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A LONGITUDINAL STUDY OF STUDENTS' EMOTIONAL ENGAGEMENT IN TASK-BASED EFL READING LESSONS

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Abstract: This study investigates how English as a Foreign Language (EFL) university students' emotional engagement develops over time across task-based reading lessons. Adopting a short-term longitudinal mixed-methods design, the data were collected from 66 Vietnamese EFL students over five task-based reading lessons within half a semester. The quantitative data were collected via repeated questionnaires administered after each reading task, while the qualitative data were obtained from follow-up interviews with ten selected students. The quantitative results revealed a significant change in emotional engagement across tasks, with engagement increasing after the initial task, peaking midway through the sequence, and declining slightly in the final task. The qualitative findings further showed that students' emotional engagement was characterized by evolving patterns of enjoyment, enthusiasm, curiosity, and limited boredom, which were closely related to task design, topic relevance, interaction, and novelty. The findings indicate that emotional engagement in task-based reading lessons is dynamic and task-sensitive rather than stable over time. The study highlights the importance of sequencing and designing reading tasks that sustain positive emotional engagement throughout a task sequence in EFL classrooms.

Keywords: emotional engagement, task-based language teaching, reading skill

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NGHIÊN CỨU SỰ BIẾN ĐỔI MỨC ĐỘ GẮN KẾT CẢM XÚC CỦA SINH VIÊN TRONG CÁC BUỔI HỌC ĐỌC HIỂU TIẾNG ANH THEO HƯỚNG NHIỆM VỤ

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Tóm tắt: Nghiên cứu này tìm hiểu sự thay đổi theo thời gian về mức độ gắn kết cảm xúc của sinh viên đại học chuyên ngành tiếng Anh trong các buổi học kỹ năng đọc hiểu theo hướng nhiệm vụ. Nghiên cứu áp dụng phương pháp hỗn hợp theo chiều dọc, với dữ liệu được thu thập từ 66 sinh viên của Việt Nam qua năm bài học đọc theo hướng nhiệm vụ trong nửa học kỳ. Dữ liệu định lượng được thu thập thông qua bảng hỏi lặp lại sau mỗi nhiệm vụ đọc và dữ liệu định tính được thu thập qua các cuộc phỏng vấn tiếp nối với mười sinh viên được chọn. Kết quả định lượng cho thấy sự gắn kết cảm xúc thay đổi đáng kể giữa các nhiệm vụ, tăng sau nhiệm vụ đầu tiên, đạt mức cao nhất ở giai đoạn giữa chuỗi nhiệm vụ và giảm nhẹ ở nhiệm vụ cuối. Kết quả định tính cho thấy sự gắn kết cảm xúc của sinh viên được thể hiện qua các dạng cảm xúc thay đổi như: hứng thú, nhiệt tình, tò mò và mức độ chán nản thấp, những yếu tố này gắn với thiết kế của nhiệm vụ, mức độ liên quan của chủ đề, sự tương tác và tính mới mẻ của bài học. Kết quả khảo sát cho thấy sự gắn kết cảm xúc trong các giờ học đọc theo hướng nhiệm vụ không ổn định mà mang tính động và thay đổi theo nhiệm vụ. Nghiên cứu nhấn mạnh tầm quan trọng của việc sắp xếp trình tự và thiết kế các nhiệm vụ đọc nhằm duy trì sự gắn kết cảm xúc tích cực xuyên suốt chuỗi nhiệm vụ trong lớp học ngoại ngữ.

Từ khóa: gắn kết cảm xúc, dạy học ngôn ngữ theo hướng nhiệm vụ, kỹ năng đọc

1. Introduction

Student engagement has been widely recognized as an important factor supporting learners' achievement in language learning (Alzahrani, 2025; Hasavov et al., 2021; Hodge et al., 2018; Li et al., 2022). Engaged learners are more likely to participate actively in classroom activities, sustain effort, and benefit from learning opportunities. For this reason, student engagement has attracted increasing attention in second and foreign language research. Although student engagement is commonly understood as a multidimensional construct (Hiver et al., 2024), emotional or affective engagement is consistently acknowledged as a core component across most conceptualizations. Emotional engagement refers to learners' affective reactions during learning activities, such as interest, enjoyment, enthusiasm, or boredom. These emotional responses shape how learners experience classroom tasks and influence their willingness to remain involved in the learning process. In language learning contexts, emotional engagement plays a particularly important role, as learning often requires sustained attention and effort. Empirical research has shown that emotional engagement is closely associated with students' academic performance and, in many cases, predicts learning outcomes across educational settings (Engels et al., 2021; Liu et al., 2022; Liu et al., 2024). These findings suggest that emotional engagement is not only an accompanying affective state but also a meaningful contributor to learning success. However, much of this research has examined emotional

engagement either at a single point in time or across broad instructional periods, offering limited insight into how students' emotional responses fluctuate from one classroom task to another.

