validity. The KMO values were 0.679 (TRA), 0.618 (BRA), and 0.723 (CRA), while Bartlett's tests were highly significant for all subscales ($p < .001$). These results confirm that each set of items measures a coherent latent construct and supports the multidimensional framework of reading anxiety.

Construct Validity of SLWAI

Table 8 presents the construct validity results for the Chinese version of the Second Language Writing Anxiety Inventory (SLWAI), which consists of three sub-constructs: Cognitive Anxiety (CA), Somatic Anxiety (SA), and Avoidance Behaviour Anxiety (AA). The Kaiser-Meyer-Olkin (KMO) values for all sub-constructs exceeded the minimum recommended threshold of 0.60, suggesting that the sampling was adequate for factor analysis. Specifically, the KMO values were 0.727 for CA, 0.808 for SA, and 0.616 for AA.

Furthermore, Bartlett's Test of Sphericity was statistically significant ($p < .001$) across all three sub-constructs, indicating that the correlation matrices were appropriate for factor analysis. These findings collectively support the construct validity of the SLWAI, confirming that each subscale effectively captures a distinct dimension of second language writing anxiety among Chinese EFL learners.

Table 8: Construct Validity: KMO and Bartlett's Test for SLWAI Subscales (Chinese Version)

Subscale	KMO Value (KMO>0.6)	Bartlett's Test (p-value)
Cognitive Anxiety (CA)	0.727	0.000
Somatic Anxiety (SA)	0.808	0.000
Avoidance Behaviour Anxiety (AA)	0.616	0.000

Item Revision Based on Feedback

In response to reliability testing, expert review, and participant comments, several questionnaire items were revised or removed. Low-performing items with poor CITC values were deleted, while others were reworded to enhance grammatical accuracy, semantic clarity, or cultural appropriateness.

For example, EFLRAI Item 2 was revised for clarity (“It is worrying to me...” became “It worries me...”), and EFLRAI Item 5 was rephrased to correct a grammatical error. SLWAI Items 4, 18, and 22 were removed due to poor CITC and conceptual ambiguity.

All revised items were subsequently re-evaluated for internal consistency to ensure the instruments maintained psychometric robustness. These revisions represent a critical step in culturally adapting established instruments for use in the Chinese EFL context.

Table 9: Summary of Item Revisions Based on Pilot Feedback

Instrument Section	Item No.	Original Wording	Feedback Source	Type of Issue Identified	Action Taken
EFLRAI	1	I do not feel at ease when the title of the text is unfamiliar to me.	Reliability Test	Low corrected item-total correlations	deleted
EFLRAI	2	It is worrying to me when the ideas expressed in the text are culturally unclear.	Expert validation	Unclear expression	Revised to “It worries me when the ideas in the text are culturally unclear.”
EFLRAI	5	When I cannot recognize minor ideas (details) of the text is worrying to me.	Expert validation	Grammatical inaccuracy	Revised to “I feel anxious when I cannot identify the smaller details in the text.”
EFLRAI	21	I get confused when I encounter a certain grammar point that I understand but makes no sense to me.	Reliability Test	Low corrected item-total correlations	deleted
EFLRAI	26	It makes me uncomfortable when the instructor corrects my pronunciation or translation mistakes.	Reliability Test	Low corrected item-total correlations	deleted
SLWAI	4	I often choose to write down my thoughts in English.	Reliability Test	Low corrected item-total correlations	deleted
SLWAI	18	I usually seek every possible chance to write English	Reliability Test	Low corrected item-total correlations	deleted

		compositions outside of class.			
SLWAI	22	Whenever possible, I would use English to write compositions.	Reliability Test	Low corrected item-total correlations	deleted

Discussion

The findings from this pilot study confirm that the adapted Chinese versions of the EFLRAI and SLWAI are psychometrically sound tools for assessing reading and writing anxiety among Chinese EFL undergraduates. Both instruments demonstrated high internal consistency and acceptable construct validity, supporting their use in a larger-scale investigation.

The results highlight the importance of contextually adapting existing instruments. Several items that performed well in the original versions did not exhibit strong item-total correlations in the Chinese context, likely due to linguistic or cultural differences. This underscores the necessity of rigorous piloting and expert review during scale adaptation, particularly for cross-linguistic research.

