CellMed
Orthocellular Medicine and Pharmaceutical Association

Original Article

An Analysis of Korean Language Teachers' Teaching Anxiety Using the KLAST: The Effects of Gender and Native-Speaker Status

Bu-Kyu Chae[1]*

[1]*Professor, Department of Pharmacology, Seoul National University, Seoul, Republic of Korea*

ABSTRACT

Objective: This study aimed to analyze teaching anxiety among Korean language teachers according to gender and native-speaker status, and to explore the characteristics of these anxiety experiences.

Materials and Methods: A secondary analysis was conducted using factor analysis data from Chae & Cho (2025). One hundred in-service Korean language teachers participated, and teaching anxiety was measured using the Korean Anxiety Scale for Teachers (KLAST). Normality tests, independent samples t-tests, Welch t-tests, and Mann–Whitney U tests were conducted to compare anxiety levels by gender and native-speaker status.

Results: Male teachers reported higher anxiety than female teachers regarding difficulties assessing student comprehension and meeting learner expectations. Non-native speaking teachers reported higher anxiety than native speakers concerning decreased student engagement, potential impacts of pronunciation or grammatical errors on lessons, and challenges managing classes due to weak student-teacher relationships. These results indicate that teacher anxiety is influenced by both individual and structural or situational factors.

Conclusion: This study provides evidence that teaching anxiety among Korean language teachers varies by gender and native-speaker status. The findings highlight the need for tailored professional development and emotional support programs to enhance teacher well-being and educational practice.

Keywords Korean language teacher, Teaching Anxiety, Gender difference, Native-speaker status, KLAST

INTRODUCTION

Korean language teachers experience a wide range of emotions throughout their teaching activities, and emotions such as enjoyment and anxiety directly and indirectly affect class engagement, interactions with learners, and lesson design and implementation. These emotions are particularly important in the context of Korean language education, where teachers must manage classes while interacting with diverse learners. According to Pekrun's (2006) Control-Value Theory, teachers' emotions are determined by their perceived control over tasks and the value they attribute to them within the learning context. These emotions play a crucial role in shaping teachers' engagement, motivation, job satisfaction, and their interactions with students.[1]

Positive emotions in teachers have been reported to be positively correlated with class engagement and job satisfaction, whereas negative emotions (e.g., anxiety, anger) show negative correlations with engagement and work-related stress (Burić & Frenzel, 2023[2]). Furthermore, teachers' emotions manifest across the entire teaching context, including lesson management, student responses, and interactions, and have been found to be significantly associated with self-efficacy, class engagement, and the formation of relationships with learners (Frenzel et al., 2009[3], 2016[4], 2018[5]; Dewaele & Li, 2020[6]).

Research on the emotions of Korean language learners has been actively conducted recently (Song & Cho. 2025[7]; Han et al., 2025[8]; Chae et al., 2025[9]; Song et al., 2025[10]; Kim et al., 2025[11]; Yoo et al., 2025[12]; Song 2025[13]). However, research on teachers' emotions is relatively limited (Park & Fraschini, 2025[14]; Song, 2025[15]; Chae & Cho, 2025[16]).

In particular, existing research primarily focuses on teaching anxiety in non-native teachers or prospective native teachers (Yoon & Choi, 2015[17]; Kim, 2024[18]; Oh & Lee, 2024[19]; Lee &

*Correspondence: Bu-Kyu Chae
E-mail: chae67@khu.ac.kr
Received Nov 07, 2025; **Revised** Nov 26, 2025; **Accepted** Nov 27, 2025; **Published** Nov 28, 2025
doi: http://dx.doi.org/10.5667/CellMed.2025.016

Oh, 2025[20]). Differences in anxiety based on teachers' gender and native speaking status have not been fully investigated.

Therefore, this study conducted a secondary analysis of the factor analysis data from Chae & Cho (2025)[16], who developed the Teacher Emotion Scale, to identify the emotional characteristics of Korean language teachers by gender and native speaker status. By comparing anxiety levels and subfactors across male and female teachers, as well as native and non-native teachers, this study empirically explored the emotional characteristics of Korean language teachers. The results of this study are expected to serve as a foundation for learner-centered instructional design and the development of teacher emotional support policies.