This gap is particularly relevant to task-based EFL reading lessons. Reading tasks require learners to process texts and persist through cognitive and linguistic challenges (Grabe, 2009), while task-based lessons involve meaning-focused activities with purposeful outcomes (Ellis, 2003; Willis & Willis, 2007). Features such as prediction, peer discussion, role-play, and post-reading production may shape students' enjoyment, curiosity, enthusiasm, or boredom from one lesson to another (Philp & Duchesne, 2016; Hiver et al., 2024). Therefore, emotional engagement in reading should be examined as a task-sensitive experience rather than only as a general learning condition.

Despite this need, emotional engagement in task-based EFL reading lessons remains underexplored, especially in the Vietnamese university context. The present study therefore adopts a short-term longitudinal mixed-methods design to examine EFL university students' emotional engagement across five task-based reading lessons over half a semester. By focusing on emotional engagement as a dynamic and task-sensitive process, this study seeks to contribute to a clearer understanding of student engagement in EFL reading and to provide insights into the design of reading tasks that support students' emotional involvement. The study addresses the following research question: How does the emotional engagement of EFL students develop over time across task-based reading lessons?

2. Literature Review

2.1. Emotional Engagement in Education Context

Emotional engagement, also referred to as affective engagement in some studies, has been conceptualized in different ways depending on the research focus. In the field of language learning, Svalberg (2009) defines affective engagement as learners' positive, purposeful, willing, and autonomous disposition toward the target language. From this perspective, affective engagement is reflected in learners' *willingness*, *purposefulness*, and *autonomy* in language learning. However, Hiver et al. (2024) argue that emotional engagement should be understood more directly through learners' affective responses while they are participating in language learning activities or tasks. This distinction is important because indicators such as willingness, meaningfulness, or purposefulness may represent antecedents or outcomes of engagement rather than emotional engagement itself.

Other scholars define emotional engagement more specifically in relation to students' emotions during learning. Skinner et al. (2009) describe affective engagement as students' positively motivated involvement in learning tasks and activities. Positive emotions such as *enjoyment*, *enthusiasm*, *interest*, *satisfaction*, *pride*, *vitality*, and *zest* are commonly regarded as indicators of students' affective engagement, whereas negative emotions such as *anxiety*, *boredom*, and *frustration* are often associated with affective disengagement. Similarly, Reeve (2013) and Reeve and Tseng (2011) define emotional engagement in terms of students' *enjoyment*, *interest*, and *curiosity* in learning tasks or activities. Mercer (2019) further notes that emotional engagement may also involve students' positive feelings about their relationships with teachers and peers during classroom learning. Although these definitions are useful, many of them emphasize positive emotions or broader learner dispositions. They may therefore provide a limited account of students' emotional experiences if less favorable emotions during classroom tasks are not considered.

Halverson and Graham (2019), drawing on the work of Skinner and colleagues (Skinner et al., 2008; Skinner et al., 2009), offer a more balanced framework by dividing emotional engagement into positive and negative emotional engagement. In their framework, positive emotional engagement includes *enjoyment* or *situational interest*, *happiness*, and *confidence*, whereas negative emotional engagement includes *boredom*, *frustration*, and *anxiety*. This framework is useful for the present study because it allows emotional engagement in task-based EFL reading lessons to be examined not only through students' positive emotions but also through less favorable emotional responses. Accordingly, the present study draws on Halverson and Graham's (2019) framework to conceptualize emotional engagement as students' emotional experiences while participating in reading tasks. The framework informed the questionnaire, which measured selected positive indicators, including enjoyment, curiosity, and enthusiasm, and one negative indicator, boredom. It also guided the interpretation of interview data by helping identify both stronger and weaker emotional responses across the five reading tasks. Thus, the framework served as the basis for defining, measuring, and interpreting emotional engagement in the present study.

With regards to the measurement of emotional engagement in language learning tasks, research provides evidence for the use of observing physical emotional indicators, including laughter, expressions of interest, positive responses to tasks and peer and facility relationships as means to determine the degree and nature of students' affective engagement (Lutz et al., 2006; Oga-Baldwin, 2019). Other researchers support the *use of self-reports*, such as surveys or questionnaires, about their emotions (Appleton et al., 2006; Dao et al., 2021; Fredricks & McColskey, 2012; Gunuc & Kuzu, 2014). Appleton et al. (2006) argue that self-report measures should be employed to measure emotional and cognitive engagement, as alternative approaches like observation and teachers' rating scales are deemed excessively inferential. Questionnaires concerning students' enjoyment, interest, excitement, contentment, satisfaction, boredom, tedium, discouragement, frustration, and annoyance have been documented as being frequently aroused during task execution (Dao & McDonough, 2018; Dao, 2021; Sampson & Yoshida, 2021).