The removal and revision of items with low CITC values led to improvements in reliability, with both instruments exceeding the conventional threshold for Cronbach's alpha after refinement. These findings align with previous validation studies (e.g., Cheng, 2004; Zoghi & Alivandivafa, 2014), which emphasize the multidimensionality of skill-specific language anxiety and the benefits of targeted measurement.

Preliminary trends observed in this pilot also provide pedagogical insights. Participants with lower English proficiency appeared to exhibit higher anxiety levels across both reading and writing tasks. While inferential statistics were not applied due to the small sample size, this trend is consistent with prior research linking lower proficiency to heightened anxiety (Cheng, 2004; Sellers, 2000). These findings suggest that language anxiety may be moderated by linguistic competence, with lower-proficiency learners being particularly vulnerable.

From an instructional perspective, the findings support the need for differentiated pedagogical interventions. Strategies such as anxiety-reducing reading scaffolds, guided writing support, and culturally responsive materials may be particularly beneficial for lower-proficiency learners. Additionally, awareness of the somatic, cognitive, and behavioural symptoms of writing anxiety can help instructors design more empathetic and supportive classroom environments.

Overall, the pilot study achieved its objective of evaluating the feasibility and psychometric robustness of the adapted instruments. The data offer valuable direction for refining both the measurement tools and the research procedures for the full-scale study.

Conclusion and Implications

This pilot study provides evidence that the adapted versions of the English as a Foreign Language Reading Anxiety Inventory (EFLRAI) and the Second Language Writing Anxiety Inventory (SLWAI) are reliable and valid tools for use among Chinese undergraduate EFL learners. Both instruments showed strong internal consistency and acceptable construct validity following careful cultural and linguistic adaptation.

The process of item revision, informed by statistical diagnostics, expert review, and participant feedback, was essential to enhancing the instruments' contextual sensitivity and measurement accuracy. This underscores the importance of localised validation, especially when using established tools across different linguistic and educational settings.

The pilot also revealed preliminary patterns suggesting that learners with lower English proficiency may experience higher levels of reading and writing anxiety. While further investigation is needed to statistically confirm these trends, the findings highlight a potentially important interaction between proficiency and affective factors in language learning. This suggests the need for responsive pedagogical strategies tailored to learners' emotional and linguistic profiles.

For future research, the validated instruments will be employed in a full-scale study involving a larger and more diverse sample. Inferential statistical methods will be used to examine the relationships between anxiety dimensions, proficiency levels, and language performance. The study may also incorporate qualitative components to provide deeper insights into learners' lived experiences with language anxiety.

Ultimately, this research contributes to the growing literature on skill-specific language anxiety and offers practical tools for both researchers and educators seeking to better understand and support EFL learners in high-stakes academic environments.

Author contributions

Conceptualisation, methodology, formal analysis, and initial draft preparation by Hu Kangna; supervision, writing, review, and editing by Prof Dr Ain Nadzimah Abdullah and Dr Mohamad Ateff Md Yunos. All authors have reviewed and approved the manuscript for publication.

Funding

This programme and research did not receive funding from any organisation.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author, [0364821@sd.taylors.edu.my]. The data are not publicly available due to [restrictions e.g. their containing

information that could compromise the privacy of research participants]. This study received an ethics review exemption from the university, referenced as HEC 2025/161.

Conflicts of interest

No potential conflict of interest was reported by the authors.

Acknowledgement

We sincerely thank everyone who helped complete this research paper, especially the supervisor and the review committee. Their guidance, support, and valuable feedback played a crucial role in shaping our work.

