

Construction and validation of an English language teachers' feedback practices scale in Chinese primary schools



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ABSTRACT

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The objective of the current study is to develop and validate a questionnaire “English Language Teachers’ Feedback Practices Scale (ELTFPS)” for assessing primary school English language teachers’ feedback practices, in the context English as a Foreign Language (EFL) in China. Based on Hattie and Timperley’s four levels of feedback model, the items for the questionnaire are sourced from past studies. The study used quantitative research methodology involving purposive sampling technique, and collected data from 10 private primary school EFL teachers in Guangdong Province, China. The study employed SPSS 27.0v, and SEM-AMOS software to study the psychometrics of the newly constructed ELTPS scale. The Confirmatory Factor Analysis (CFA) confirmed 21 valid items under four dimensions, viz task, process, self-regulation, and self-levels of feedback practices. The results showed good model fit indices ($\chi^2/df=1.83$, CFI=0.95, RMSEA=0.06), confirming the reliability and validity of the ELTPS scale. This validated instrument precisely assesses primary EFL teachers’ feedback practices, that support in teaching evaluations of in-service and pre-service EFL teachers. The ELTFPS is a potential questionnaire in assessing and improving quality education in English language teaching in primary schools.

Contribution/ Originality: The study validated a questionnaire titled “English Language Teachers’ Feedback Practice Scale (ELTFPS)” for assessing primary school English language teachers’ feedback practices. The instrument demonstrates strong reliability and validity through rigorous statistical testing. The study contributes to enhancing teachers’ feedback practices, supporting them in achieving intended learning outcomes among students.

1. INTRODUCTION

Feedback plays an important role in the teaching and learning process and has a significant impact on students’ achievement and academic success (Al Maharma & Abusa'aaleek, 2022; Rajapakse, 2024; Selvaraj, Azman, & Wahi, 2021). In language teaching, especially English language teaching (ELT), feedback can contribute to language acquisition, develop language skills, and promote learner autonomy, which means students can take responsibility for their learning, set learning goals, and monitor their progress (Fu, Zou, Xie, & Cheng, 2024; İnanç, 2021; Masharipova,

Saparbayeva, & Mamirbayeva, 2024; Samsudin, Wan Mohd Rosly, Syed Abdullah, & Ahmad Shukri, 2025; Yang, Chiu, & Yan, 2021).

Nevertheless, feedback tools are still lacking in primary school ELT for the following reasons. First, primary students are young, and their cognitive and language skills are developing. They cannot concentrate for a long time, and their language abilities vary greatly (Butler, 2022; Gualtieri & Finn, 2022; Zhang, 2023). Second, primary school teachers have the dual responsibilities of language initiation and interest cultivation, and students in primary school hardly have English-speaking environments outside class, which means limited opportunities to use the target language (Hu & Shen, 2024; Le, Nguyen, & Burns, 2021; Ly, 2024; Zhang & Lu, 2024). Furthermore, primary students in China's primary EFL context face uneven urban-rural educational resource allocation, including differences in teachers' quality and teaching materials, large class sizes that limit opportunities for personalized instruction and feedback, and a test-oriented culture that emphasizes memorization over communication (Chan & Smith, 2024; Jiang, Lim, & Balakrishnan, 2025; Poole & Li, 2025; Yu & Zhou, 2025) need more valid feedback tools for their English teachers (Wang, Derakhshan, Pan, & Ghiasvand, 2023; Zhan, 2022).

Although feedback is important in primary school English teaching and learning, there is still a lack of valid instruments to assess primary school English teachers' feedback practices (Finch et al., 2022; Li & Vuono, 2019). Most of the existing feedback scales are general teaching or non-ELT subject scales. Few of them consider the characteristics of language learning, such as language accuracy, language communication appropriateness, fluency, and coherence (Fischer et al., 2022; Fitriyah, Ningrum, & Gozali, 2024; Hyland & Hyland, 2019). Hattie and Timperley (2007) four-level feedback model (task, process, self-regulation, self) has an excellent theoretical basis (Yasin, 2024) and it has been widely used in many educational fields (Chan & Smith, 2024; Jiang et al., 2025; Poole & Li, 2025; Yu & Zhou, 2025). However, there is still a gap between this model and a practical and valid tool for primary school English teachers (Li & Vuono, 2019).

If an English Language Teachers' Feedback Practice Scale (ELTFPS) were to be constructed and validated, this gap could be filled. This scale would facilitate the comparison of feedback practices across different settings, allow for research into the feedback-student outcome relationship (thus informing teachers of more effective feedback strategies), and contribute to teachers' professional growth, leading to students' language development (Li & Vuono, 2019). Therefore, this study intends to bridge this gap by constructing and validating a survey instrument based on Hattie and Timperley's (2007) model for primary school English teachers. The instrument will be correlated with the model using statistical methods, namely Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) through Structural Equation Modeling (SEM-AMOS).