MATERIALS AND METHODS

Research Design

This study, a secondary analysis utilizing data collected for factor analysis of the Teacher Emotion Scale in the study by Chae & Cho (2025)[16], aimed to explore classroom-related anxiety among Korean teachers by gender and native speaker status. The research design was based on a quantitative approach, focusing on empirical assessment of teacher anxiety and comparing differences by gender and language background. Through this, we aim to examine how teacher anxiety functions as a complex emotion that interacts not only with individual characteristics but also with classroom environment and sociocultural factors.

Participants and Sample Characteristics

The participants of this study were 100 Korean language teachers working in various educational contexts both in Korea and abroad. There were no restrictions on age, gender, educational background, or teaching experience in the recruitment process.

Regarding gender, 23 participants (23%) were male and 77 (77%) were female, indicating a higher proportion of female teachers. In terms of linguistic background, 76 teachers (76%) were native speakers of Korean, and 24 (24%) were non-native speakers, with native speakers accounting for approximately three-quarters of the total sample. The age distribution was as follows: 9 teachers (9%) in their 20s, 16 (16%) in their 30s, 43 (43%) in their 40s, 26 (26%) in their 50s, and 6 (6%) aged 60 or above, with the largest group being those in their 40s.

As for academic background, 36 participants (36%) held a master's degree, 7 (7%) were doctoral students, 23 (23%) had completed coursework for a doctoral degree, and 25 (25%) held a doctoral degree, indicating that 91% of the participants possessed a graduate-level education. Teaching experience varied as follows: less than 1 year (6%), 1–5 years (11%), 5–10 years (20%), 10–15 years (19%), 15–20 years (28%), and over 20 years (16%), with 44% of teachers having more than 15 years of teaching experience.

Overall, the sample consisted predominantly of female, native-speaking, middle-aged teachers with graduate-level education and mid- to long-term teaching experience. This composition closely reflects the demographic characteristics of teachers in the field of Korean language education, making it a suitable sample for exploring teachers' emotional experiences. However, because the number of male and non-native teachers was relatively small, the statistical power of some analyses may be limited. To address this limitation, potential effects of age, experience, and education level were examined, and statistical methods considering sample imbalance were applied.

Ethics Statement

This study did not require IRB review as it did not involve clinical procedures, collection of personally identifiable

information, or sensitive data. Participation was entirely voluntary, and participants were informed about the study

purpose and confidentiality of their responses, providing implicit consent before participation

Research Instrument

The instrument used in this study was the Korean Language Anxiety Scale for Teachers (KLAST), which constitutes a part of the emotional measurement scale for Korean language teachers developed by Chae & Cho (2025)[16]. The KLAST was designed to measure teachers' anxiety experienced during classroom instruction and consists of seven items. Each item addresses different aspects of teaching-related anxiety, including lesson preparation, learners' comprehension and reactions, unexpected events during class, lesson quality and satisfaction, teacher's professional competence (e.g., pronunciation and grammar), and relationship building with students. Detailed descriptions of the items are presented in Table 1.

Table 1. Items of the Korean Language Anxiety Scale for Teachers (KLAST)

Item	Description
KLAST_1	I feel anxious when my lesson preparation is insufficient or not properly done.
KLAST_2	I feel anxious when I cannot determine whether students understand the lesson content.
KLAST_3	I feel flustered and anxious when unexpected problems arise during class.
KLAST_4	I worry that students may find my class boring.
KLAST_5	I feel burdened by the need to meet students' expectations.
KLAST_6	I am worry that my pronunciation or grammatical mistakes may negatively affect the class.
KLAST_7	It is difficult to conduct the class effectively if I cannot build good relationships with students.

Note: KLAST = Korean Language Anxiety Scale for Teachers

Each item was rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree), with higher scores indicating higher levels of anxiety in classroom situations.