References

- Brantmeier, C. (2005). Anxiety about L2 reading or L2 reading tasks? A study with advanced language learners. *Reading in a Foreign Language*, 17(2), 67–85.
- Capan, S. A., & Karaca, M. (2013). A comparative study of listening anxiety and reading anxiety. *Procedia - Social and Behavioral Sciences*, 70, 1360–1373. <https://doi.org/10.1016/j.sbspro.2013.01.198>
- Cheng, Y. (2002). Factors associated with foreign language writing anxiety. *Foreign Language Annals*, 35(6), 647–656. <https://doi.org/10.1111/j.1944-9720.2002.tb01903.x>
- Cheng, Y. S. (2004). A measure of second language writing anxiety: Scale development and preliminary validation. *Journal of Second Language Writing*, 13(4), 313–335. <https://doi.org/10.1016/j.jslw.2004.07.001>
- Daly, J. A., & Miller, M. D. (1975). The empirical development of an instrument to measure writing apprehension. *Research in the Teaching of English*, 9(3), 242–249. <https://doi.org/10.58680/rte197520067>
- DeVellis, R. F. (2016). *Scale development: Theory and applications* (4th ed.). SAGE Publications.
- Elovskaya, S., Stanchuliak, T., & Karandeeva, L. (2019). The holistic approach to teaching English as a foreign language. *INTED2019 Proceedings*, 1253–1258. <https://doi.org/10.21125/inted.2019.0402>
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics 5th ed.* Sage.
- George, D., & Mallery, P. (2019). *IBM SPSS statistics 26 step by step: A simple guide and reference.* Routledge. <https://doi.org/10.4324/9780429056765>
- Guimba, W. D., & Alico, J. C. (2015). Reading anxiety and comprehension of grade 8 Filipino learners. *International Journal of Humanities and Social Sciences*, Special Volume, 44–59. https://www.academia.edu/33435635/Special_Issue_April_2015#page=46

- Hassan, B. A. (2001). The relationship of writing apprehension and self-esteem to the writing quality and quantity of EFL university students. ERIC. <https://eric.ed.gov/?id=ED459671>
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125–132. <https://doi.org/10.2307/327317>
- Kirmizi, Ö., & Kirmizi, G. D. (2015). An investigation of L2 learners' writing self-efficacy, writing anxiety and its causes at higher education in Turkey. *International Journal of Higher Education*, 4(2), 57–66. <https://doi.org/10.5430/ijhe.v4n2p57>
- Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Pergamon Press. https://www.academia.edu/35019808/Principles_and_Practice_in_Second_Language_Acquisition
- McKain, T. L. (1991). *Cognitive, affective, and behavioral factors in writing anxiety* [Doctoral dissertation, The Catholic University of America]. ProQuest Dissertations Publishing. <https://search.proquest.com/docview/303927385>
- Muhlis, A. (2017). Foreign language reading anxiety among Indonesian EFL senior high school students. *English Franca: Academic Journal of English Language and Education*, 1(1), 19–44. <https://doi.org/10.29240/ef.v1i1.160>
- Pallant, J. (2020). *SPSS survival manual: A step-by-step guide to data analysis using IBM SPSS* (7th ed.). Routledge. <https://doi.org/10.4324/9781003117452>
- Rezaei, M., & Jafari, M. (2014). Investigating the levels, types, and causes of writing anxiety among Iranian EFL students: A mixed-method design. *Procedia - Social and Behavioral Sciences*, 98, 1545–1554. <https://doi.org/10.1016/j.sbspro.2014.03.577>
- Saito, Y., Garza, T. J., & Horwitz, E. K. (1999). Foreign language reading anxiety. *The Modern Language Journal*, 83(2), 202–218. <https://doi.org/10.1111/0026-7902.00016>
- Sellers, V. D. (2000). Anxiety and reading comprehension in Spanish as a foreign language. *Foreign Language Annals*, 33(5), 512–520. <https://doi.org/10.1111/j.1944-9720.2000.tb01995.x>
- Tobias, S. (1979). Anxiety research in educational psychology. *Journal of Educational Psychology*, 71(5), 573–582. <https://doi.org/10.1037/0022-0663.71.5.573>
- Zhang, H. (2011). A study on ESL writing anxiety among Chinese English majors: Causes, effects and coping strategies [Master's thesis, Kristianstad University]. DiVA. <https://www.diva-portal.org/smash/record.jsf?pid=diva2:426646>
- Zhu, Z. (2021). The Relationship between Reading Anxiety and Reading Performance: A Comparison Study of Chinese Postgraduates in China and in the UK. *Journal of Higher Education Research*, 2(4), 197–211. <https://doi.org/10.32629/jher.v2i4.389>

- Zoghi, M. (2012). An instrument for EFL reading anxiety: Inventory construction and preliminary validation. *The Journal of Asia TEFL*, 9(1), 31–56.
- Zoghi, M., & Alivandivafa, M. (2014). EFL Reading Anxiety Inventory (EFLRAI): Factorial validity and reliability. *Journal of Psychoeducational Assessment*, 32(4), 318–329.
<https://doi.org/10.1177/0734282913513686>