2. LITERATURE REVIEW

2.1. *The Notion of Feedback in Education*

The conceptualization of feedback as an important element in the teaching-learning process has undergone a significant evolution in the last couple of decades (Lipsch-Wijnen & Dirks, 2022; Winstone, Boud, Dawson, & Heron, 2022). Ramaprasad (1983) pioneering work defined feedback as information describing the gap between actual and reference levels of a system parameter, which is used to modify the gap. Sadler (1989) definition was built on Ramaprasad (1983) work and placed it in the educational context, highlighting the use of feedback in formative assessment and its role in clarifying to students the goals of learning, their current status in relation to these goals, and ways in which the gap might be narrowed.

The shift from behaviourists' to constructivists' views of learning has greatly impacted our understanding of feedback. While behaviourist approaches to feedback focused on reinforcement (Skinner, 1968), constructivist approaches focus on feedback as a way of scaffolding learning and developing metacognitive skills (Bruner, 1986; Vygotsky, 1978). Here, Wood, Bruner, and Ross (1976) seminal work on 'scaffolding' is instructive: when feedback is applied in the context of learners' 'zone of proximal development' (Vygotsky, 1978) it helps build independence

gradually (an idea that remains influential when designing feedback in language classrooms where learners need to be scaffolded to move from simple to complex linguistic tasks). This has led to a more nuanced view of feedback as a complex, multidimensional concept that goes beyond the simple correction of errors (Fitriyah et al., 2024; Sanchez & Rodrigues, 2024). In this section, a critical analysis of Hattie and Timperley's feedback model will be provided.

2.2. Hattie and Timperley's Feedback Model: A Critical Analysis

Hattie and Timperley (2007) model of feedback is a major contribution to the feedback theory literature as it builds on other research and consolidates the work into a useful model of feedback practice. Hattie and Timperley (2007) feedback model has quadrants of task, process, self-regulation, and self-level of feedback (Aslanyan Rad, 2024; Lipsch-Wijnen & Dirks, 2022).

Strong in distinguishing the purposes and effects of different types of feedback (Mather & Scheepers, 2025; Wilkerson, 2024). Task-level feedback is concerned with the correctness and completeness of the outcomes of the tasks that students have completed themselves (Da Silva, De Mello, & Garcia, 2024; Panadero et al., 2025). For instance, when the teachers graded the students' English homework, they found some mistakes in grammar and vocabulary spellings and then corrected them for the students so that the students could know their language correctness or accuracy. This type of feedback enables students to know very soon whether they have fulfilled the requirements of the task (Fagbohun, Iduwe, Abdullahi, Ifaturoti, & Nwanna, 2024) study revealed that task-level feedback often remains at the level of the current task and is not easily extended to enable students to dive into the underlying knowledge system of the task, so it has a limited effect on promoting knowledge transfer and deep understanding among students.

Process-level feedback concerns the methods and approaches that students use when completing a task and can help students identify their strengths and weaknesses (Ahlam, 2024; Dai, Tsai, Gašević, & Chen, 2025). For example, when teachers implement listening exercises, they can observe the approaches students use, such as taking notes or not, and then provide feedback based on these approaches. According to Carless (2020) study, process feedback has a strong potential for knowledge transfer. Students can apply the approaches they have learned to other learning materials (Brooks, Carroll, Gillies, & Hattie, 2019). Self-regulation feedback is concerned with students' metacognitive process (ElSayad, 2024; Sharma, Nguyen, & Hong, 2024; Teng & Ma, 2024). In English language learning, when the teacher teaches the students English, they can ask whether the students' oral expression is fluent and pronunciation is accurate, and also ask the students to summarize their learning every week and analyze how to improve their oral English. According to Zhang (2024) suggestion, self-regulation feedback can enhance students' autonomous learning ability and help them control their own English learning. Self-level feedback involves students' subjective evaluations and feelings about their learning outcomes (Wang, Wang, Yin, Yu, & Li, 2024; Yasin, 2024). The study of Charalampous and Darra (2025) revealed that self-feedback is objective and easily influenced by students' own cognitive biases. In addition, the model also indicates that self-feedback is the least effective type. This conclusion has an important implication for pedagogical practice, that is, the conventional humanistic praise (Hattie & Timperley, 2007; Winstone, Nash, Parker, & Rowntree, 2017).

However, Kluger and DeNisi (1996) contend that the effectiveness of feedback is highly context-dependent and that a one-size-fits-all model may be too simplistic for different types of educational settings. Additionally, Winstone et al. (2017) argue that the model does not adequately acknowledge the role of the learner in feedback, and therefore runs the risk of paying insufficient attention to feedback literacy and receptivity. Most recently, however, studies have focused on the importance of feedback literacy and the role of the learner in feedback (Evans, 2013; Moni, 2023).