2.2. Task-Based Reading Lessons

Task-based language teaching positions the task as the central unit of instruction and emphasizes meaning-focused language use to achieve a communicative or learning outcome (Ellis, 2003; Long, 2015). In reading instruction, task-based lessons extend beyond comprehension testing by embedding texts in purposeful activities such as prediction, information exchange, problem-solving, discussion, or post-reading production (Grabe, 2009; Nunan, 2004). These activities may make reading more meaningful and interactive, thereby creating conditions for students to respond emotionally to the task rather than merely complete a text-based exercise. As Philp and Duchesne (2016) argue, learners' engagement in tasks is shaped not only by cognitive and interactional demands but also by affective responses to task features. In task-based EFL reading lessons, students' enjoyment, curiosity, enthusiasm, or boredom may therefore vary depending on the topic, task demand, peer interaction, and opportunities for personal response. This relationship between task design and emotional engagement provides the theoretical basis for the present study, which examines students' emotional engagement across five task-based reading lessons.

2.3. Previous Studies

A growing number of studies have examined emotional engagement in EFL learning contexts (Dao & Sato, 2021; Engels et al., 2021; Hiromori, 2021). However, much of this

research has relied on cross-sectional designs in which emotional engagement is measured at a single point in time, offering only a snapshot of learners' emotional experiences. This limitation has led recent studies to adopt longitudinal or repeated-measure approaches to examine whether students' emotional engagement remains stable or changes over time.

Previous longitudinal studies have reported different patterns of emotional engagement. Some studies suggest relative stability or limited growth. For example, Zhou et al. (2023) examined intra- and inter-individual changes in L2 classroom engagement by measuring students' emotional engagement at three points in a general English course. Their findings showed that emotional engagement declined after the early stage of the course and then remained relatively stable in later measurements. Similarly, Oga-Baldwin and Fryer (2021) tracked students' engagement across five measurement points over a two-year period in Japanese elementary school English classes. Using latent growth curve modeling, they found no significant increase in emotional engagement over time, despite relatively high initial levels. In contrast, other studies have shown that emotional engagement may increase when instructional conditions provide sustained support for learners. Vo et al. (2024), for instance, investigated engagement trajectories in EFL listening instruction over a 15-week semester and reported a gradual increase in students' emotional engagement across three measurement points.

In the Vietnamese context, existing studies also provide useful but still limited evidence. Pham et al. (2024) adopted a short-term repeated-measures design and found a gradual increase in university students' emotional engagement over a four-week technology-supported vocabulary learning project. Nguyen and Tran (2025), using a cross-sectional survey, also reported generally high levels of emotional engagement among Vietnamese university students in English-medium instruction classes, although their design did not trace changes across time. Despite these contributions, existing Vietnamese studies have mainly examined emotional engagement in EMI settings or vocabulary-focused learning projects. Less attention has been given to how students' emotional engagement unfolds over time across a sequence of task-based lessons.

A related limitation concerns the skill focus of previous research. Much of the existing literature has examined emotional engagement in general English courses (Oga-Baldwin & Fryer, 2021; Zhou et al., 2023) or in relation to skills and activities other than reading, including listening instruction (e.g., Vo et al., 2024), speaking or oral interaction (e.g., Dao & Sato, 2021), and writing (e.g., Alzahrani, 2023; Li, 2024). Comparatively little attention has been paid to reading instruction (Hiver et al., 2025). This gap is important because reading lessons may involve different emotional demands from speaking, writing, or listening tasks. In task-based reading lessons, students' emotional engagement may be shaped by text topic, task novelty, comprehension difficulty, peer interaction, prediction activities, and opportunities for personal response. Therefore, findings from general English courses or other language-skill contexts cannot fully explain how students emotionally engage with a sequence of reading tasks.

Previous studies indicate that emotional engagement in EFL learning is dynamic, but its trajectory is not uniform. While some studies have reported stability or decline, others have shown gradual increases depending on instructional context, learning conditions, and skill focus. However, much of this research has examined emotional engagement either at a single point, across broad instructional periods, or in contexts other than task-based reading lessons. Therefore, the present study addresses this gap by tracing Vietnamese EFL students' emotional engagement across five task-based reading lessons.

3. Methodology

3.1. Research Design

This study employed a short-term longitudinal mixed-method design to examine EFL students' emotional engagement in reading tasks over the course of half a semester. A short-term longitudinal design was chosen because the study aimed to examine task-to-task fluctuations in emotional engagement rather than long-term development across an entire course. The half-semester period covered a clear sequence of five reading tasks, which was sufficient for tracing changes while keeping the participants, teacher, and instructional conditions relatively consistent. Extending the study to the whole semester might have introduced additional influences, such as examination pressure, course fatigue, or changes in workload, making task-related emotional changes more difficult to interpret. Data was collected in two stages. First, questionnaires were administered after five reading tasks to trace changes in students' emotional engagement across time. This was followed by interviews that provided deeper insights into students' emotional experiences during the tasks. The integration of quantitative and qualitative data enabled a more comprehensive understanding of how emotional engagement developed across the reading task sequence.

