



A comparative study into the emotional impact of peer feedback modalities in ELT

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Abstract

The study presented herein situates and examines the face-to-face and digital modes of peer feedback regarding emotional effects within the ELT context. Based on a convergent mixed-methods design, this study combines quantitative data obtained from surveys about emotional responses and qualitative perspectives gained through focus group discussions, the researcher's field notes, and the individual reflective thoughts of the participants. This study was conducted with 115 undergraduate ELT students who were divided into two groups, one to be given immediate face-to-face feedback and the other to receive asynchronous digital feedback through Google Forms. The quantitative results revealed that there is a difference in emotional responses. Face-to-face feedback provided higher scores of enthusiasm; however, anxiety-related emotions were also found to increase as compared to the digital setting. Qualitative data emphasized the advantages of immediacy and interpersonal dynamics in face-to-face feedback, while digital feedback had its own merits regarding the reflective nature and reduced stress. The integration of findings shows that hybrid models of feedback, which combine the strengths of both modalities, might enhance emotional engagement and improve learning outcomes in ELT settings. These findings add to the increasing literature on feedback practices and support the emotionally responsive and pedagogically valid feedback strategies in language education.

Keywords: peer feedback modalities, face-to-face feedback, digital feedback, emotional response

Introduction

Feedback is an integral component of educational methods and serves as a vital tool to enhance learning, self-regulation, and academic growth. In the context of ELT, peer feedback has evolved as one of the most essential pedagogic approaches in which students are encouraged to engage in their learning process by evaluating others' work (Aprilianti & Widyanoro, 2024), providing

constructive feedback, and reflecting on their academic performance. Although the cognitive advantages associated with peer feedback, including enhanced writing and speaking skills, are extensively documented (Lv et al., 2021; Pham, 2021), the emotional aspects of the feedback process have not been thoroughly investigated, especially in situations where face-to-face and digital feedback methods are compared.

The growing incorporation of technology within educational settings has significantly altered conventional feedback approaches (Anttila et al., 2017), providing asynchronous and anonymous digital platforms that address various learner requirements. Digital feedback reduces the immediacy and social pressures of face-to-face interactions and provides learners with reflective time to internalize feedback. Face-to-face feedback, on the other hand, enhances interpersonal relationships and immediacy, which enables learners to clarify feedback immediately through verbal and non-verbal cues. Nevertheless, both modalities evoke varied emotional responses, ranging from motivational and pride to anxiety and apprehension of judgment, significantly influencing learners' approach and receptivity.

Notwithstanding the growing body of literature on peer feedback, there are still gaps in understanding how different modalities impact learners' emotional experiences and levels of engagement. Research into peer feedback so far has been predominantly guided by cognitive and pedagogical considerations (Kayacan & Razi, 2017; Peungcharoenkun & Waluyo, 2024; Pham, 2021) and given little attention to the affective issues underpinning the interactions occurring around feedback. Such studies, while helpful, are based on single-method designs and therefore cannot adequately represent the range of emotional experiences. Further, while traditional face-to-face feedback has been studied for its emotional and pedagogical impacts (Bharuthram & van Heerden, 2023), the possible emotional responses within digital peer feedback settings have been overlooked (Donia et al., 2022).

Confronting this shortcoming is important for developing methods of feedback that not only promote better academic performance but also enhance learners' emotional well-being. From this view, the central research question is how different feedback contexts (face-to-face vs. digital) shape the emotional perceptions of ELT learners in peer feedback interactions. To address this aim, the study employed a mixed-methods approach comprising quantitative survey data capturing students' emotional reactions such as enthusiasm, concern, and confidence and supplementary qualitative data via focus group discussion, researcher observation, and reflection reports from the students. The combination of these data types facilitated a depth of understanding to the emotional experiences arising from each feedback method. Its theoretical contribution lies in extending current understandings from *appraisal theory* and the *affective turn* in researching how varied feedback modalities—face-to-face immediate and digital delayed feedback—each play a role in learner emotional experience and engagement in different ways. In providing empirical observations on how emotions differ across these feedback contexts, the study not only fills an important gap in feedback studies but also enriches existing theory with contextualized knowledge about affective processes in language learning. By deliberately foregrounding emotions, this research is also making a significant contribution to the field by bringing rich insight into emotionally responsive feedback practice, ultimately informing teachers to more holistic and effective language education practices.

Theoretical Framework

The growing attention to emotions has long been underlined for their role in shaping learning and teaching experiences (Pavlenko, 2013; Pentón Herrera & Martínez-Alba, 2022). Investigations into emotions in educational contexts have demonstrated their crucial impact on the cognitive and behavioral learning outcomes. It is also well documented in various contexts that

the emotional state of learners, such as motivation, anxiety, and enthusiasm, is fundamentally affecting the process of learning itself (Benesch, 2017; Guyer et al., 2014). Indeed, Pentón Herrera and Martínez-Alba (2022) further highlight emotional well-being as being pivotal not only to students' academic success but also to the development of compassionate learning environments and good student-teacher relationships. To investigate to the fullest the relationship between emotional experiences and peer feedback modes in language learning, this study employs *appraisal theory* alongside the contributions offered by the *affective turn*.

Rooted in cognitive psychology, *appraisal theory* suggests that emotion is the consequence of an evaluation or appraisal on the part of individuals (Scherer, 2001; Smith & Lazarus, 1993). This allows for a very organized framework to understand the way learners may interpret feedback, and how the interpretation of this feedback elicits certain emotional responses. In this context, appraisal refers to learners' evaluation of feedback based on the components of feedback that influence the cognitive appraisal processes (Shin et al., 2020). This approach takes the focus from the feedback to the learner's interpretation of it. It has been recognized that the same feedback can stimulate very different emotions, depending upon individual appraisals, and it is accepted that initial appraisals influence subsequent behavior. As used within this study, appraisal theory allows indirect analysis of how learners might interpret peer feedback, whether face-to-face or digital, and how these interpretations impact emotional engagement and learning outcomes.