2.3. Feedback in Second Language Acquisition: Theoretical Perspectives

In Second Language Acquisition (SLA), feedback has been a contentious topic among scholars. The role of corrective feedback, in particular, has been viewed through different theoretical perspectives.

Long (1996) interaction Hypothesis proposed that negotiation for meaning, which is a form of feedback, helps language learners to acquire a language by making input more comprehensible and drawing language learners' attention to form meaningful relationships (Gass & Mackey, 2023).

Schmidt (1990) noticing the Hypothesis further attests to the importance of feedback in language learning. It argues that learners need to consciously notice linguistic forms in order to acquire them. This theoretical perspective has impacted feedback in language teaching, and feedback in language teaching is expected to promote noticing of target language forms (Lee, 2022).

Swain (1985) output Hypothesis adds another dimension to the role of feedback in SLA. She argued that when learners produce a language and receive feedback on their output, they are forced to process the language more deeply and to notice gaps in their knowledge of the target language. This theoretical perspective has implications for designing feedback practices that encourage language learners' output and provide them with opportunities to test their hypotheses about the target language (Kim & Emeliyanova, 2019).

2.4. Empirical Studies on Feedback Effectiveness in Language Learning

Meta-analyses have provided strong evidence for the effectiveness of feedback in language learning contexts. For example, Li and Vuono (2019) meta-analyzed 33 primary studies and found that the overall effect size for CF on L2 acquisition was 'medium'. In a similar vein, Lyster and Saito (2010) meta-analysis of 15 classroom-based studies showed that CF had significant and lasting effects on TL development (Russell & Spada, 2006).

These studies also suggested that the effectiveness of feedback is complex, and variables such as the type of feedback, linguistic target, and learner characteristics may moderate the effects of feedback. For example, EF has generally been more effective than IF (Ellis, Loewen, & Erlam, 2006). However, depending on the targeted linguistic feature and the learner's proficiency level, this may not always be the case.

The timing of feedback has also been explored with regard to the suggestion that immediate feedback is more useful for procedural learning than for conceptual learning (Mohamed, 2020; Shute, 2008). This fine-grained understanding of feedback timing has implications for feedback in language classrooms where teachers need to provide immediate correction as well as time for self-repair and language use over time.

2.5. Challenges in Feedback Provision in Language Teaching Contexts

Despite the strong theoretical and empirical support for the importance of feedback, feedback in language teaching contexts still presents a number of challenges. One of these challenges is the negative affective impact of corrective feedback. Truscott's (1996) infamous position against the use of correction in L2 writing classes was centered on the demotivating impact of extensive error correction Truscott (1996). Several researchers have challenged Truscott's position and conclusions (Ferris, 1999). However, the debate has made clear that feedback practices need to be not only effective but also motivationally sound (Lee, 2020).

Another challenge in feedback provision is the cognitive demands on teachers to provide timely, accurate, and appropriate feedback. Prastikawati, Mujiyanto, Saleh, and Fitriati (2025) studied EFL teachers' written feedback practices, revealing great variation in teachers' practices and the complexity of teachers' decision-making in providing feedback (Prastikawati et al., 2025). The variation in teachers' practices suggests the need for meaningful professional development and guidelines for feedback practices (Bitchener & Ferris, 2012).

The increasingly diverse landscape of language learning contexts, particularly in online and blended learning environments, presents further challenges for feedback provision (Kulhavy, 1977). While online and blended learning settings potentially provide more timely and individualized feedback, there are concerns about the quality of feedback (Sari & Cahyono, 2024; Ware & Warschauer, 2006; Zhang & Rahimi, 2014) and the loss of nuance in interactions between teachers and students (Chea, 2025).

Li and Pei (2024) discovered in their study that students had difficulties in writing, reading, and listening. For instance, students had difficulty arranging paragraphs in English, and they often needed to write in Chinese first and then translate. In addition, they had a hard time finding supporting arguments and understanding hard words in reading. Moreover, students lacked confidence and fluency in speaking English. Therefore, the teachers needed to provide feedback to assist students in their weak areas and improve their English writing in China. It becomes urgently important that feedback should be given to enhance language skills in EFL learning in China.

Chea (2025) also observed that the respect for authority and collectivism in Hong Kong culture made students become too passive when receiving feedback. If they had any questions about the feedback, they were reluctant to raise them, which affected the effectiveness of absorption.

Interestingly, Li and Pei (2024) discovered, based on their investigation of teacher feedback practices, that there are differences among teachers who face challenges in giving timely, accurate, and appropriate feedback. For instance, when giving writing feedback, they tend to concentrate on correcting grammar while ignoring the feedback on students' ideas and logical progression. This indicates the lack of effectiveness and consistency in teacher feedback in Chinese EFL teaching.