3.2. Participants

The research was carried out at a public university located in central Vietnam. The participants were 66 second-year undergraduates majoring in English Language Teacher Education. They were between 19 and 21 years old, had at least 10 years of English-learning experience, and shared broadly similar educational and cultural backgrounds. They were selected through convenience sampling from two intact classes because the study was conducted in a natural classroom setting and aimed to trace students' emotional engagement across an existing sequence of reading tasks. Both classes were taught by the same instructor, followed the same course syllabus, and completed the same five task-based reading lessons, which helped maintain comparable instructional conditions. Although the use of two intact classes may limit the generalizability of the findings, it was appropriate for this short-term longitudinal design because it allowed the same students to be followed across five tasks within a consistent classroom context.

3.3. Materials

In this study, five task-based reading lessons, corresponding to five of the ten units in the Reading and Writing 1 course, were implemented as a coherent half-semester sequence using *Skillful Level 3: Reading and Writing* (Rogers & Zemach, 2018) as the main course book. The lessons were designed by integrating the classroom procedure framework of Willis and Willis (2007) with task design principles proposed by Ellis (2003). All lessons followed three stages: pre-task, task cycle, and language focus, while varying in topic, interactional pattern, and task demand. To address their emotional engagement potential, the tasks were reviewed against engagement-related facilitators, including familiar or personally relevant topics, opportunities to predict and discuss text content, peer interaction through jigsaw reading or role-play, manageable comprehension demands, and meaningful post-reading outcomes such as group plans or timeline summaries. These features were expected to create opportunities for positive emotions for students. More specifically, the five reading tasks were organized around different themes and activity types. Task 1 (Identity) involved a jigsaw reading activity in which students exchanged information from different sections of the text and classified identity traits. Task 2

(Design) featured a role-play reading task in which students defended contrasting viewpoints based on the text. Task 3 (Thought) focused on question generation, with students creating and answering comprehension questions after reading. Task 4 (Fire) employed a prediction-based reading task that required students to anticipate content before reading and to develop a group action plan afterward. Task 5 (Movement) centered on annotating and matching activities, with students identifying main ideas and details in a text and producing a timeline summary.

3.3. Data collection instruments

3.3.1 Questionnaires

To examine changes in students' emotional engagement during reading tasks, questionnaires were administered repeatedly over five task-based lessons within a single semester. The questionnaire consisted of four items adapted from the validated scale used by Zare and Derakhshan (2025). The items were selected because they aligned with the present study's conceptualization of emotional engagement based on Halverson and Graham's (2019). Specifically, the questionnaire measured three positive indicators, namely enjoyment, curiosity, and enthusiasm, and one negative indicator, boredom. To fit the task-based reading context, the items were reworded to refer to students' emotional experiences during each reading task.

Before the main data collection, the adapted questionnaire was piloted with 30 second-year English-major students with similar backgrounds to the main participants but not included in the final sample. The pilot was conducted to check item clarity, comprehension, and relevance to the task-based reading context, and minor wording revisions were made accordingly. The short scale was considered appropriate for the repeated-measures design of the current study because it reduced item redundancy and limited students' response burden after each task.

Internal consistency was assessed separately for each of the five questionnaire administrations. As shown in Table 1, Cronbach's alpha values ranged from .705 to .801, with all values exceeding the commonly accepted threshold of .70. This indicates satisfactory internal consistency of the four-item emotional engagement scale across the five reading tasks. Given the small number of items, these alpha values were interpreted as evidence of internal consistency rather than full construct validation. Therefore, the results should be interpreted as reflecting selected aspects of emotional engagement in task-based reading lessons.

Table 1

Cronbach's Alpha Coefficients for Social Engagement Across Five Tasks

Dimensions	Task 1	Task 2	Task 3	Task 4	Task 5
Emotional engagement	0.705	0.801	0.721	0.746	0.707

3.3.2. Interviews

Semi-structured interviews were conducted to explain students' emotional engagement across the five reading tasks. Initially, 12 students were selected from the two intact classes, with six from each class. Based on their Task 1 questionnaire scores, each class contributed two students with relatively low engagement, two with moderate engagement, and two with high engagement. Two students were unable to participate in some later sessions; therefore, the final interview dataset included 10 students who completed repeated interviews across the task sequence. Each selected student was interviewed five times, once after each reading task. The interviews were conducted in Vietnamese, either face-to-face after the lesson or online via

Microsoft Teams, depending on students' availability. Students were asked how they felt during each reading task, why they felt more or less emotionally engaged, and whether their emotional experiences changed across the five tasks.