To broaden the individualized view of appraisal theory, this study incorporates insights from the *affective turn*, defined here as moving beyond exclusively cognitive models to more contextual and critical approaches to understanding emotions in educational settings. Unlike the exclusive emphasis on individual psychological events from the perspective of emotions, this approach highlights their profound interconnection with the larger social, cultural, and contextual determinants (Pavlenko, 2013). Pavlenko (2013) stresses that it enhances the status of emotions or affective factors in language learning and teaching. Benesch (2017) also highlights that emotions should never be examined in isolation from social dynamics of classroom interactions but illustrates how positive emotional experiences are produced by supportive and inclusive settings and, consequently, enhanced learner participation. In peer feedback processes, this emotional landscape is rendered most relevant as learners negotiate their dual roles of evaluator and recipient. In the context of this study, the affective turn is a useful lens through which to understand how face-to-face feedback fosters collective emotional dynamics, whereas digital feedback creates a different emotional landscape influenced by its asynchronous and anonymous nature. Through the integration of these, the study can address both individual cognitive processes and the broader social and emotional contexts that shape learners' responses to feedback.

The present study takes these theories as guiding theoretical orientations to frame and focus on the emotional experience of learners. Appraisal theory, emphasizing the individual evaluation of feedback by learners, calls attention to how personal perceptions of peer feedback embody emotional responses that, in turn, construct engagement and learning activity. Meanwhile, the affective turn enlarges this perspective by putting these emotional responses into some social and contextual face-to-face and digital interaction processes. Building on these frameworks, the research question particularly tries to find out in what ways learners' emotional responses differ in face-to-face and digital peer feedback modes of ELT settings.

Peer Feedback and Emotional Dynamics

Defining Feedback and Peer Feedback

Feedback, generally defined in educational research as information provided to students regarding their performance, helps bridge the gap between current student knowledge and

planned learning (Carless & Boud, 2018). It is a critical pedagogic task supporting self-regulation, motivation, and academic development. Peer feedback is a specific type of feedback wherein students evaluate each other's work based on shared criteria or informed judgments. Unlike traditional instructor-provided feedback, peer feedback is more learner-focused, and it emphasizes cooperation, promotes active participation, critical thinking, and autonomy (Kayacan & Razi, 2017; Pham, 2021). It supports the feedback literacy of learners to meaningfully engage with evaluations and improve their work based on constructive suggestions given by others (Aprilianti & Widyantoro, 2024; Carless & Boud, 2018) as well as improvement in linguistic accuracy, organization, and vocabulary in EFL learners' writing tasks (Kayacan & Razi, 2017).

In speaking activities specifically, peer feedback is usually in the shape of oral corrective feedback, which involves immediate or delayed verbal responses to oral production. Common forms of oral corrective feedback include explicit correction, implicit reformulations, elicitation (asking learners to self-repair), clarification requests, and metalinguistic explanations (Lyster & Ranta, 1997; Lyster & Saito, 2010). Research shows that oral corrective feedback strongly impacts students' ability to recognize and correct their language errors in real-time and thereby contributes to improving language competence (Li, 2010). While oral corrective feedback is primarily concerned with language-based errors, which may or may not lead to communication breakdown, written corrective feedback can be concerned with both language and content (Li & Vuono, 2019).

Emotional Dynamics of Peer Feedback

Affective reactions by learners to either oral or written corrective feedback are very inconsistent and subject to variations in immediacy, type of feedback, learner beliefs, and classroom interpersonal dynamics (Lyster & Saito, 2010). In peer feedback contexts, emotions such as anxiety, fear, and motivation become particularly crucial, given their influence on learners' openness to feedback and subsequent changes in their behavior. According to Winstone et al. (2017), the concept of "agentic engagement" with feedback exists when the emotional readiness of learners to receive and act upon feedback is central to its effectiveness. Proactivity in receiving feedback enhances self-regulated learning, which has been considered a significant lifelong learning skill. From a pedagogical point of view, emotional patterns among learners fluctuate between anxiety and enthusiasm, caused by social support or task-related challenges (Anttila et al., 2017). This is further confirmed by Bharuthram and van Heerden (2022), who also indicated that peer feedback processes could bring about varied emotional reactions among learners, such as motivation, confidence, anxiety, and discomfort. For example, positive feedback can raise students' self-esteem, while negative and insensitive feedback can generate anxiety or demotivation, deterring learning potential (Gkonou et al., 2020). As such, an insight into such emotional reactions is key to creating constructive and emotionally supportive feedback environments.

The immediacy of face-to-face peer feedback allows for real-time clarification and personal interaction, which develops stronger emotional connections and engagement. Bharuthram and van Heerden (2022) examined students' emotional responses when performing peer assessment and reported that scaffolding feedback processes decreased anxiety levels and increased positive feelings. Conversely, this immediacy may increase performance anxiety, especially during oral communication tasks (Gkonou et al., 2020). Negative emotions, such as fear of being judged, were mostly related to face-to-face feedback. (Guyer et al., 2014). Anttila et al. (2017) also describe the immediate nature of in-person feedback as emotionally powerful, generating excitement and worry. These findings suggest the need to compare the emotional

experiences of face-to-face peer feedback with digital alternatives, exploring how the delivery mode influences learners' perceptions of feedback and its overall effectiveness.

Conversely, emotional reactions to digital responses have remained mixed. Digital peer feedback, frequently asynchronous and anonymous, provides greater time and space for thinking without the immediacy of social interaction pressures. This reduced immediacy tends to decrease anxiety and can lead to more objective and honest judgments (Donia et al., 2021). Hence, the digital peer review emerges as a two-edged sword: it may reduce social anxiety but sometimes depersonalizes or makes responses vague (Kayacan & Razi, 2017). In the study by Bharuthram and van Heerden (2022), some students felt motivated and comfortable online, while others reported feeling detached from a lack of instant interaction. This aligns with the findings by Ennis et al. (2021), who reported logistical and emotional complications in virtual peer feedback exchange in telecollaboration projects. Asynchronous feedback allows the digital exchange of suggestions to be considered by learners over time, without immediate stress, which deepens their engagement with it (Aprilianti & Widyantoro, 2024).