2.6. Existing Instruments for Measuring Feedback Practices

Although various instruments have been developed to measure certain aspects of teaching practices, including feedback, there is a lack of validated scales established for measuring English language teachers' feedback practices, especially in primary education. The Feedback Environment Scale (FES), developed by Steelman, Levy, and Snell (2004) has contributed significantly to the conceptualization of feedback environment; however, it was designed for organizational settings rather than educational contexts (Wisniewski, Zierer, & Hattie, 2020). In education, the Assessment Experience Questionnaire (AEQ) by Gibbs and Simpson (2003) contains feedback-related items, but it assesses assessment practices in general.

For language teaching, the Foreign Language Classroom Anxiety Scale (FLCAS) by Horwitz, Horwitz, and Cope (1986) relates to aspects of feedback reception rather than feedback practices in general. It measures anxiety only (Li & Vuono, 2019). The Teacher Written Feedback Scale (TWFS), developed by Lee, Mak, and Burns (2015), focuses on written feedback in the ESL context; however, it is designed for secondary and tertiary levels only (Evans, 2021).

2.7. Limitations in the Existing Literature

2.7.1. Limited Attention on Primary Education

Existing literature on feedback in language teaching has predominantly focused on secondary and tertiary education, neglecting primary education (Li & Vuono, 2019). Research has called for feedback that is suitable for young language learners who are at different cognitive, social, and emotional development levels (Kang & Han, 2015). Findings from research indicate that feedback for primary students should be more formative in nature, supportive, and motivational, and should focus on promoting learner autonomy rather than just correcting learners' errors (Hyland & Hyland, 2019).

2.7.2. Lack of Validated Instruments that Measure Feedback Practices

There is a lack of validated instruments that measure feedback practices in an integrated way, especially for the primary education context (Mao & Crosthwaite, 2019). Instruments that measure feedback in an integrated manner are important to assess feedback effectiveness in terms of its impact on motivation, self-regulation, and learning outcomes. Only by developing such instruments can we gain a better understanding of feedback practices for young language learners.

2.7.3. Integrating Theoretical Perspectives

Future research could integrate findings from general education, second language education, and educational psychology to build a more comprehensive understanding of feedback in language learning (Benson & DeKeyser, 2018). This could offer a more comprehensive model for understanding feedback in language acquisition, such as the influence of cognitive load, motivation, and self-regulation (Li, Zhang, & Parr, 2020), and help connect feedback models with practice in language teaching.

2.7.4. Contextual Factors

A number of contextual factors have been reported to impact feedback effectiveness, including cultural factors, institutional factors, and individual differences (Hyland & Hyland, 2019). Research has shown that these factors can play a significant role in how feedback is received and used by learners (Bao, 2019; Boud, 2000). For example, cultural values may prohibit certain types of feedback. Institutional policies may also impact how feedback is provided.

2.7.5. Technology-Mediated Feedback

As more and more digital tools are emerging in educational settings, it is becoming increasingly interesting to apply these tools to provide feedback in teaching and learning (Kerr, 2017). Research is needed to examine how digital tools could improve the quality of feedback without diminishing the meaningfulness of teacher-student interactions. Research has also shown that digital tools could provide innovative feedback methods, such as automatic feedback and interactive feedback platforms, which could offer timely and personalized feedback to learners. It is important to ensure that digital tools do not replace the essential human element in the feedback process (Mao & Crosthwaite, 2019).

Purpose: To design and validate a survey instrument to measure primary school teachers' feedback practices based on Hattie and Timperley's model of feedback. Validation is conducted using SEM-AMOS analysis (EFA and CFA are performed).

3. METHODOLOGY

3.1. Research Design and Sample

The current study employed a quantitative survey approach with purposive sampling involving English language teachers from selected 10 private primary schools in Guangdong Province, China. The study employed a purposive sampling technique to ensure that the responses are collected from trained English language teachers who have at least five years of teaching experience in teaching English language in primary schools. After distributing the questionnaires and excluding invalid responses (e.g., incomplete answers, inconsistent responses), a total of 280 valid responses were obtained. This sample size meets the statistical requirements for subsequent Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA), with EFA typically requiring ≥ 100 samples and CFA requiring ≥ 150 samples conforming to the robustness of the dataset for further statistical analysis.

3.2. Instrument Development

The English Language Teachers' Feedback Practice Scale (ELTFPS) was constructed based on Hattie and Timperley (2007) model of feedback (2007) which consists of four levels of feedback: Task, process, self-regulation and self-level feedback. Referring to the scale developed by Muthukrishnan et al. (2025) a 28-item instrument using a 5-point Likert scale (1="always", 5="never"), the current study developed items that are contextualized to teaching primary school English language in China. Muthukrishnan et al. (2025) and Rui and Muthukrishnan (2019) studies utilized the feedback practice scale, however the scale was only validated using EFA. Therefore, this study attempts to validate the ELTFPS scale using SEM-AMOS technique in establishing a valid instrument for measuring feedback practices. The questionnaire was reviewed by a panel of experts for content validity and language appropriateness.