3.4. Procedure

Data collection took place across five consecutive reading lessons. After each lesson, students completed the questionnaire to report their emotional engagement during the reading task. The same procedure was repeated after all five tasks to capture changes over time. After the questionnaires had been collected, interviews were conducted with ten selected students. The same participants were interviewed after each reading task to trace possible changes in their emotional engagement across the task sequence.

Quantitative and qualitative data were analyzed in a stepwise manner. Questionnaire responses were first processed using SPSS to identify overall trends in students' emotional engagement. Descriptive statistics were used to summarize engagement levels, followed by repeated-measures ANOVA to examine whether engagement differed significantly across tasks. Assumptions of sphericity were assessed using Mauchly's test, and adjustment was applied when violations were detected. Effect sizes were reported using partial eta squared, and Bonferroni-corrected comparisons were conducted to locate significant task-level differences. The interview data were analyzed using thematic analysis following Braun and Clarke's (2006) six-phase procedure. After transcription, initial coding was guided by the four questionnaire indicators: enjoyment, curiosity, enthusiasm, and boredom. During theme development, enjoyment and enthusiasm were combined because students often described them together, while curiosity was treated as a separate theme. Boredom was integrated where relevant as a less favorable emotional response. To enhance coding consistency, the second author independently reviewed a sample of the coded transcripts, then any coding differences were discussed and resolved through consensus.

4. Findings

This section reports the findings of the data analysis addressing the research question of how students' emotional engagement developed over time across the five reading tasks. The table below presents the mean scores for students' emotional engagement items across the five reading tasks, along with the overall item and task means.

Table 2

Mean Scores of Students' Emotional Engagement Levels Across Five Reading Tasks (N=66)

Code	Item	T1 M(Sd)	T2 M(Sd)	T3 M(Sd)	T4 M(Sd)	T5 M(Sd)	Overall Item Mean
2.1	I felt enjoyable when doing the reading task.	3.76 (0.61)	4.36 (0.78)	4.38 (0.74)	4.33 (0.64)	4.24 (0.68)	4.01
2.2	Doing the reading task aroused my curiosity.	3.52 (0.85)	4.23 (0.76)	4.26 (0.75)	4.11 (0.73)	3.11 (0.68)	3.85
2.3	I felt bored when doing the reading task.	3.73 (0.71)	4.24 (0.75)	4.24 (0.90)	4.18 (0.70)	4.14 (0.78)	4.11
2.4	I felt enthusiastic when doing the reading task.	3.50 (0.66)	4.11 (0.75)	4.29 (0.67)	4.21 (0.71)	3.65 (0.81)	3.95
Overall task mean		3.63	4.23	4.29	4.21	3.78	

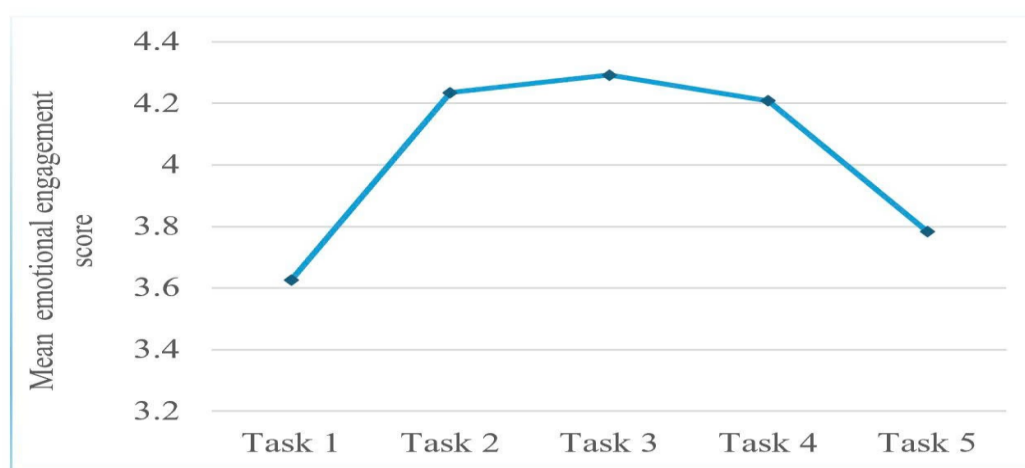
M: mean; T: task; SD: standard deviation