Overall, although much has been written about the efficacy of peer feedback, surprisingly little has examined how different modalities of feedback affect students' emotions. In addition, earlier research has extensively examined cognitive processes or general learning outcomes, yet few have examined the issue of how emotional experiences differ between face-to-face and digital contexts. This is significant because emotional factors significantly affect learners' receptiveness to feedback and subsequent learning behaviors. Thus, this research aims to fill this void by making direct comparisons between emotional responses and engagement in face-to-face and digital peer feedback environments, providing significant insights into emotionally sensitive teaching practice.

Method

Research Design

This current research has adopted a convergent mixed-methods design in exploring the emotional impact of two peer feedback modalities within ELT. In the convergent mixed-methods design, quantitative and qualitative data are collected and analyzed simultaneously and then integrated to draw conclusions to answer the research questions (Creswell & Plano Clark, 2023). This design was chosen as it would grasp the complex nature of feedback processes, which included both quantifiable emotional reactions and more subjective and individualized perceptions. This methodology is consistent with Creswell's (2021) suggestion to employ mixed-methods designs in educational research to tackle intricate questions that cannot be comprehensively investigated using a singular methodology.

Quantitative data collected through the survey examined emotional student responses to feedback. Standardized scaling of emotional responses has meant consistency in the measure within and between the groups; meanwhile, qualitative data in text form were obtained through focus group discussions, researcher's field notes, and individual reflections, complementing the numerical data by presenting the contextual experiences of participants.

Setting and Participants

This research was conducted at a public university in Turkey, within the English Language Teaching (ELT) department. The setting was an undergraduate class of special purpose to develop students' public speaking and oral presentation ability, entitled "Public Speaking Skills". The class aimed at making learners more proficient and confident in giving well-organized presentations on different subjects. During the semester, students frequently engaged in activities of speaking including brief presentations, tasks of storytelling, and group discussions.

A total of 115 undergraduate students, ranging from 19 to 23, participated in the study. The participants, who were all upper-intermediate to advanced Turkish L2 users of English, were selected through convenience sampling. All participants shared a similar educational background, having completed courses involving multiple presentations and prior experience with delivering speeches and providing peer feedback in other courses. They were enrolled in the same undergraduate course named 'Public Speaking Skills', which aims at developing students' presentation and speaking skills. Within this course, speaking tasks included structured short presentations (3–5 minutes), storytelling tasks, and oral discussions, which were carefully designed to align with typical communicative activities in language teaching, encouraging natural spoken interactions among students. The participants were divided into two groups:

- *Group A (Face-to-Face Feedback)*: This group consisted of 49 students (17 males, 32 females) who received immediate peer feedback in a traditional classroom setting. Feedback was provided immediately after each student's speaking performance, allowing for real-time interaction and clarification.
- *Group B (Digital Feedback)*: It contained 66 students (24 males and 42 females). They, too, had their speeches in the classroom; however, feedback was assigned asynchronously. Feedback was gathered with the help of Google Forms. It included anonymous peer review comments which participants were able to view after the session. As such, this asynchronous feedback gave them an opportunity to study the same at their own pace without the immediacy of live audiences.

The design ensured that both groups were exposed to identical speaking tasks and feedback opportunities, with the primary variable being the modality of feedback delivery. The balanced gender distribution and shared academic experiences among participants ensured a degree of homogeneity, allowing for meaningful comparisons between the two feedback modalities. Procedurally, the most significant difference between the two groups lay in the way peer feedback was given systematically. In the condition of face-to-face feedback, the students received organized, immediate, oral peer feedback after finishing their speaking activities in class. The immediate feedback was evidently organized as part of the class exercise, with room for students to discuss freely, ask, or respond to feedback from peers in real-time. Although spontaneous teacher remarks necessarily came up in class, structured peer feedback was clearly stated as a separate step of each activity in an effort to distinguish it from spontaneous teacher remarks or brief exchanges that necessarily take place along the flow of class activities.

In contrast, in the digital feedback condition, identical speaking tasks were performed by the students in the lesson, but without getting instant peer feedback. Instead, the feedback was provided asynchronously and anonymously through Google Forms after class. There were feedback forms with written peer feedback, which were then read privately by each student. Though incidental, spontaneous teacher feedback (i.e., nodding or generic encouragement) unavoidably occurred during class, there were no formal peer evaluations orally presented. Participants knew beforehand that extensive peer feedback would be provided and reviewed electronically at a later stage.

Research Instruments

Quantitative and qualitative research instruments were applied to answer the research questions in an encompassing way. In this respect, such a toolset is intended to capture both the quantitative and qualitative dimensions of emotional reactions on the part of participants

toward peer feedback modalities. The employment of mixed-methods allowed these instruments to provide robust analyses that integrate scales on emotion, observational data, and reflective narratives—a comprehensive perspective into the experience with feedback.

Emotional response scale: The Emotional Response Scale adapted from Marcus et al. (2006) has been adopted to assess participants' emotional states following the receipt of peer feedback. It is particularly suited for the study, as it resonates with the affective turn in applied linguistics, as suggested by Pavlenko (2013), which highlights the role of emotions in shaping language learning experiences. By nature, this scale is an appropriate measure for capturing the full continuum of emotional experiences, assessing not only positive emotions, including enthusiasm, hopefulness, and pride, but also negative emotions, including fear, worry, and resentment. Finally, participants indicated on a 5-point Likert scale ranging from “Not at all (1)” to “Very strongly (5)” the intensity of each of these emotions. The reliability and validity of this instrument were established through a pilot test conducted with a similar student group prior to the main study, resulting in a Cronbach's alpha reliability score of .86, indicating strong internal consistency. This scale, therefore, provided quantitative data that could be used to gain a deeper insight into how different feedback modalities affect the emotional landscape of the participants.