After experts' validation and finalizing the questionnaire, the data was collected using the online survey platform "Questionnaire Star". Teachers from the selected schools were invited to take part in the study. The respondents gave their consent before taking their survey.

3.3. Data Analysis

The study employed SPSS 26.0v, for conducting the Exploratory Factor Analysis (EFA) to explore the underlying factor structure of the ELTFPS scale. Factors with initial eigenvalues greater than 1.0 were extracted, and the Varimax rotation method was applied to clarify the roles of each factor. Following the EFA analysis, Confirmatory Factor Analysis (CFA) was then performed using the Structural Equation Modeling (SEM) approach, where SEM-AMOS 26.0v software was used to validate the items, and the corresponding model by testing its convergent, and discriminant validity measures, and the goodness of fit of the model. Finally, the newly developed instrument English Language Teachers' Feedback Practice Scale (ELTFPS) is confirmed.

4. RESULTS

4.1. Exploratory Factor Analysis (EFA)

Exploratory Factor Analysis (EFA) was conducted on 28 items related to the types of teacher feedback, utilizing Varimax (orthogonal) rotation. The analysis yielded a Kaiser-Meyer-Olkin (KMO) value of 0.935, which exceeds the 0.900 threshold, indicating excellent structural validity of the questionnaire items (Tabachnick & Fidell, 2019). Furthermore, Bartlett's test of Sphericity reported $\chi^2 (378) = 6302.203$, $P < 0.001$, demonstrating a strong correlation among the items (Tabachnick & Fidell, 2019). These results confirm that factor analysis is an appropriate technique for this data set.

The EFA results identified four primary factors based on the criterion that initial eigenvalues exceeded 1.0. The scree plot (Figure 1) clearly illustrates the significant contribution of these four factors to the overall variance. The factor loadings for the items of these factors ranged from 0.719 to 0.901, all exceeding the 0.70 threshold (Williams, Onsman, & Brown, 2010), which led to the retention of all items. Refer to Table 1 for the factor loading matrix after rotation.

These four factors together accounted for 74.52% of the total variance, with an eigenvalue of 3.998, indicating strong explanatory power. Factor 1, labeled "Task-focused feedback," comprised nine items and explained 41.309% of the variance, with an eigenvalue of 6.962. Factor 2, derived from seven items and labeled "Self-regulated feedback," explained 13.869% of the variance, with an eigenvalue of 5.326. Factor 3, labeled "Process-focused feedback," included six items and explained 9.988% of the variance, with an eigenvalue of 2.707. Lastly, Factor 4, labeled "Self-focused feedback," included six items, explained 9.352% of the variance, with an eigenvalue of 2.619.

The EFA analysis indicates that these four factors significantly contribute to the overall variance, confirming their robustness and relevance in the study.

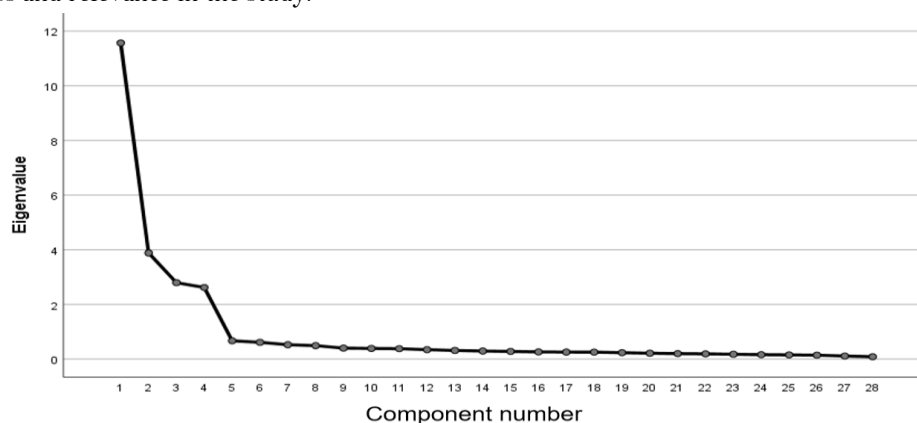


Figure 1. Scree plot.