These scores reflect students' combined responses to four emotional engagement items in each task: enjoyment, curiosity, boredom (reverse-coded) and enthusiasm. Emotional engagement was high, with the strongest levels occurring midway through the task sequence. *At the item level*, *enjoyment* rose clearly from Task 1 ($M = 3.76$) to Task 3 ($M = 4.38$), then eased slightly by Task 5 ($M = 4.24$), resulting in a high overall mean ($M = 4.01$). *Curiosity* followed a similar pattern, increasing from Task 1 ($M = 3.52$) to Task 3 ($M = 4.26$) but dropping sharply in Task 5 ($M = 3.11$), making it the item with the largest late-stage decline. In addition, *enthusiasm* increased from Task 1 ($M = 3.50$) to Task 3 ($M = 4.29$), then fell to 3.65 in Task 5. In addition, the *boredom* item was reverse-coded, higher scores indicate lower boredom. Its consistently high score across tasks (overall $M = 4.11$) therefore suggests that boredom remained low throughout the intervention. Furthermore, *at the task level*, overall emotional engagement rose sharply from Task 1 ($M = 3.63$) to Task 2 ($M = 4.23$) and peaked in Task 3 ($M = 4.29$). It remained high in Task 4 ($M = 4.21$) before decreasing Task 5 ($M = 3.78$). Standard deviations ranged from 0.61 to 0.90 across the five tasks, suggesting moderate variation in students' responses. This means that, although the mean scores showed stronger emotional engagement in the middle tasks, students did not experience the tasks uniformly. The relatively higher standard deviation for curiosity in Task 1 and boredom in Task 3 indicate that some emotional responses varied more noticeably across students. These results show that emotional engagement was strongest in the middle tasks and weakened toward the final task.

As illustrated in Figure 1, the line graph clearly shows this progression, highlighting the steady rise from task 1 to task 3 and the subsequent decline toward task 5. The decline in emotional engagement in Task 5 may reflect the fading novelty of the task format combined with increased cognitive demands. As students became familiar with the routine, emotional excitement may be weakened, while greater cognitive effort in task 5 may have redirected attention toward task completion rather than emotional engagement. This finding suggests a shift in the quality of engagement rather than a loss of interest.

Figure 1

Students' Overall Emotional Engagement Across Five Reading Tasks



A repeated-measure ANOVA was conducted to examine changes in students' emotional engagement across the five reading tasks.

Table 3*Mauchly's Test of Sphericity for Emotional Engagement*

Within-Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon ^b		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Tasks	.757	18.211	9	.033	.859	.910	.250

Table 3 presents that Mauchly's Test of Sphericity indicated a violation of the sphericity assumption, $\chi^2(9) = 18.211$, $p = .033$; therefore, the Greenhouse-Geisser correction was applied.

Table 4*Repeated Measures ANOVA Results for Emotional Engagement Across Five Reading Tasks (Greenhouse-Geisser Corrected)*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Reading tasks - Greenhouse-Geisser	24.937	3.431	7.267	28.130	.000	.296
Error(tasks)	59.336	229.908	.258			

As shown in Table 4, students' emotional engagement changed across the reading tasks. The repeated-measures test confirmed that this change was statistically significant, $F(3.431, 229.908) = 28.130$, $p < .001$. The effect size was large (partial $\eta^2 = .296$), which suggests that the tasks did not affect students in the same way. In other words, nearly 30% of the variance of emotional engagement is explained by the differences between reading tasks. In short, emotional engagement was unstable and shifted throughout the intervention.

Furthermore, pairwise comparisons using Bonferroni correction revealed several statistically significant differences in emotional engagement between tasks (see Table 4).

Table 5*Significant Bonferroni-Adjusted Pairwise Comparisons for Emotional Engagement Between Reading Tasks*

Comparison	Mean Difference (I-J)	Sig.
Task 1 - Task 2	-0.610	.000
Task 1 - Task 3	-0.667	.000
Task 1 - Task 4	-0.583	.000
Task 2 - Task 5	0.451	.000
Task 3 - Task 5	0.508	.000
Task 4 - Task 5	0.424	.000

These results indicate that emotional engagement increased after task 1, remained relatively stable across tasks 2 to 4, and then declined in task 5. Specifically, task 1 showed significantly lower emotional engagement compared to tasks 2, 3, and 4 ($p < .001$), but did not differ significantly from task 5 ($p = .494$). No significant differences were found between tasks 2, 3, and 4. Task 5, however, demonstrated significantly lower engagement than tasks 2, 3, and 4 (all $p < .001$). In summary, students' emotional engagement significantly fluctuated across the five tasks, peaking midway and declining by the final task.

The interview data provides a deeper look into the quantitative results by showing how

students felt during the reading tasks. Two main themes were identified: fluctuating enjoyment and enthusiasm across the task sequence, and curiosity stimulated by task novelty and activity sequencing.