Researcher's field notes: During each session, field notes were taken with care by the researcher. Face-to-face session observations targeted specifically emotional expressions such as body postures, facial expressions, anxiety or comfort signals, engagement or disengagement behavior (e.g., smiling, nodding, fidgeting). For online feedback, written notes captured emotional signals observed while students read feedback online (e.g., apparent reactions such as smiling or frowning, note-taking behavior, or confusion or satisfaction signals). Emotions were made focal concern by identifying any observed manifestations of students' emotional reactions, whether positive or negative, in their interactions or consideration of feedback given. These detailed, real-time observations strengthened the validity of the findings by offering direct observational evidence to supplement self-reported data from surveys and reflections.

The use of field notes is consistent with the mixed-methods nature of this study, contributing to triangulation in the data to make sure that the emotional effects of the peer feedback modalities are holistically considered. Therefore, this instrument was important in complementing quantitative data and deepening participants' experiences. These observations contextualized the study with rich insights into the affective dimensions of feedback practices.

Focus group discussions: The FGDs were conducted with randomly selected five participants from each modality group after completing the reflection reports. The sessions lasted approximately 30 minutes each and were audio-recorded with the permission of the participants. The researcher delivered the sessions in the participants' native language, Turkish, as it would be easier for them to express their experiences and feelings. These discussions were primarily about participants' emotional experiences wherein they were reminded to reflect upon their feelings as well as reactions towards the range of feedback modalities. Specifically, participants described their affective reactions when receiving feedback, indicated how face-to-face immediacy or electronic anonymity influenced comfort, anxiety, confidence, and motivation, and described the impact of feedback modality on overall participation in the speaking tasks and peer interactions. This process particularly focused on emotional factors and provided richer qualitative data regarding the emotional dynamics that could not be fully addressed by quantitative tools alone.

FGDs align with the mixed-methods design of the study and provide a collaborative platform for data triangulation, hence enriching the qualitative analysis of participants' emotional experiences. In this study, therefore, they were crucial in eliciting nuanced insights that could not

be captured through surveys or individual reflections. They highlighted the recurring themes, contrasting views, and areas for possible improvement in both feedback modalities, which provided additional layers of qualitative validity and reliability to the study.

Individual reflections: Following completion of the feedback sessions, individual reflection reports were written by participants and sent to the researcher electronically via email within seven days. The instructions explicitly guided students to concentrate their reflections on their emotional responses, encouraging vigorous exploration of subjective experience with peer response. Students described their affective reaction to receiving feedback, discussed the influence of various modalities on anxiety, comfort, and motivation levels, and pondered the affective determinants of resistance or acceptance to peer feedback. These reflections also allowed them to suggest how affective reactions shaped impressions of their speaking performance and engagement with others, resulting in increased affective self-awareness and personal understanding of the feedback process. By triangulating these findings with quantitative surveys, focus group discussions and field notes, reflections added substantial depth and validity to the current study.

Reflective journals provided respondents with the opportunity to express their own individual emotional experiences in private, writing down subjective opinions without immediate social pressure or the researcher's influence. Alternatively, field notes allowed the researcher to capture witnessed, real-time affective responses and interactions during feedback sessions. Hence, the application of reflective journals and field notes afforded methodological triangulation, data diversification based on several observations, and adding strength to validity in qualitative analysis. Along with quantitative surveys and focus groups, these resources collectively gave an effective and synthesized understanding of emotional experiences that underlie each modality of peer feedback.

Data Collection and Analysis

The data collection and analysis followed a structured, multi-phase approach to analyzing participants' emotional responses to face-to-face and digital feedback. Quantitative data were gathered using the Emotional Response Scale, a tool adapted from Marcus et al. (2006). This scale employs a 5-point Likert system to measure a range of positive emotions (e.g., enthusiasm, hopefulness, pride) and negative emotions (e.g., fear, worry, resentment) experienced by participants after receiving feedback. The scale's standardized nature ensured consistency and comparability across both feedback groups. Surveys were distributed immediately after feedback sessions for Group A (face-to-face feedback) and after participants in Group B (digital feedback) had accessed their peer evaluations asynchronously.

Descriptive statistics were calculated to summarize the participants' emotional responses, while inferential statistics were used to test for significant differences in emotional constructs. Normality was checked by obtaining statistics on skewness and kurtosis to gauge the appropriateness of performing a parametric test. Non-normal constructs were considered to be those whose skewness and kurtosis values fell outside the acceptable range ± 2 . Independent samples t-tests were then conducted to compare the means between the two feedback groups. Each significant difference calculated the effect size by Cohen's *d* to indicate the practical significance.

Qualitative data collection, on the other hand, included field notes from the researcher, focus group discussions, and individual reflections. Detailed observation notes were taken by the researcher in face-to-face sessions to note non-verbal communication, interpersonal relations, and the engagement of participants. During the digital modality, note-taking concerned

reactions of participants related to anonymity and asynchronous interaction. In addition, focus group discussions which allowed for in-depth exploration of experiences and perceptions were conducted with randomly selected participants from each group. Group A's discussions highlighted immediacy and interpersonal dynamics, while Group B elaborated on the effects of anonymity and asynchronous feedback. Lastly, all participants submitted their reflections one week after the feedback sessions.

Thematic analysis (Braun & Clarke, 2023) was conducted to organize qualitative data from focus group transcripts, field notes, and individual reflections via MAXQDA. The analysis started with an initial open coding round, where stretches of text explicitly citing emotional experience and response following peer feedback were labeled. For the initial round, the scheme was inductive, tracking respondents' own vocabulary in order to keep the results genuine. From this, code pieces were identified to look out for patterns, similarity, and recurrences of repeated patterns allowing the researcher to refine and merge initial codes into meaningful categories, such as *'initial reactions'*, *'usefulness of feedback'*, *'peer interaction'*, and *'engagement with feedback'*. The cross-validation and theme generation were done through focus group discussion, reflective journals, and the researcher's field notes with constant comparison to achieve consistency.