The construct validity of the KLAST was examined through exploratory factor analysis (EFA) and confirmatory factor

analysis (CFA), which supported a unidimensional factor structure. The reliability of the scale was reported as Cronbach's α = .80 and McDonald's ω = .804, indicating adequate internal consistency. Furthermore, Bayesian estimation of reliability yielded a posterior mean of Cronbach's α = .727 (95% credible interval [0.595, 0.855]), demonstrating that the scale maintains a stable structure despite the relatively small number of items.

The analysis procedure of the present study was as follows. First, the normality of the data for each group was assessed using the Shapiro–Wilk test. When the assumptions of normality and homogeneity of variance were met, an Independent Samples t-test was applied; when these assumptions were violated, a nonparametric Mann–Whitney U test was conducted. In addition, given the imbalanced sample sizes between male (n = 23) and female (n = 77) teachers, as well as between native (n = 76) and non-native (n = 24) teachers, Welch's t-test was performed to account for potential violations of the equal variance assumption. To enhance the reliability and generalizability of the findings, the potential effects of sample imbalance on statistical power and result interpretation were carefully considered.

RESULT

KLAST Item-level Anxiety by Gender

Normality tests indicated that some items did not meet the assumption of a normal distribution. Therefore, to examine gender differences in teacher anxiety levels, Independent Samples t-tests (Student's t-test), Welch's t-tests, and nonparametric Mann–Whitney U tests were conducted.

The item-level analysis of teacher anxiety by gender revealed that male teachers reported higher mean anxiety scores than female teachers across all items; however, statistically significant differences were observed only for certain items. Specifically, significant gender differences were found for KLAST_2 (difficulty assessing students' comprehension) and KLAST_5 (pressure to meet students' expectations) (see Table 2).

For KLAST_2, all three tests revealed statistically significant gender differences: Student's t-test (p = .005), Welch's t-test (p = .001), and Mann–Whitney U-test (p = .007), with effect sizes ranging from medium to large (Cohen's d = –0.685 to –0.740). Similarly, KLAST_5 showed significant differences across all three tests (p = .011 to .016; d = –0.583 to –0.609). These results indicate that male teachers reported higher anxiety than female teachers in situations involving the assessment of students' understanding and meeting learners' expectations.

In contrast, for KLAST_1, KLAST_3, KLAST_4, KLAST_6, and KLAST_7, males had higher mean scores, but these differences did not reach statistical significance (p > .05), suggesting minimal gender differences or insufficient statistical power.

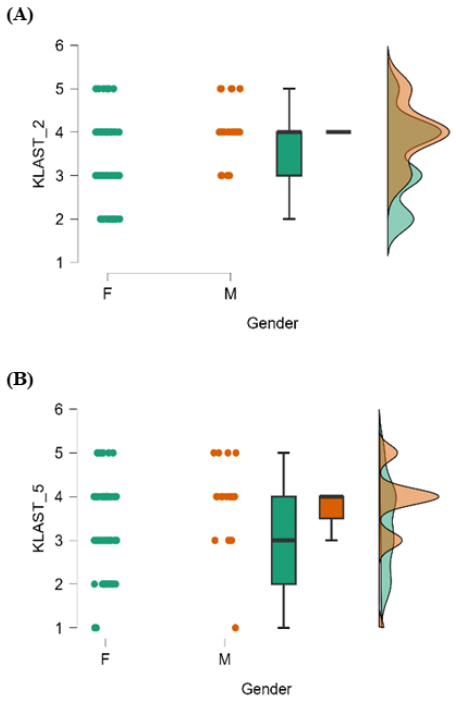

Fig. 1. Raincloud plots of anxiety scores by gender. (A) KLAST_2. (B) KLAST_5. Dots show individual teacher scores, boxplots indicate medians and interquartile ranges (IQR), and density curves represent score distributions. Scores of female teachers are more widely spread, while male teachers' scores are concentrated at higher levels. F = Female, M = Male.

