Emotionally Tailored Web-Based Instruction: A Catalyst for Improved Performance Across Emotional Intelligence Levels

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ABSTRACT
This study examined the impact of emotionally sound web-based teaching on the learners’ achievement regarding English grammar. Emotions play a crucial role in education, influencing students’ ability to process information and learn effectively. The education system is not giving importance and attention to emotional intelligence education in schools and colleges. They often stress on IQ and not on EI. This study aims to improve English grammar performance by using emotionally sound web-based instruction, addressing the impact of emotions on learning outcomes. The sample of the population for this study was 183 Form Three students selected from a secondary school in Peninsular Malaysia. The research instruments included Pre-test, Post-test, and Trait Emotional Intelligence — Short Form (TEIQue-SF). The research design for this study is Quasi-Experimental with pre-test and post-test designs. In this study, the independent variable would be the instructional strategies, under two types of treatment conditions as well (Web-based Instruction with Emotional Element (WBIe) and Web-based Instruction without Emotional Element (WBIwe), and a moderator variable (level of emotional intelligence)) in two levels of emotional intelligence (high and low level of emotional intelligence). A simple 2×2 factorial design was employed here. The results indicated that students in WBIe were performing better rather than in WBIwe in terms of student success in learning English Grammar and between students of emotional intelligence with a high level on each of the WBIe and WBIwe types had the same score. It was found that the emotional intelligence level has a role in the WBIe and the WBIwe performance of the students. The emotional intelligence of high EI students scored higher on English grammar than the EI of low EI students. The results of this study established a link between sound web-based instruction and instruction; it also serves as a call for an instructional designer to understand clearly, why and how emotions affect learning. They can use this to determine how to harness their emotions toward the most effective kind of learning.

KEYWORDS: Emotions and design, Web-based instruction, Emotional intelligence, Academic performance

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1. INTRODUCTION
Emotions can affect the online learning experience (Butz et al., 2016; Ren, 2023). Despite the widespread use of technology in almost every aspect of our lives, still there are no emotional contents incorporated by instructional designers in educational strategies or learning tools (Driscoll & Burner, 2007; Clark & Mayer, 2023). Holtgrewe (2014) stated that new technologies sometimes are believed to make work easier, but new technologies also mean having new abilities. There is a need for more creative online learning in the design of emotionally stable online instruction.

There are two well-known names for the role of emotions in intelligence, Gardner (1999) and Cherniss (2000). Gardner has proposed that personality and intelligence are independent facets and intelligence is the simple processing of fact. Emotions do not have any kind of linkage with intelligence. But, as time passed by, scientists started to notice and understand the importance of emotions, feelings, and thoughts during the process of thinking (Seligman, 2004; Goleman, 2006; Ekman, 2007). This then is the realm of Emotional Intelligence (EI). Goleman (2006) says that IQ can explain only 20% of the factors that determine success in life, and the other 80% is attributable to EI. The fact of the matter is that both have a significant role in the lives of humans (Goleman, 2006; Agastya, 2023). So now in the sense of 80% depending level of EI then these individuals should know their level of EI to avoid any circumstances in their lives making life difficult.
In recent work, such as Schutz & Lanehart (2002), Pekrun et al. (2002), Dirx (2008), Värlander (2008), Phye et al. (2011), Hassankiaadeh (2013), and Christianson (2014) suggested that there is an emerging emphasis on emotion and learning which had been comparatively neglected in educational research. According to Brookfield (2006) and Dirx (2008), the contention was that emotion was usually associated with obstruction in teaching and learning. Furthermore, it seems like emotion is a much bigger and more dynamic force in learning than just slowing down rational thought (Sharp, 1975). It can be useful for learning this is all humans act and reason “but always require an appropriate facilitating context if successful action, or reason at all, is to be secured” (Barbalet, 2002, p1) and to gain an understanding of the emotional context of learning. Therefore, this study aims to investigate the emotions in learning processes and suggests a role for educators, educational institutions, and organizations to pursue well-being learning among students and to prepare them for the work organization, physically, mentally, and emotionally.