Triangulation through different sources of data was done to enhance validity. This allowed for the identification of consistent patterns and the resolution of discrepancies, thereby reinforcing the reliability of thematic analysis. Such an intensive and iterative approach to analysis means that emergent themes are well grounded in the data and reflect participant experiences. Such triangulation lends validity to the findings since convergence suggests a robust insight into an area of exploration and divergence an in-depth investigation into nuances within contexts. The current methodology provides complete insight into how modality differentiates emotional and pedagogic influences, thus providing useful implications for improving feedback practices in ELT settings.

The Researcher's Positionality

In qualitative research, it is most important to note researcher's positionality to provide clarity and credibility. As the researcher in this study, I investigated from my perspective as an experienced educator familiar with ELT contexts and aware of the emotional complexity students often find themselves in while engaging in peer feedback transactions. My experiences and assumptions inevitably shaped my understanding of emotional responses from participants. However, to reduce the potential for bias due to my positionality, I used triangulation between different data sources (reflective journals, field notes, focus groups), actively seeking discrepancies and convergences to support my interpretations. Further, I took reflexive notes while going through data analysis to reflect on how assumptions and beliefs could have influenced coding and theme building. Such reflection allowed greater consciousness and regulation over personal bias so that findings in the study became credible.

Findings

The data analysis has identified several significant differences in emotional impacts between the face-to-face and the digital peer feedback modalities in ELT. Results from quantitative measures showed that emotions of both a positive and negative nature were higher-order for participants in the face-to-face feedback group compared with those in the digital feedback group. Similarly, qualitative data from individual reflections, focus group discussions, and the researcher's field notes highlighted distinct emotional responses and engagement patterns.

Quantitative Findings

The descriptive statistics provided an overview of emotional responses for both face-to-face feedback (coded as 0) and digital feedback (coded as 1). According to Table 1, the mean score for **enthusiastic** in face-to-face feedback (4.143) is higher than in digital feedback (3.652), suggesting participants in face-to-face sessions felt more eagerness. Moreover, digital feedback scores for **worried** (2.182) and **afraid** (1.712) are lower than face-to-face scores, indicating that digital feedback reduces anxiety-related emotions. Conversely, mean scores for hateful and angry are comparable across modalities, showing no significant differences in participant hostility.

Table 1 Descriptive statistics for emotional constructs across feedback modalities

Emotional construct	Feedback modality	Valid (N)	Mean	SD	Skewness	Kurtosis
Enthusiastic	Face-to-Face	49	4.143	0.842	−0.718	−0.088
	Digital	66	3.652	1.000	−0.480	0.004
Hopeful	Face-to-Face	49	3.918	0.953	−0.286	−0.600
	Digital	66	3.879	1.133	−0.851	0.954
Proud	Face-to-Face	49	3.612	0.984	−0.604	−0.139
	Digital	66	3.652	0.984	−0.438	0.080
Scared	Face-to-Face	49	2.347	1.182	0.619	−0.365
	Digital	66	1.970	1.052	1.043	0.615
Worried	Face-to-Face	49	2.714	1.080	0.759	−0.080
	Digital	66	2.182	1.258	0.897	−0.290
Afraid	Face-to-Face	49	2.143	1.004	1.272	0.433
	Digital	66	1.712	1.049	1.496	1.400
Resentful	Face-to-Face	49	1.673	1.004	1.272	1.400
	Digital	66	1.758	0.860	0.646	−0.928
Hateful	Face-to-Face	49	1.245	0.830	2.661	6.805
	Digital	66	1.348	0.850	2.702	8.289
Angry	Face-to-Face	49	1.245	0.830	4.065	16.665
	Digital	66	1.364	0.777	2.702	8.289
Bitter	Face-to-Face	49	1.265	0.638	2.216	3.399
	Digital	66	1.394	0.677	1.782	2.964

Note: SD = Standard Deviation, SE = Standard Error of the Mean. Face-to-face feedback (coded as 0) and Digital feedback (coded as 1). Shapiro-Wilk test indicates significant deviations from normality ($p < .001$).

While most emotional constructs fall within the acceptable range for skewness and kurtosis, extreme values for *hateful* and *angry* indicate substantial deviations from normality. These results, combined with Shapiro-Wilk tests (all $p < 0.001$), suggest that normality cannot be assumed for certain constructs, particularly those with high skewness and kurtosis. For constructs exceeding the thresholds may require non-parametric tests for further validation.

Independent samples T-test was utilized to compare the emotional responses between face-to-face and digital feedback modalities as shown in Table 2. The results suggest that the participants who received feedback in the face-to-face setting felt significantly more *enthusiastic* compared to the ones who received feedback digitally ($t = 2.784$, $p < 0.01$) having a medium effect size (Cohen’s $d = 0.54$) according to Cohen’s (1988) thresholds, where 0.2 represents a small effect, 0.5 a medium effect, and 0.8 a large effect. In addition, lower *worry* ($t = 2.469$, $p < 0.05$) and *fear* ($t = 2.041$, $p < 0.05$) levels were obviously seen in the digital feedback setting, showing a small effect size with Cohen’s $d = 0.47$ and Cohen’s $d = 0.39$, respectively. However, emotional constructs such as *hopeful*, *proud*, *resentful*, *hateful*, *angry*, and *bitter* do not show significant differences between the two modalities ($p > 0.05$), which suggests that the feedback mode less influences these emotions.

Qualitative Findings

This study explores the emotional dimensions of face-to-face and digital peer feedback modalities, focusing on their influence on learners’ engagement and emotional experiences. By analyzing individual reflections, the researcher’s field notes, and focus group discussions, this research provides a nuanced understanding of how feedback practices impact students’ learning processes in ELT settings.

Initial Reactions to Feedback

The face-to-face feedback session generated very positive emotional reactions. The participants often reported feeling proud, satisfied, and confident after receiving immediate feedback.