The plots show individual data points, probability density, and median scores. Male teachers generally reported higher

Table 2. Teacher Anxiety by KLAST_2 and KLAST_5: Differences by Gender

	Test	Statistic	df	p	Effect Size	SE Effect Size
KLAST_2	Student	-2.883	98	0.005	-0.685	0.244
	Welch	-3.405	48.98	0.001	-0.74	0.245
	Mann-Whitney	575.5		0.007	0.35	0.137
KLAST_5	Student	-2.454	98	0.016	-0.583	0.242
	Welch	-2.689	42.14	0.01	-0.609	0.243
	Mann-Whitney	598.5		0.011	0.334	0.137

Note: KLAST = Korean Language Anxiety Scale for Teachers; **Statistic:** Test statistic (t-test, Welch t-test, Mann–Whitney U, etc.); **df**: Degrees of freedom; **p**: p-value; **Effect Size:** Magnitude of the effect (**Cohen's d;** negative values indicate higher scores in male teachers due to the subtraction order used, e.g., female – male); **SE**: Standard error; **Significance symbols**: Student = Student's t-test; Welch = Welch's t-test; Mann-Whitney = Mann-Whitney U test; * p < .05; ** p < .01; *** p < .001.

scores on both items, indicating greater task-related anxiety in situations requiring assessment of students' understanding and fulfillment of learners' expectations.

2. Anxiety Levels of KLAST Items by Native Speaker Status

To examine differences in anxiety levels between native and non-native teachers, the Shapiro–Wilk test was conducted. For most items, the p-values were below .05, indicating that the assumption of normality was not met. Accordingly, to account for violations of normality, group differences were tested using Student's t-test, Welch's t-test, and a nonparametric test (Mann–Whitney U) simultaneously (see Table 3).

The item-level analysis of teacher anxiety by native speaker status showed that, on average, non-native teachers reported higher anxiety scores than native teachers across all KLAST items; however, statistically significant differences were observed only for some items.

For KLAST_4 ("I worry that students may find my class boring"), all three tests indicated significant differences (Student's t-test p = .006, Welch t-test p = .004, Mann–Whitney p = .005), with medium-to-large effect sizes (Cohen's d = –0.657 to –0.681), suggesting that non-native teachers experience relatively higher anxiety regarding learners' responses.

For KLAST_6 ("I am worry that my pronunciation or grammar mistakes may negatively affect the class"), the differences were most pronounced (Student' t-test p < .001, Welch p = .003, Mann–Whitney p = .002) with the largest effect sizes (d = –0.824 to –0.786), indicating that non-native teachers feel greater pressure about linguistic accuracy and potential errors during class.

For KLAST_7 ("It is difficult to conduct the class effectively if I cannot build good relationships with students"), significant differences were also observed (Student's t-test p = .016, Welch p = .011, Mann–Whitney p = .017) with medium effect sizes (d ≈ –0.58), demonstrating that non-native teachers experience more anxiety regarding classroom relationships and management.

The group differences for KLAST_1 and KLAST_5 varied depending on the statistical method and effect size. KLAST_1 showed significance only in the Welch t-test (p = 0.026, d = -0.458), while Student's t-test and Mann–Whitney U tests were not significant, suggesting moderate differences in mean scores but no clear differences in medians or overall distributions. In contrast, KLAST_5 was significant only in the Mann–Whitney U test (p = 0.044, r = 0.265), indicating small-to-moderate differences in rank-based distributions despite minimal mean differences.

KLAST_2 and KLAST_3 showed no significant differences across all tests (p > .05), and effect sizes were small (d ≈ –0.3 to –0.4), indicating that teacher anxiety on these items was relatively unaffected by native speaker status.

DISCUSSION

In this study, the teaching anxiety of Korean language teachers was analyzed in terms of gender and native-speaker status. The results indicated that male teachers reported relatively higher anxiety than female teachers on KLAST_2 (difficulty assessing students' understanding) and KLAST_5 (pressure to meet students' expectations), which may be related to the situational demands of evaluating student comprehension or fulfilling learners' expectations. Similarly, Aydın & Uştuk (2020) [20] found that male EFL teachers in Turkey experienced higher foreign language teaching anxiety than female teachers, particularly regarding low self-confidence in language proficiency, fear of negative evaluation, class preparation, and