Table 1. The factor loading matrix after rotation.

| Items | | Factor 1 | Factor 2 | Factor 3 | Factor 4 |
|---|-----|----------|----------|----------|----------|
| Factor 1: Task-focused feedback | | | | | |
| My feedback is intended for the entire class rather than for an individual students. | T1 | 0.901 | | | |
| My feedback helps students produce the quality work I expect from them. | T2 | 0.870 | | | |
| I provide specific details of errors in my feedback. | T3 | 0.859 | | | |
| I provide opportunities for students to correct their errors. | T4 | 0.842 | | | |
| I emphasis more on students' overall language writing, including neatness, margin format, spacing, and handwriting. | T5 | 0.832 | | | |
| I help my students gain more knowledge about a topic. | T6 | 0.828 | | | |
| My feedback helps students identify their mistakes in language learning. | T7 | 0.817 | | | |
| The focus of my feedback is on task completion. | T8 | 0.808 | | | |
| I provide feedback on the quality of the work. | T9 | 0.792 | | | |
| Factor 2: Self-regulated-focused feedback | | | | | |
| I encourage my students to check their work before submitting. | SR1 | | 0.855 | | |
| I encourage my students to monitor and regulate their language learning approach. | SR2 | | 0.837 | | |
| I provide feedback to my students to reflect on their own learning. | SR3 | | 0.837 | | |
| I insist my students develop a routine in language learning. | SR4 | | 0.813 | | |
| I insist my students recall and reflect on their process of language learning. | SR5 | | 0.809 | | |
| I encourage my students to self-assess their work. | SR6 | | 0.808 | | |
| My feedback helps students to know their strengths and weaknesses in learning a language. | SR7 | | 0.784 | | |
| Factor 3: Process-focused feedback | | | | | |
| I guide my students on how to approach the task for effective learning. | P1 | | | 0.867 | |
| I help students by providing language learning strategies to improve their learning process. | P2 | | | 0.841 | |
| During feedback-sharing sessions, I allow students to interact with me. | P3 | | | 0.830 | |
| I teach students not to become upset about their mistakes, but to make an effort to correct them on their own. | P4 | | | 0.828 | |
| My feedback emphasizes the learning process over task completion. | P5 | | | 0.793 | |
| My feedback focuses on strategies for achieving in-depth learning. | P6 | | | 0.742 | |
| Factor 4: Self-focused feedback | | | | | |
| I ensure my feedback makes the students feel good about themselves. | S1 | | | | 0.832 |
| My feedback to my students is full of appreciation for the task they did well. | S2 | | | | 0.807 |
| I comment on the outcome that the student has achieved. | S3 | | | | 0.804 |
| My feedback enhances the self-esteem of the students. | S4 | | | | 0.776 |
| I praise my students publicly when students perform well. | S5 | | | | 0.719 |
| I generously appreciate students (Good girl/well done, you're great, you're smart) | S6 | | | | 0.725 |
| Eigen value | | 11.567 | 3.883 | 2.797 | 2.619 |
| % of variance | | 41.309 | 13.869 | 9.988 | 9.352 |

4.2. Confirmatory Factor Analysis (CFA)

The subsequent analysis after exploratory factor analysis involves conducting confirmatory factor analysis (CFA) and validating the instrument. The study employed AMOS 26 software to validate the measurement model. During this analysis, the factor loadings of each item were examined, with a threshold of ≥ 0.70 (Hu & Bentler, 1998). One item (S6) was removed due to a low factor loading, resulting in a total of 27 items remaining.

To assess the model's overall goodness of fit, several model-fit measures were utilized, following established benchmarks: $CMIN/df \leq 3.0$; $RMSEA \leq 0.080$; $IFI \geq 0.90$; $CFI \geq 0.90$; and $TLI \geq 0.90$ (Hu & Bentler, 1998; Ullman, 2001). As shown in Table 2, the Confirmatory Factor Analysis (CFA) resulted in satisfactory indices, indicating that the four-factor model was a good fit: $CMIN/df = 2.067$, $RMSEA = 0.065$, $IFI = 0.939$, $CFI = 0.945$, and $TLI = 0.939$. The goodness-of-fit indices are well within the acceptable range, with $CMIN/df$ below 3.0, $RMSEA$ below 0.080, and all other fit indices (IFI , CFI , TLI) exceeding 0.90. Thus, the results indicate that the four-factor model was a good fit. These results suggest that the proposed four-factor model adequately fits the data, supporting the validity of the factors. The model, illustrated in Figure 2, includes the following factors: Task-focused feedback, Process-focused feedback, Self-regulated-focused feedback, and Self-level feedback.

Table 2. Model fit measurement statistics.

| Fit index | Estimate | Recommended value |
|-----------|----------|-------------------|
| CMIN/DF | 2.067 | ≤ 3.00 |
| RMSEA | 0.065 | ≤ 0.08 |
| IFI | 0.939 | ≥ 0.90 |
| CFI | 0.945 | ≥ 0.90 |
| TLI | 0.939 | ≥ 0.90 |

4.3. Convergent and Discriminant Validity

Construct reliability was assessed using Cronbach's Alpha and Composite Reliability. Cronbach's Alpha for each construct in the study exceeded the required threshold of 0.70 (Hair, Black, Babin, & Anderson, 2010). As shown in Table 3, the composite reliabilities ranged from 0.717 to 0.861, all above the 0.70 benchmark (Hair et al., 2010). Therefore, construct reliability was established for each construct in the study.