Fluctuating enjoyment and enthusiasm across tasks

Interview data showed that students' enjoyment and enthusiasm were stronger in the middle tasks, while lower excitement, tiredness, or mild boredom appeared in less dynamic tasks. In Task 1, students' emotional responses were still uneven. Only four students responded positively to the jigsaw reading activity. For example, S1 shared, *"I felt excited when in jigsaw activity, each person focused on a specific section"*, while S10 reflected, *"I felt motivated. I liked sharing my ideas and hearing from others. It didn't feel like a typical reading exercise, it was more interactive."* These comments suggest that the jigsaw format supported positive emotional engagement for some students by making reading more collaborative and interactive. However, this response was not shared by all participants. S5 noted, *"The lesson wasn't too boring. There were some parts I liked, but I wouldn't say I was very excited. The class was also noisy during the jigsaw activity,"* while S4 stated that she *"didn't feel excited"* and *"didn't have any motivation to study because I had to work with new friends who I am not familiar with"*. These contrasting responses show that enjoyment and enthusiasm were present in Task 1, but they were not yet widely shared across the group. They also suggest that interaction alone did not automatically generate positive emotional engagement; classroom noise and unfamiliar peer grouping appeared to limit some students' enjoyment of the jigsaw task.

A clearer increase in positive emotional engagement appeared in Task 2, which involved a role-play reading activity based on an interview about community development and a new business in town. Unlike Task 1, this lesson moved from think-pair-share evaluation of handmade versus machine-made products to role-play, gallery walk, and a town-hall-style debate. This design gave students clearer roles, contrasting viewpoints to defend, and more opportunities to speak, move around, and respond to peers. Seven out of ten students described this lesson as more interesting, enjoyable, or exciting than the first task. S7 stated, *"There were many new learning methods and activities like games, so it was quite interesting"*, while S3 explained that the competitive element made the lesson fun. This shift was especially visible among students who had expressed weaker engagement in Task 1. For instance, S4, who had reported very low motivation in the first task, said, *"Compared to the class before that, I felt better, more excited. It was more fun because the teacher initiated more activities."* This suggests that the role-play format and varied classroom activities helped increase students' enjoyment by giving them more active roles in the reading lesson.

Enjoyment and enthusiasm continued to be evident in Tasks 3 and 4, although they were linked to different task features. Task 3 was organized around the topic of the development of thought and began with students guessing and sharing childhood milestones from personal photos before they acted as *"question masters"* by creating and answering comprehension questions for other groups. This design gave the reading lesson a game-like and student-led format. All interviewees reported enjoying the activity, especially the group interaction and sequence of classroom stages. S1 described, *"I felt quite happy and engaged during the lesson. Compared to previous sessions, the activities yesterday were more developed, which allowed us to interact more with each other."* In addition, S9 shared, *"When each group created their own questions, we had to think like teachers and choose important information from the text to design multiple-choice and gap-filling questions."* This response indicates that enjoyment was connected not only to the reading content but also to the organization of the activity and the

opportunity to interact. In Task 4, the reading lesson focused on the causes of wildfires and moved from creating a mind map of fire causes to predicting multiple-choice answers before reading and designing a group wildfire prevention action plan after reading. Enjoyment in this task was therefore more often related to the practical topic, prediction activity, and collaborative final product. For example, S4 said that group work made the lesson “*more enjoyable*”, S5 commented that it “*didn’t feel like boring study*”, and S6 noted that teamwork made the lesson fun. These comments suggest that positive emotional engagement was strongest when the reading tasks combined interaction, novelty, prediction, and a meaningful outcome.

In Task 5, enjoyment was still present but less strongly expressed. Four students continued to describe the lesson positively. For example, S1 said, “*I felt happy*”, while S7 explained, “*It was more enjoyable when we could discuss the lesson instead of only doing textbook exercises.*” However, other students expressed more restrained or less favorable emotions. S8 commented, “*The text was quite long, so I felt a bit tired*”, and S9 noted, “*The lesson felt heavy because there was a lot of information to handle*”. These responses show that Task 5 did not remove enjoyment completely, but positive emotional engagement was weaker and less widely shared. The longer and denser text appeared to shift students’ attention from exploring the content to managing information.

Curiosity stimulated by task novelty and activity sequencing

Another emotional pattern in the interview data was students’ curiosity. It was not simply attached to particular tasks but appeared to be shaped by several task features, especially novelty, activity sequencing, and the unfamiliarity or challenge of the reading content. In the middle tasks, curiosity was often connected to the less predictable organization of the lessons. For example, S7 explained that “*the game format...at the beginning, made us very curious even before the class started, we were wondering what we would learn that day.*” Similarly, S9 noted that he often felt “*eager to know what the next activity would be or how the following lesson might be organized.*” These comments suggest that curiosity was stimulated when the reading lesson included varied stages and made students anticipate what would happen next.

Curiosity was also linked to unfamiliar or challenging content. In Task 2, which focused on handmade and machine-made products, S9 said, “*I felt more curious about things I didn’t know yet, so I wanted to learn more*”, while S10 shared, “*I was curious about the content of the questions the teacher asked and also about the information in the lesson*”. These responses indicate that students became curious when the reading topic or teacher questions opened up new information for them to explore. A similar pattern appeared in some responses to Task 5. Although most students described the final reading as heavy or tiring, three students still found the topic intellectually interesting. For example, one student explained, “*I became more curious about things I didn’t know, such as how the canal connects the Atlantic and Pacific oceans—it made me want to search for more information later.*” This shows that challenging content could still generate curiosity for some students, even when the overall emotional response to the final task was less positive.