2. PROBLEM STATEMENT

Emotion plays a critical role in teaching and learning (Niculescu et al., 2016; Rasalingam, 2020; Parinussa, 2023). Some of the effects are on the students’ capacity to retain information. So often, in today’s classroom, students’ intellectual abilities may be sapped by negative thoughts and emotions. Their mind is driven by their emotions (Inzlicht et al., 2015). The intellect develops with all, with the emotional brain managing to place learning, cognition, and knowledge reception in the best possible way (Greenberg & Snell, 1997). Emotion is the on-off switch for learning (MacFadden, 2007). For example, students learn and perform better, for example, when happy, secure, and enthusiastic about the subject matter (Boekaerts, 1993; Oatley, 1996; Mar et al., 2011). On one hand, emotions can enliven students’ minds, but on the other hand, they can also distract from successful learning. Students who are too enthusiastic may not work with care or as carefully as methodologically. These same emotions (fear, anger and sadness) also can take away from the academic potential and prevent students from paying attention to the task at hand and therefore rob their knowledge.

There are several ways in which emotions can impact students learning, including by i) decreasing the ability to manage emotions with schoolwork, ii) worrying concerning schoolwork, and iii) eliciting an effective response to classroom events (Meyer, 2016). Results suggest emotions have a direct effect on the learning process (Ingleton, 1999; Barry, 2001; Pekrun, 2014; Barber, 2015). In this study, the researchers’ approach to teaching and fostering motivation in the classroom relies on the discovery of these findings. That is probably because we are not currently teaching emotional intelligence in schools and colleges (Goleman, 2006; Goleman & Boyatzis, 2017). The education system often stresses on IQ and not on EI (Singh, 2007; Taroor, 2016; De Botton, 2019; Clarke et al., 2024). Malaysian Government provides teachers to teach Bahasa Melayu, English, Mathematics, History, Geography, Science and IT which are the 7 core subjects in this country. Even though the subjects were in the school, how to handle frustrations, anxieties, stresses, failure, depression and burnout, ego, etc. not taught in school, (Singh, 2007). They were never taught how to handle feelings, like dealing with blending, settling in and associating with other individuals. All of this they were supposed to figure out, from parents, and the peer group. Years later, in marrying the organization context with the societal one to survive, they were advised to nurture emotional competencies to thrive (Polak et al., 2015; Tsakalerou, 2016; Einstein, 2023). On the other hand, it is correct that students who have better emotional intelligence are capable of giving better performance (Rasalingam et al., 2024). So, this study is aimed at ameliorating the poor performance in the English language and as such to experiment with how effective a web-based design could be. Therefore, this study aims to measure the differences between students’ grammatical English proficiency due to the use of emotionally based web-based instruction (WBIe).

3. RESEARCH OBJECTIVES AND RESEARCH QUESTION

This study aims to assess the effectiveness of emotionally tailored web-based instruction (WBIe) on English grammar performance among students with varying levels of emotional intelligence. Specifically, it seeks to:

1. Develop and compare two types of web-based instruction: one incorporating emotional elements (WBIe) and one without (WBIwe), to evaluate their impact on students’ grammar learning.
2. Examine how students’ performance is influenced by these instructional methods with their levels of emotional intelligence.

To achieve these objectives, the study poses the following research questions:

1. Is there a significant difference in performance between students with high and low levels of emotional intelligence under the WBIe and WBIwe conditions?
2. Is there a significant interaction between the instructional methods and students’ emotional intelligence levels on their performance?

4. RESEARCH FRAMEWORK

The study aims to examine the effect of the type of emotional cues in web-based instruction on English grammar learning for students with different levels of
emotional intelligence. Emotion is one of this model’s moderator variables. Regarding web-based instruction, the dependent variable is students’ performance in this study (Figure 1). Methodology: The web-based instruction was structured based on two models. These are two models: the social-cognitive model of academic emotion development (adapted from Pekrun, 2006) and the FEASP model (Astleitner, 2000). The overall view of the developmental design of this web-based instruction with the emotional element was from Astleitner (2000).

The general concept for the construction of the affective part of these web-based instructions was based on Astleitner (2000) in Figure 2. This model is related to the systems perspectives in creating socially just instructional technology. The model, positive and negative affection, of programmed learning mechanisms to structure and de-structure them. Astleitner (2000), justifies this by the fact that in the course of instructional technology design a positive emotion is upped and a negative emotion is concomitantly reduced.