Table 2 Independent samples t-test results for emotional constructs

Emotional construct	t	df	p
Enthusiastic	2.784	113	0.006**
Hopeful	0.232	113	0.817
Proud	-0.198	113	0.843
Scared	1.803	113	0.074
Worried	2.469	113	0.015*
Afraid	2.041	113	0.044*
Resentful	-0.472	113	0.638
Hateful	-0.653	113	0.515
Angry	-0.787	113	0.433
Bitter	-1.033	113	0.304

Note: $p < 0.05^*$, $p < 0.01^{**}$. Statistically significant results are marked with asterisks.

As one participant noted, *“I felt proud and confident”*, many participants highlighted the uplifting nature of the sessions, stating that the face-to-face feedback process was enlightening and boosted their self-esteem. In FGD, F3 also indicated, *“I liked it because it felt more personal. It made me feel confident when I saw that they were interested in my speech.”* Similarly, participants in digital feedback sessions appreciated the comfort provided by the anonymity and asynchronous nature of the process. Some participants shared, *“I felt comfortable reading the feedback later; it was less stressful.”* or *“I would have had negative emotions if I had received my feedback right after the presentation.”* In FGD, D4 also highlighted, *“I felt more relaxed because I wasn’t receiving the comments in front of everyone. Reading them later gave me time to process without feeling pressured.”*

Despite the largely positive reactions, some participants reported mixed feelings, particularly in the digital feedback setting. While anonymity was appreciated, it also led to disappointment for some due to vague or redundant comments. One participant expressed, *“Some feedback was unclear and irrelevant.”* In face-to-face settings, initial nervousness was common, but it often subsided as participants realized the feedback was constructive. As one student explained, *“Although I was anxious at the beginning because my peers’ criticisms would be heard by everyone, their feedback was constructive, not destructive.”* In FGD, a similar statement was made by F1, *“At first, I was really nervous. But then, when they started giving feedback, I felt supported. The smiles and gestures made it easier to accept the feedback.”*

Quality and Usefulness of Feedback

The quality and perceived usefulness of feedback varied between modalities. In face-to-face settings, participants appreciated the constructive and respectful tone of the feedback, with one student stating, *“They criticized without hurting.”* However, close relationships sometimes affected objectivity in this setting, with some participants noting, *“A few friends said that I had no mistakes. They were my best friends, but that feedback was useless for me since it is not the truth.”*, *“The feedback should not be given by close friends.”*, and *“The feedback my best friend gave me was not objective or helpful to improve myself, I need reality.”* Likewise, F3 stated in the FGD, *“People close to me gave overly positive feedback, which wasn’t that helpful. I needed more honest suggestions to improve.”* In contrast, digital feedback’s anonymity was seen as a double-edged sword. While some participants found it increased objectivity, others felt it reduced accountability. One participant remarked, *“The anonymity of feedback made me trust their objectivity.”* while some others stated, *“The anonymity reduced the seriousness of feedback.”* and *“Some people just wrote the feedback because they had to.”*

When it comes to depth and clarity of feedback, face-to-face feedback allowed for immediate clarification, which participants valued highly. One student noted, *“Face-to-face feedback is the most effective way because when we are in front of them at that moment, the feedback is more accurate and impactful.”* Likewise, another participant indicated, *“Face-to-face feedback provided clarity, reliability and sincerity.”* while many others agreed with the participant suggesting, *“Face-to-face feedback process helped me grasp their suggestions more effectively.”* In digital setting, on the other hand, the permanence of written comments was appreciated, but the lack of depth in some feedback was a concern. Some participants shared, *“They were simply written, so not helpful.”* or *“In terms of diversity, the quality of feedback was a bit disappointing.”*

Peer Interaction and Communication

Face-to-face feedback allowed for richer interaction through non-verbal cues such as eye contact, gestures, and smiles. As one participant explained, *“Eye contact was valuable, made me*

feel understood." These contacts also created a sense of connection among the students: *"Normally, we don't talk much with some people, but this gave us the opportunity to engage in mutual dialogue."* In digital settings, for example, this was a disadvantage due to the lack of live interaction. A participant commented, *"Lack of interaction in real time made it impossible to ask for clarification."*

Face-to-face sessions therefore strengthened bonds among classmates. As stated in the FGD by F2, *"Giving and receiving feedback in a face-to-face setting strengthened our bonds as classmates and helped build sympathy among each other."* On the other hand, while anonymity was valued in the digital setting for giving freedom to them, it also made them irresponsible and less connected. As one participant responded, *"Some friends wrote the same feedback for everyone."* This lack of connection was also highlighted by D2 in FGD, *"It is easier to accept feedback when you can connect it to someone you trust."*

Engagement with Peer Feedback

Receiving feedback, both face-to-face and digital, was an emotionally charged process through which participants' engagements and perceptions were developed. The face-to-face feedback process brought a wide array of emotional responses from most participants, who expressed it to be a positive and motivating experience. Many participants felt encouraged and supported by the constructive nature of the feedback. As one pointed out, *"Constructive suggestions encouraged me,"* while another added, *"Their comments made me visible, appreciated, and encouraged me to be better."* The feeling of encouragement was further shared by participants who emphasized the equality and non-judgmental atmosphere: *"Everybody spoke under equal conditions, I don't think anybody gave feedback with judgment,"* and *"They did not give feedback to judge."*

Many participants reported that the process increased their self-confidence and motivation. One participant commented, *"It motivated me to improve my speaking,"* another shared, *"It will work for me for the rest of my life."* Even when participants received negative feedback, they viewed it constructively: *"I viewed them as an opportunity to see the areas for improvement."* The supportive environment also made the participants feel comfortable and appreciated: *"Never felt uncomfortable, not even by the ones who are strangers to me,"* and *"Their support was priceless."*

Some participants reflected on the impact of instant feedback, noting initial nervousness: *"Knowing that I will get instant feedback made me a little nervous,"* and *"I was anxious at the beginning because my peers' criticisms would be heard by everybody."* However, this anxiety often turned into realization and satisfaction when participants recognized the constructive intent of their peers. One shared, *"The feedback was constructive, not destructive";* and another said, *"It was a great feeling getting good comments from my peers I had not talked to a lot until then."*