Convergent validity of the items was estimated using Average Variance Extracted (AVE) (Fornell & Larcker, 1981). The AVE values for the results ranged from 0.689 to 0.729, all above the threshold value of 0.50 (Fornell & Larcker, 1981). These results confirm that the measures used in the present study have the required convergent validity.

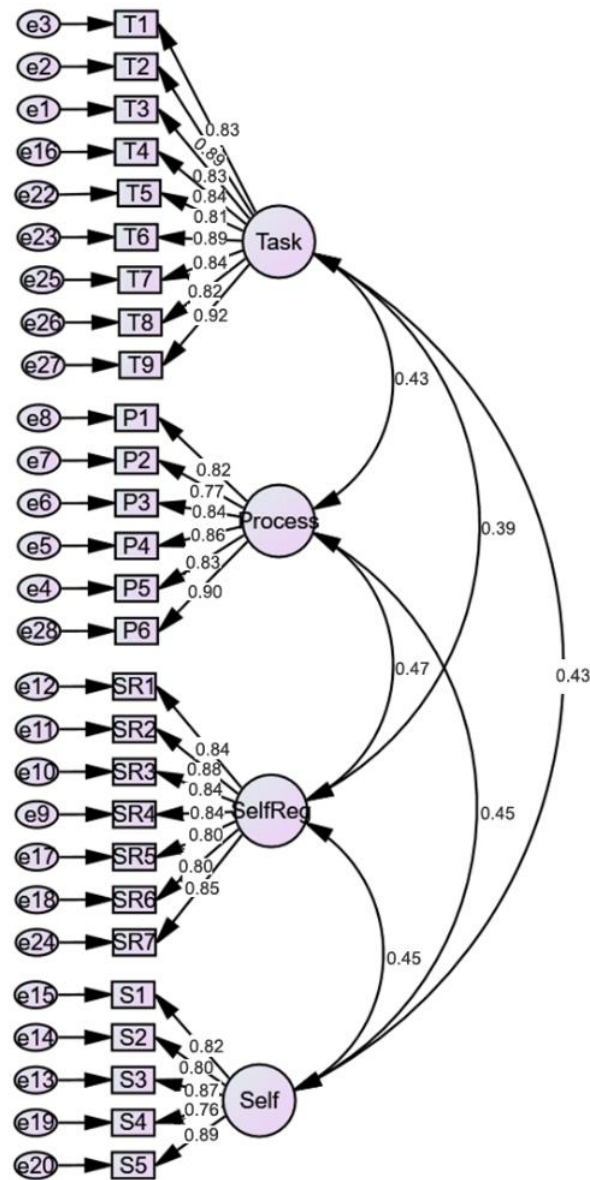
Table 3. Reliability and Convergent Validity.

| Factors | Number of items | Cronbach's alpha | Composite reliability (CR) | Average variance extracted (AVE) |
|--|-----------------|------------------|----------------------------|----------------------------------|
| Task-focused feedback (Task) | 9 | 0.960 | 0.961 | 0.729 |
| Self-regulation focused feedback (SelfReg) | 7 | 0.942 | 0.942 | 0.698 |
| Process-focused feedback (Process) | 6 | 0.935 | 0.936 | 0.706 |
| Self-focused feedback (Self) | 5 | 0.916 | 0.917 | 0.689 |

Discriminant validity in the study was evaluated using both the Fornell and Larcker criterion and the Heterotrait-Monotrait (HTMT) ratio. The Fornell and Larcker criterion posits that discriminant validity is demonstrated when the square root of the AVE of a construct exceeds its correlation with other constructs. However, recent critiques have emerged regarding this method, prompting a shift towards the HTMT ratio as a preferred approach. In this study, discriminant validity was not fully confirmed using the Fornell and Larcker criterion. Nonetheless, the HTMT ratio assessment yielded ratios between 0.393 and 0.476, which are well within the acceptable limit of 0.85 (Henseler, Ringle, & Sarstedt, 2015). Consequently, discriminant validity was established using the HTMT ratio. Table 4 presents the discriminant validity of the constructs. These results collectively confirm the reliability, convergent validity, and discriminant validity of the constructs measured in this study.