Table 3. Teacher Anxiety by KLAST Items 1, 4, 5, 6, and 7: Differences by Native Speaker Status

	Test	Statistic	df	p	Effect Size	SE Effect Size
KLAST_1	Student	-1.74	98	0.085	-0.407	0.236
	Welch	-2.269	67.93	0.026	-0.458	0.237
	Mann-Whitney	749		0.155	0.179	0.135
KLAST_4	Student	-2.804	98	0.006	-0.657	0.240
	Welch	-3.026	44.15	0.004	-0.681	0.241
	Mann-Whitney	583		0.005	0.361	0.135
KLAST_5	Student	-1.85	98	0.068	-0.433	0.237
	Welch	-1.78	36.53	0.083	-0.425	0.237
	Mann-Whitney	672.5		0.044	0.265	0.135
KLAST_6	Student	-3.517	98	< .001	-0.824	0.243
	Welch	-3.221	34	0.003	-0.786	0.243
	Mann-Whitney	539		0.002	0.409	0.135
KLAST_7	Student	-2.454	98	0.016	-0.575	0.239
	Welch	-2.666	44.7	0.011	-0.598	0.239
	Mann-Whitney	638		0.017	0.3	0.135

Note: KLAST = Korean Language Anxiety Scale for Teachers; **Statistic:** Test statistic (t-test, Welch t-test, Mann–Whitney U, etc.); **df:** Degrees of freedom; **p**: p-value; **Effect Size**: Magnitude of the effect (**Cohen's d**; negative values indicate higher scores in non-native teachers due to the subtraction order used, e.g., native – non-native); **SE**: Standard error; **Significance symbols:** Student = Student's t-test; Welch = Welch's t-test; Mann-Whitney = Mann-Whitney U test; * p < .05; ** p < .01; *** p < .001.

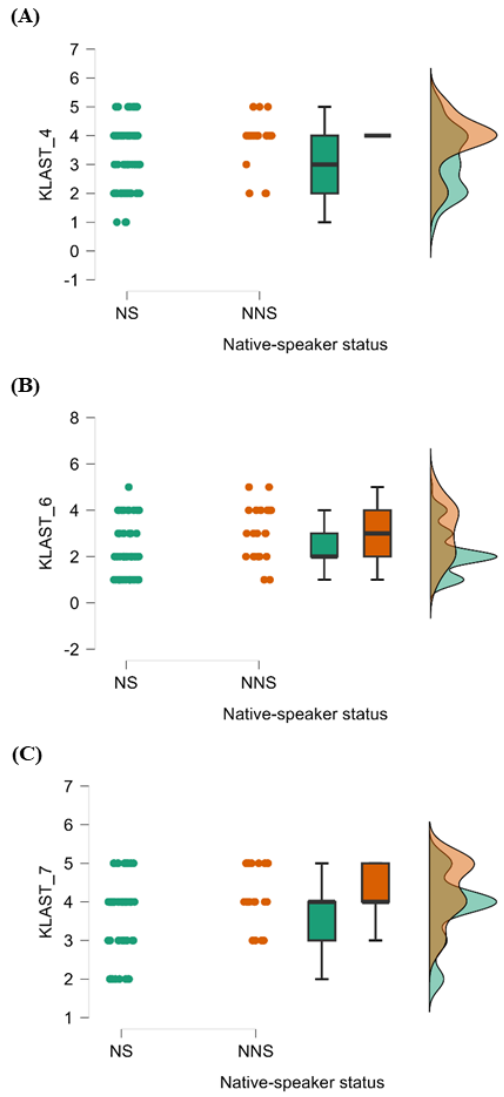

Fig. 2. Raincloud plots of anxiety scores by native speaker status. (A) KLAST_4. (B) KLAST_6. (C) KLAST_7. Dots represent individual scores, boxplots show medians and IQR, and curves indicate score distributions. Colors distinguish NS and NNS, with NS scores more widely distributed and NNS scores higher and more concentrated. NS = Native Speaker, NNS = Non-Native Speaker.

time management. Their study highlights that teaching anxiety is not solely linked to language use but is closely associated with situational factors such as student engagement, peer or mentor evaluation, and classroom environment. Therefore, the observed gender differences in the present study should be interpreted with caution, considering classroom context and situational demands rather than attributing them solely to individual characteristics or gender. While tendencies in anxiety experiences may vary by gender, these should be understood as one possible explanation, emphasizing the importance of integrating educational and contextual factors.