The interactive character of face-to-face feedback generated a positive emotional climate, for example, through the use of smiles and gestures. One participant noticed that *"They smiled, blinked, and suddenly the whole class was brighter than ever."* Interpersonally, the process became livelier and more interesting for the participants this way. Lastly, there is the personal development elicited by giving feedback as one participant commented: *"I enjoyed giving feedback more than receiving,"* while another stated, *"Sharing opinions may allow building up connections with the others."*

While most of the feedback was well-received, some participants identified areas for improvement, describing a few comments as "artificial". Nonetheless, the overall sentiment was that face-to-face feedback significantly boosted participants' enthusiasm and motivation as

indicated in the FGD by F5: *“Nice comments boosted my enthusiasm.”* A similar situation was emphasized in the FGD by D3 for the digital feedback setting, *“I liked the calmness of the process, but some comments were too vague or repetitive.”*

On the other hand, in the case of the digital environment, anonymity was a major discourse that recurred throughout many participants’ accounts. One participant shared, *“It was a great opportunity for me to receive feedback that was written honestly because they were anonymous.”* Another shared, *“The process was particularly good for introverted people,”* as some people are more emotional while confronting others directly.

Other influential elements regarding emotional response were the asynchronies of digital feedback. For most participants, this was explained by stating that receiving feedback later gave them time to calm down. D5 said in the FGD, *“The asynchronous nature of digital feedback was better compared to immediate feedback since I had time to think about what I did.”* Some mentioned that delayed feedback resulted in reduced levels of stress. A participant commented, *“I felt relaxed when I got feedback digitally.”* However, the lack of real-time interaction in digital feedback created some limitations. One participant reflected, *“The anonymity of the feedback influenced me emotionally because I wanted to see who wrote it.”* This curiosity sometimes impeded emotional engagement, as participants felt disconnected from the source of feedback.

Despite the differences in emotional dynamics, participants from both conditions agreed on the higher value of feedback quality over timing. As one participant aptly summarized in FGD, *“It is not important exactly when I receive feedback; the quality is more important.”* This resonates with the central position meaningful and actionable feedback occupies in the emotional experience of learners.

Suggestions for the Improvement of Feedback Process

Most of the respondents recommended developing a hybrid model of feedback that combines strengths from both modalities. In face-to-face setting, participants suggested adding written elements. As one participant stated, *“I wouldn’t change the face-to-face process, but I’d add an evaluating paper to be written anonymously.”* For the digital setting, participants suggested adding real-time features. A participant commented, *“A platform that allows for follow-up questions would increase the effectiveness of the digital feedback process.”*

In addition, structured rubrics were most often mentioned in improving the effectiveness of the feedback. In the face-to-face setting, participants suggested *“I would suggest a more structured approach, such as concrete instructions or a Likert scale.”* In the digital setting, gamification elements, like scoring systems or emojis, were recommended to make the process less tedious. One participant said, *“I would like to use emojis or stickers.”*

Discussion

Peer feedback in ELT has been explored considerably as a key pedagogical tool. Contributing to this wealth of knowledge, the current study comparatively explores face-to-face and digital peer feedback modalities. The findings from the statistical data and participants’ reflections illustrate distinct patterns of emotional engagement and practical implications for educational feedback practices.

Emotional Engagement in Peer Feedback Modalities

Face-to-Face Feedback

Face-to-face feedback sessions elicited stronger emotional responses, as reflected in the higher mean scores for positive emotions such as *enthusiasm* and *hopefulness* compared to digital

feedback. Specifically, the face-to-face feedback setting fosters significantly higher enthusiasm levels than digital feedback. This aligns with previous research, which highlights that immediacy in feedback interactions heightened emotional intensity, prompting both enthusiasm and anxiety (Bharuthram & van Heerden, 2023; Xiao & Lucking, 2008). Similarly, according to the researcher's field notes, during the face-to-face feedback sessions, the overall atmosphere was observed to be highly interactive and positive. Most participants appeared engaged, maintaining eye contact and nodding as their peers shared feedback.

Qualitative accounts supported this, with participants most often mentioning that non-verbal behaviors, such as eye contact and smiles, were instrumental in helping to build a supportive and motivational environment. Most participants mentioned that their interactions with smiles, gestures, and eye contact made communication stronger during the feedback sessions. The researcher also noted that there were non-verbal cues like smiling, nodding, and leaning forward to indicate active listening and a non-judgmental setting. Thus, it is safe to say that in-person encounters foster real communication and prompt explanation, which in turn encourages learners to get emotionally involved (Peungcharoenkun & Waluyo, 2024). Furthermore, the promptness of emotional reactions through tone, gestures, and facial expressions can create encouraging and inspiring settings in face-to-face peer feedback (Bharuthram & van Heerden, 2023; Donia et al., 2021).

Face-to-face settings also triggered higher levels of anxiety, as evidenced by higher mean scores for *worry* and *fear* compared to digital feedback. Students' affective engagement and emotional responses such as discomfort and nervousness during peer feedback can affect its perceived utility (Peungcharoenkun & Waluyo, 2024). Initial nervousness was commonly reported but often gave way to constructive realizations. Although a noticeable number of students exhibited nervousness at the beginning, as evidenced by fidgeting and avoiding eye contact, as the feedback process progressed, this nervousness appeared to subside. Face-to-face feedback can initially heighten anxiety but ultimately facilitates deeper learning through real-time dialogue (Winstone et al., 2017). This is in line with the findings of Guyer et al. (2014), who studied the increased vulnerability of adolescents to peer evaluations and reported that emotional responses were intensified with direct feedback. Anttila et al. (2017) also describe the immediacy of face-to-face feedback as emotionally intense, often eliciting both anxiety and enthusiasm.