In short, the interview findings were broadly consistent with the questionnaire results. Both sets of data showed stronger enjoyment, enthusiasm, and curiosity in the middle tasks, particularly Tasks 2, 3, and 4, and weaker emotional responses in the final task. The interviews added detail by showing that positive emotions were often linked to role-play, game-like activities, interaction, prediction, and meaningful group outcomes, whereas lower excitement or mild boredom was mentioned in relation to classroom noise, unfamiliar peers, and heavier reading texts.

5. Discussions

Notably, emotional engagement showed a curvilinear pattern, increasing during the early and middle phase of the task sequence before decreasing in the final task. This pattern aligns with prior longitudinal research showing that emotional engagement is task-sensitive and non-linear (Sulis, 2022; Zhou et al., 2023). However, while previous studies have traced engagement over longer periods of instruction, the present study shows that emotional engagement can also fluctuate within a short sequence of reading tasks. The interview data further suggest that the mid-sequence peak was not merely time-related but was associated with how students experienced particular task features. Students reported stronger enjoyment and curiosity when tasks involved interaction, prediction, question-making, game-like activity structures, and meaningful reading purposes. This finding supports the view that emotional engagement is a dynamic and context-sensitive state rather than a stable personal trait (Dao & Sato, 2021; Mystkowska-Wiertelak et al., 2025).

The findings also support previous research indicating that novelty and curiosity are key drivers of emotional engagement. According to the four-phase model of interest development (Hidi & Renninger, 2006; Renninger & Hidi, 2022), triggered situational interest is often activated by task and content features, with novelty playing a central role in eliciting positive emotions. This mechanism has been demonstrated in empirical studies, including Palmer (2009), and synthesized in the review by Guo and Fryer (2025). Consistent with Vo et al. (2024), students in the present study reported stronger emotional responses when the reading tasks introduced unfamiliar ideas, surprising information, or less predictable activities. However, the present findings also suggest that novelty was most effective when combined with interaction, student-generated output, and a meaningful task purpose, rather than operating as an isolated feature.

One important issue emerging from the findings is the decline in emotional engagement in the final task, with curiosity showing the most noticeable decrease. This suggests that the final task did not simply reduce students' positive emotions in general but specifically weakened their desire to explore or discover new information. One possible explanation is reduced novelty. When learners became more familiar with the task sequence, the initial positive affect associated with triggered situational interest may have weakened (Ainley, 2012; Guo & Fryer, 2025). However, the interview data suggest that the Task 5 decline was not only a matter of emotional saturation. Several students described the final reading task as longer, denser, and more tiring, indicating that the task may have shifted their attention from exploring new content to managing information. This interpretation is consistent with Yulia et al. (2020), who found that EFL student teachers often described dense academic reading as "a burden", "tedious", and something they were "reluctant" to do. Although students in the present study did not describe Task 5 as negatively as those in Yulia et al. (2020), their responses similarly suggest that text-heavy reading conditions can weaken positive emotional responses, especially curiosity. In this sense, the sharp decrease in curiosity may reflect specific features of Task 5's design, especially its heavier reading load and less dynamic activity structure.

In short, the findings indicate that emotional engagement in task-based reading lessons develops dynamically rather than linearly. The present study adds to previous longitudinal research by showing how this dynamic pattern can be explained at the level of individual reading tasks. Emotional engagement increased when tasks combined novelty, meaningful content, clear structure, interaction, and student-generated outcomes, but particular emotional indicators, especially curiosity, weakened when the task became more text-heavy and less

exploratory. This highlights the importance of designing reading tasks that balance predictable structure with challenge, interaction, and conceptual novelty to sustain learners' positive emotional engagement throughout a task sequence.

6. Conclusion

This study shows that EFL university students' emotional engagement in task-based reading lessons develops dynamically across tasks. The results indicate that emotional engagement increased after the initial task, peaked midway through the sequence, and declined slightly in the final task, suggesting that students' emotional responses were sensitive to task features and sequencing. The findings further suggest that positive emotions such as enjoyment, enthusiasm, and curiosity supported sustained involvement in reading tasks, while boredom occurred only occasionally and remained limited. From a pedagogical perspective, the results highlight the importance of sequencing reading tasks to maintain emotional interest, with later tasks requiring variation or challenge to prevent emotional engagement from weakening. Future research could examine emotional engagement over longer instructional periods or explore its interaction with other dimensions of engagement. Overall, this study emphasizes emotional engagement as a dynamic process shaped by repeated participation in well-designed task-based reading lessons.

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