The performance, satisfaction, interest, engagement, and retention in learning English grammar of the subjects were measured as dependent variables, which were evaluated through web-based instruction, and which were operationalized as the post-test results and questionnaires to the students. Building on this moderation effect for emotional intelligence (the moderator or moderator variable), we then ran tests to explore our emotional intelligence high and low moderator positions where the moderation effect emerged. The conceptual research framework of this study is depicted in Figure 1 formulated based on the social-cognitive model of academic emotion development, FEASP model, along with the independent variable, moderator variable, and dependent variable.

5. LITERATURE REVIEW

Positive emotions may act as motivators and reinforce learning and teaching behaviors (Ruzek et al., 2016; Fong & Schallert, 2023). According to Rowe et al. (2015), a feeling toward the positive pole might soak up additional learning and memory accessible to a student. The reason for this is that when a student has an interest in a particular subject or field, it is easier to grasp the information since they are passionate about the very thing they are learning. No, learning is hard when you are not interested. For example, suppose a student needs to study or take an exam, but his family member died in an incident, can you expect the student to score good marks in the exam if he attends the exam after a family member’s death, not at all, he will be disturbed emotionally that time and he will do anything other than give the exam. In turn, students who have negative sentiments will feel discouraged and disturbed and will not listen to what the teacher conveys in the class. This will result in low academic performance. Therefore, if you have a passion while learning you should have the perfect ingredient that you need to become knowledgeable and be able to succeed. Despite the call for similar research on emotion and academic achievement in Malaysia, no action has been taken to improve emotions in learning in Malaysian classrooms.

5.1 Emotion and Performance

There are always classrooms filled with youngsters with a variety of issues and behavioural difficulties (Korpershoek, 2016). Learning is not extensive because the students are usually not very self-confident, determined, disciplined, or have too much emotional burden. Emotional Intelligence boosts the emotional condition of students, a rise in their learning level and memory capacity. Positive emotions and negative emotions are two transmitters of people’s sentiments. Positive emotions, according to Mayer et al. (1997), also referred to as Positive Affectivity include emotions with high energy and enthusiasm. Some positive emotions are satisfaction, joy, sympathy, and interest. Mayer et al. (1997), explain that Negative Affectivity includes anguish and misery. Such emotions are jealousy, envy, anger, fear, and guilt.
Emotions are a prominent feature in the learning process. Emotions drive awareness of learning and memory and help learners to recall what they have learned. Negative emotions hinder the ability of students to focus and obtain knowledge. This may result in poor grades, leaving many students disappointed. Students can respond to sadness, anger, and frustration in several ways. Astleitner (2000), contends that emotional persons are not any less wise. It’s just they don’t understand the words to which they are sensitive. Attention and retention are essential to the learning process, and when these processes are disrupted by emotions, retrieval and recall are also disturbed. An instance is given of a bright student who is ready to take his or her test.

As the student prepared for the test the next morning, the test and other materials got to the ground. The mother, who was well-versed in the seriousness of the syndrome, was irritated over the pieces of porcelain and directed her son/daughter, who was optimistic about the morning test. This sends the message that a high-IQ mother calmed down following some calm thought and caution. The student’s mood has no choice but to catalogue this fact. They may take the exam with which they are given tools, but they will respond in one way or another.

Emotions control academics not just because of the emotions observed; IQ interactions control. The level of emotional intelligence explains how one dram and contributes to determining students’ cognitive performance. At the same time, Rilea (2007) argues, “emotional intelligence has more of a negligible controversy as a predictor of intellectual performance” than the combination of cognitive high IQ and personality traits. The question arises: Can emotional intelligence improve students’ academic results? A research study conducted by Yahaya et al. (2012) titled “The impact of emotional intelligence element on academic achievement” revealed that emotional intelligence, in its role, can boost cognitive ability and proficiency.

6. POPULATION AND SAMPLE
The target population for this study is Form Three school students in Malaysia. The samples were purposive
sampling. The schools that were selected in this study have a similar background in terms of students’ academic achievement and socio-economic status. The samples in this study are 15 years old. A total of 183 Form Three students were selected from a secondary school region of Peninsular Malaysia. The students have basic skills or knowledge of computers. The sample selection for this research is a purposive sampling technique to select the schools and the subjects for this study. The main goal of purposive sampling is to focus on particular characteristics of a population, which enables to answer the research question in this study. Another justification for using purposive sampling is that this sampling method can gather large amounts of information by using a range of different techniques (Kothari, 2004). This provides a better cross-section of information. Purposive sampling is therefore most successful when data review and analysis are done in conjunction with data collection.