Table 4. The discriminant validity - Heterotrait-Monotrait ratio (HTMT).

| Factors | Task | SelfReg | Process | Self |
|--|-------|---------|---------|------|
| Task-focused feedback (Task) | | | | |
| Self-regulation focused feedback (SelfReg) | 0.393 | | | |
| Process-focused feedback (Process) | 0.443 | 0.476 | | |
| Self-focused feedback (Self) | 0.436 | 0.455 | 0.436 | |

**Figure 2.** Confirmatory factor analysis model.

Note: Task = Task-focused feedback; Process = Process-focused feedback; SelfReg = Self-regulated focused feedback; Self = Self-level feedback.

5. DISCUSSION

Based on Hattie and Timperley's (2007) feedback model, this study developed and validated a feedback practice scale for primary school English teachers in China. The Exploratory Factor Analysis (EFA) revealed that the model accounted for 74.52% of the total variance, with task-focused feedback contributing the highest proportion (41.31%). This indicates that primary school English teachers tend to place more emphasis on the correctness of language forms and task completion in their teaching practices. Aslanyan Rad (2024) proposed that the primary school teaching feature of "prioritizing the construction of basic language abilities" is consistent with this viewpoint. Notably, the

factor loadings of self-focused feedback were relatively low. For instance, item S6 was deleted due to a factor loading of less than 0.7. This reflects that teachers in the primary school stage pay more attention to specific task-related feedback rather than generalized personal evaluations. This is consistent with Bjorklund (2022) proposal of "stage adaptation in children's cognitive development".

To assess the model's overall goodness of fit, several model-fit measures were utilized, following established benchmarks: $CMIN/df \leq 3.0$; $RMSEA \leq 0.080$; $IFI \geq 0.90$; $CFI \geq 0.90$; and $TLI \geq 0.90$. Confirmatory Factor Analysis (CFA) further supported the robustness of the model, and both reliability and validity reached excellent levels. This finding expands the application scenarios of Hattie's model. Previous studies have mostly focused on the higher education stage (Kerman et al., 2024; Morris, Perry, & Wardle, 2021; Panadero & Lipnevich, 2022). The present study confirms that the model still has explanatory power in primary school English teaching, although the weights may be adjusted according to the age characteristics of learners. For example, self-regulation feedback explained 13.87% of the variance, indicating that although primary school teachers mainly focus on task-related feedback, they have also started to pay attention to the cultivation of metacognitive abilities, providing empirical support for scaffolding instruction (Al Maharma & Abusa'aleek, 2022; Michalsky, 2024).

6. IMPLICATIONS AND RECOMMENDATIONS

The 27-item scale developed by the research team provides teachers with a self-assessment and reflection feedback behavior framework that can help teachers identify the strengths and weaknesses of their own feedback practices. At the same time, it fills the gap in tools for quantitative research on primary school English feedback practices, provides a standardized measurement basis for subsequent research, and enables comparison and analysis of teacher feedback in different teaching environments.

Similarly, based on the results of the scale, educational institutions can design teacher training programs based on the four levels of the model, increasing process feedback training for teachers who over-task feedback (Burns, 2023; Huong, Minh, Linh, & Vy, 2025) and introduce metacognitive tools for teachers with weak self-regulatory feedback (Linde, Hačatrjana, & Daniela, 2024). In addition, we strongly recommend that teachers balance these four levels of feedback (Fitriyah et al., 2024; Sanchez & Rodrigues, 2024), for example, after vocabulary correction (task feedback), guide students to reflect on memory (process feedback), and set personal progress goals (self-regulatory feedback). Reduce self-focused feedback, such as "you did a good job," and use specific process feedback, such as "you solved this problem by looking up the dictionary." In addition, consider developing an intelligent feedback assistance system in combination with the scale, such as automatically identifying the proportion of different types of feedback through AI analysis, and providing teachers with visual feedback reports.

7. LIMITATIONS

The samples in this study were drawn from ten private primary schools in Guangdong Province, China. The single-geographical and single-school-type sampling limits the applicability of the findings to public schools and schools in rural areas. In addition, although the screening of teachers with more than five years of teaching experience ensured the maturity of their feedback experience, it neglected the feedback characteristics of novice teachers.

8. CONCLUSION

This study developed and validated a feedback practice scale for primary school English teachers, revealing the characteristics of teacher feedback behaviors in primary school English classrooms. The research results indicate that primary school English teachers' feedback practices are primarily task-focused, with dimensions related to process orientation and self-regulation, while the role of self-focused feedback is relatively limited. Future research should further expand the sample scope to explore the moderating effects of cultural and technological factors on feedback

effectiveness. Additionally, the scale can be applied in teacher professional development programs to enhance the scientific basis and effectiveness of feedback in primary school English teaching.

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Institutional Review Board Statement: This study was approved by the Institutional Review Board of The Ethical Committee of the INTI International University, Nilai, Malaysia, under protocol number (2025 006C), dated 5 August 2025. Informed verbal consent was obtained from all participants, and all data were anonymized to protect participant confidentiality.

Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

Competing Interests: The authors declare that they have no competing interests.

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