Digital Feedback

Digital feedback, characterized by anonymity and asynchronicity, demonstrated a reduction in anxiety-related emotions. Lower scores for *worry* and *fear* suggest that the asynchronous nature of digital feedback provides a less intimidating environment for learners. Participants appreciated the time to reflect on feedback since delayed feedback can enhance comprehension and reduce performance-related stress (Aprilianti & Widyantoro, 2024). The researcher further observed that, because of this sense of delay in engagement, participants tended to process feedback in their own time and at their own pace, without any immediate reactions. While lacking the collective energy generated in the face-to-face sessions (Ennis et al., 2021), this setting was calm and reflective, where participants could pay more attention to the content of the feedback.

Moreover, the researcher observed that the environment was more subdued in the digital feedback process, with participants independently reviewing feedback on their devices. While the lack of real-time interaction meant fewer observable emotional responses, some students were seen smiling or nodding while reading comments. A few participants even appeared thoughtful, pausing occasionally to take notes or re-read their feedback. Bharuthram and van Heerden (2023) confirm that written asynchronous feedback will be less stressful for the students because they can review the comments at their own pace.

Besides asynchronicity, it was found that the anonymity of the process seemed to have mixed effects. Although anonymity was considered a value by the participants because it enhances honesty and objectivity, which was also pointed out by the previous research (Donia et al., 2021; Xiao & Lucking, 2008), some participants still wanted to know who their reviewers were, which means that anonymity can sometimes stand in the way of emotional contact. Therefore, online peer feedback can increase performance and motivation but at the expense of a deeper emotional involvement due to the lack of an immediate interactive effect (Kayacan & Razi, 2017). The researcher's notes and the FGD with the digital feedback group also approved that while anonymity promotes sincere feedback, it can sometimes hinder relational dynamics in learning communities.

Implications of Feedback Quality and Usefulness

In both conditions, the quality and perceived usefulness of peer feedback played a vital role. Face-to-face feedback provided the opportunity for instant clarification, which in turn made the suggestions more understandable. The participants described this modality as “more accurate and impactful” since the exchange of ideas could be done in real-time. This also supports the framework of Nicol and Macfarlane-Dick (2006) on feedback, indicating that dialogue develops clarity and learner autonomy. Direct interaction encourages effective communication and negotiation, hence leading to better learning outcomes (Pham, 2021), which was also valued by participants. With heightened emotional engagement in face-to-face feedback, teachers must create structured but supportive conditions that balance timely interaction with affective safety, i.e., defining clear feedback protocols and deliberately training students to give supportive and constructive oral feedback.

On the other hand, the permanence of digital feedback was considered a virtue for documentation purposes but a vice in that it lacked depth. The participants emphasized that digital feedback needs to be supported with structured rubrics to be effective. In a related vein, Li and De Luca (2014) propose that clear guidelines can enhance asynchronous feedback to maintain its actionability and detail. Although digital feedback allows learners to reflect on comments over time and may result in more considered revisions (Baharudin & Razali, 2021), the asynchronous nature of this sometimes results in less immediate engagement, while a lack of non-verbal signals can lead to misinterpretation. Some participants also felt that anonymous feedback lacked accountability, which could diminish its constructive value. This sentiment is echoed in the literature, where researchers caution that anonymity may sometimes result in less responsible feedback, potentially impacting learners' trust in the process (Baharudin & Razali, 2021). Decreased anxiety levels in digital feedback suggest its promise as an adjunct modality for anxious or uneasy students in face-to-face settings. Practically speaking, instructors could employ hybrid frameworks of feedback combining face-to-face immediacy with online reflective time, thus finding the best balance of emotional comfort and participation. Moreover, teachers should become aware of their critical role in openly speaking about emotional reactions to feedback and consciously developing emotional resistance among students. Lastly, the teacher can optimize learner motivation and performance by intentionally selecting feedback modalities and strategies that are not only appropriate for pedagogical goals but also for learners' emotional needs.

Conclusion and Suggestions

This study has brought into sharp focus on the difference between the emotional effects of face-to-face and digital peer feedback modes in ELT. Face-to-face feedback allowed for immediate interaction and clarification. It developed collaboration but often produced defensiveness or

increased anxiety. Digital feedback provided participants with more time for reflection and less social pressure, yet it sometimes provoked frustration because real-time clarifications could not be obtained. On the other hand, the students in the digital feedback group reported a greater sense of comfort and less anxiety due to the anonymity and asynchronous nature of the feedback.

Capturing and comparing emotional responses and engagement levels, this study shows how methods of feedback shape and mold the emotional landscapes of learners. These insights underline that feedback practices must be designed in such a way as to balance emotional safety with meaningful interaction and deepen the understanding of emotional intelligence in ELT contexts, offering practical implications for enhancing feedback processes in both traditional and digital environments.

The limitation of the present study contextualizes the findings and may also inform further research. First, the generalizability of results to larger ELT populations is compromised by the convenience nature of the sampling. Future research could use random sampling to ensure a better degree of representation. Second, there is a potential for bias due to self-reported emotional responses either because of a desire for social desirability or poor recall of emotional states. Such a problem might be surmounted using other supplementary measures. Third, though face-to-face and digital modalities have been employed, different settings in these conditions were not considered, which future research can look into for a finer understanding. Despite the mentioned limitations, the present study offers rich insights into the emotional and pedagogic dynamics of providing peer feedback in the ELT context.

Given the strengths and weaknesses of each modality, a hybrid peer feedback approach may provide a balancing effect. By combining the immediacy and personal interaction of face-to-face feedback with the reflective opportunities afforded by digital platforms, both emotional engagement and learning outcomes may be improved. Guided training sessions that would show students how to give each other effective feedback, independent of modality, can enhance the quality and outcomes of peer assessments even further. Recent research underlines the necessity of explicit training for optimizing the potential of peer feedback in ELT settings.

In the end, both face-to-face and digital peer feedback modalities have different emotional impacts on learners in ELT settings. Being aware of the differences is important for educators seeking to use effective feedback that enhances learner engagement, motivation, and performance.

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