Non-native teachers reported higher anxiety than native teachers on KLAST_4 (concerns about class boredom), KLAST_6 (fear of the repercussions of pronunciation or grammar errors), and KLAST_7 (challenges in managing classes when student-teacher relationships are weak). Notably, even experienced non-native teachers felt a strong pressure to maintain linguistic accuracy, whereas native teachers exhibited an inherent confidence, which contributed to their lower reported anxiety. These results are consistent with previous research (Lee & Oh, 2025[21]) that found non-native teachers experience persistent concerns about linguistic accuracy and classroom management, suggesting that these concerns may persist regardless of teacher experience.

Non-native teachers' high anxiety may be the result of a combination of concerns about linguistic accuracy, classroom management demands, and increased self-monitoring during class. Furthermore, relational tensions and cultural uncertainty arising from interactions with learners may exacerbate anxiety. Therefore, non-native teachers' anxiety reflects not simply personal or psychological limitations, but rather a complex interplay of linguistic, educational, and relational factors.

This study defines teacher anxiety not as a purely individual psychological characteristic, but as an emotional experience arising from the classroom environment and interpersonal relationships. This perspective emphasizes that teachers' emotions cannot be fully understood without considering the educational environment and learner interactions, providing a broader framework for studying teacher emotions.

Finally, this study has several limitations due to sample imbalance. The relatively small number of male teachers (n = 23) and non-native teachers (n = 24) may reduce statistical power and limit the accuracy of effect size estimation in some analyses. When samples are small or unbalanced, true effects may not be detected as statistically significant, or effect sizes may be over- or underestimated. In addition, unbalanced samples can be sensitive to assumptions related to group variance (e.g., the homogeneity of variance assumption in Student's t-test), which requires careful interpretation of the results.

Future research should aim to address these limitations by increasing the participation of underrepresented groups to ensure adequate sample size and balance. Moreover, statistical approaches such as bootstrapping, weighted analyses, or multilevel modeling can help mitigate estimation bias due to sample imbalance and enhance the reliability of findings. In addition, combining quantitative research with qualitative approaches can provide a more in-depth exploration of the patterns, causes, and emotional responses associated with teaching anxiety, as well as coping strategies in actual classroom settings. Such complementary approaches can compensate for phenomena that are difficult to capture through quantitative analysis alone and contribute to more meaningful interpretations in research on teacher anxiety.

CONCLUSION

This study demonstrates that teaching anxiety among Korean language teachers varies according to gender and native-speaker status, and that it is shaped by a variety of contextual factors. Male teachers experienced relatively higher anxiety due to situational demands associated with assessing student comprehension and meeting learners' expectations, whereas non-native teachers reported persistent anxiety related to maintaining linguistic accuracy, classroom management, student relationships, and cultural uncertainties. These findings highlight that teacher anxiety should not be understood merely as an individual characteristic or psychological limitation, but rather as an emotional experience arising from the classroom environment, interpersonal interactions, and educational contexts.

Therefore, professional development programs aimed at supporting teachers should incorporate emotional support and take into account the situational demands and contextual factors influencing teacher anxiety. Moreover, employing a multi-method approach that combines quantitative and qualitative research can provide deeper insights into the causes, coping strategies, and emotional experiences of teaching anxiety in real classroom settings, offering practical and research-based implications for enhancing teacher well-being and connecting empirical research with educational practice.

ACKNOWLEDGEMENT

The author gratefully acknowledges the voluntary participation of the teachers whose insights made this study possible.

RESEARCH FUNDING

This research received no external funding.

CONFLICT OF INTEREST

The authors declare no competing interests.

REFERENCES

1. Pekrun R. The control-value theory of achievement emotions: Assumptions, corollaries, and implications for educational research and practice. *Educ Psychol Rev*. 2006;18:315–341.
2. Burić I, Frenzel AC. Teacher emotions are linked with teaching quality: Cross-sectional and longitudinal evidence from two field studies. *Learn Instr*. 2023;88:101822.
3. Frenzel AC, Goetz T, Lüdtke O, Pekrun R, Sutton RE. Emotional transmission in the classroom: Exploring the relationship between teacher and student enjoyment. *J Educ Psychol*. 2009;101(3):705–716.
4. Frenzel AC, Pekrun R, Goetz T, Daniels LM, Durksen TL, Becker-Kurz B, et al. Measuring teachers' enjoyment, anger, and anxiety: The Teacher Emotions Scales (TES). *Contemp Educ Psychol*. 2016;46:148–163
5. Frenzel AC, Goetz T, Stephens EJ, Jacob B. Teaching with passion: The role of teacher emotion in motivation and classroom processes. In: Pekrun R, Linnenbrink-Garcia L, editors. *International handbook of emotions in education*. Routledge; 2018. p. 389–404
6. Dewaele JM, Li C. The emotional rollercoaster of language teaching: Emotions, cognition, and teacher well-being. *Mod Lang J*. 2020;104(4):705–720.
7. Song BW, Cho HY. A study on the development and application of the enjoyment scale for Korean language education: focusing on the improvement of translational inconsistency in Dewaele's FLES. J Cult Exch Multicult Educ. 2025;14(1):267-92.
8. Han JY, Song BW, Tran TTM, Lee KH. A study on the foreign language enjoyment and classroom anxiety scales for Vietnamese learners of Korean: focusing on the adaptation and revision of FLES and FLCAS. *Korean Lang Educ Foreign Lang*. 2025;76:203–232.
9. Chae BK, Song BW, Nokkhong S, Kim N. A study on the development and application of an emotional scale for Thai learners of Korean: focusing on enjoyment factors. *J Korean Lang Cult*. 2025;22(1):313–344.
10. Song BW, Oo MT, Hlaing TS, Cho HY. Development and application of an emotion scale for Myanmar learners of Korean. *Korean Lang Educ Res*. 2025;36(2):103–128
11. Kim HK, Han JM, Song BW. Analysis of emotional patterns and development of emotion scale for Japanese learners of Korean. *Lang Cult*. 2025;21(2):111–134.
12. Yu HP, Song BW, Ko HM. Development and application of an enjoyment scale for Taiwanese learners of Korean. *Biling Res*. 2025;100:273–304.
13. Song BW. Comparing emotional patterns based on learner type in Korean language learning [doctoral dissertation]. Seoul: Kyung Hee University; 2025.
14. Park HJ, Fraschini N. A. Q methodology multiple single-case study on the dynamics and complexities of Korean language teacher emotions. *J Korean Lang Educ.* 2025;36(1):139-163.
15. Song BW. Emotional Dimensions of Korean Language Teachers: A Theoretical and Empirical Exploration. CellMed. 2025;15(10):28–32.

16. Chae BK, Cho HY. Development and Validation of the Korean Language Teacher Emotion Scale (KLEST & KLAST). *Journal of Bilingual Studies*. 2025;101:201–233

17. Yoon JW, Choi JS. A study on the teaching anxiety of non-native Korean language teachers. *Korean Lang Educ Res*. 2015;11(1):123–153.

18. Kim JH. A study on the anxiety of Vietnamese Korean language teachers in teaching Korean writing. J Writ Res. 2024;63:183-209.

19. Oh SK, Lee AR. Teaching anxiety among Korean language teachers from Uzbekistan. *Bilingual Res*. 2024;95:95–126.

20. Aydın E, Uştuk Ö. A descriptive study on foreign language teaching anxiety. *Eurasian Journal of Educational Research*. 2020;20(87):1-20.

21. Lee AR, Oh SK. Analysis of teaching anxiety among prospective Korean language teachers: A comparison of native and non-native instructors. *Emotional Dimensions of Korean Language Teachers*. 2025; 99:369-393.