7. RESULTS

7.1 Data Analysis

The null hypotheses are as follows:

H0Aa: The student with high and low levels of emotional intelligence did not show a significant difference in treatment condition WBIe and control condition WBIw.

H0Ab: The interaction effect between treatment conditions and student emotional intelligence level on student learning outcome performance is not significant.

7.2 Classification of Students as Low and High Levels of Emotional Intelligence

The study was conducted in a school in the Northern region of Peninsular Malaysia among one hundred and eighty-three Form 3 students. Low level of emotional intelligence (n = 96); high level of emotional intelligence (n = 87). This study assessed the emotional intelligence levels of students in their treatment conditions with the adapted version of TEIQue-SF. Results were tabulated using the descriptive given in Table 1.

7.3 Results Corresponding to Research Questions

The purpose of this study is to investigate the impact of a web-based instructional design designed for emotional intelligence in students who have different emotional intelligence levels. The current research has focused on evaluating the association between emotional intelligence (EI) in students (both pre and post-test) and emotional intelligence has been evaluated with a short-term measure of emotional intelligence (TEIQue-SF) for the academic achievement of students. The findings continue by presenting empirical results and interpretations based on the data analyses and research questions developed.

The performance score (score gain) was calculated based on pre-test and post-test. The second is a score, called a performance score, which is simply a measure of what a student learned in a class by comparing what he/she knew before (a pre-test) and what he/she knew after going through the class experiencing (treatment) (a post-test). Students took the pre-test following the associated topic of the course. The post-test study was conducted after a significant period had passed since the application of the treatment to determine the duration and learning effect of the treatment condition and the impact on the study. Emotional intelligent level: emotional intelligence was assessed in this study and which was a 30 items questionnaire of emotional intelligent of emotional intelligence scale that includes the students’ emotional intelligence.

Table 1: Descriptive Statistics of Distribution of Participants’ Emotional Intelligence (EI) by Type of Instruction

<table>
<thead>
<tr>
<th>Type of Instruction</th>
<th>Level of Emotional Intelligence (EI)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>WBIe</td>
<td>Low</td>
<td>48.9</td>
<td>44</td>
<td>51.1</td>
</tr>
<tr>
<td>WBIw</td>
<td>High</td>
<td>55.9</td>
<td>52</td>
<td>44.1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>52.5</td>
<td>96</td>
<td>47.5</td>
</tr>
</tbody>
</table>

*n denotes number of students
Table 2 shows the Analysis of covariance (ANCOVA) that was conducted to examine the score gain (performance score) due to the type of instruction and emotional intelligence level by controlling for pre-test scores. The pre-test score was controlled in this test to isolate the effect of student IQ or pre-knowledge in the subject so that the score gain of students in the test is due to type of instruction, emotional intelligence level, and the interaction between type of instruction and emotional intelligence level. Based on the results in the table, noticed that there was a significant effect of the covariate, i.e., pre-test score on the student’s score gain with \( F(1,178) = 30.34 \), and \( p < 0.001 \), thus the model needs to be adjusted by centralizing the pretest score at 68.566.

For the main effect for type of instructions, the main effects analysis revealed a significant difference in score gain between WBIe and WBIwe group \( F(1, 178) = 47.13, p < 0.001 \) scored at 0. Additionally, the mean score gains values suggested students in the WBIe group had greater mean score gain \( \text{mean} = 8.73, \text{S.E.} = 0.440 \) than students in the WBIwe group \( \text{mean} = 4.40, \text{S.E.} = 0.433 \).

Next, the study looks at the main effect of students’ emotional intelligence on score gain. Results revealed that there is a significant difference in score gain between the high emotional intelligent students and low emotional intelligent students, \( F(1,178) = 18.72, p < 0.001, \) at 0.05 significance level. A perusal of the table showed that high emotional intelligence students have higher gain scores \( \text{mean} = 8.16, \text{S.E.} = 0.489 \) compared to students with low emotional intelligence \( \text{mean} = 4.97, \text{S.E.} = 0.464 \). Therefore, it can be said that students with higher emotional intelligence tend to have better performance or score gain compared to students with lower emotional intelligence.

The study also examines the interaction effect of students’ emotional intelligence and the type of instructions on the students’ score gain in Figure 3. Results showed that there is no significant interaction effect of students’ emotional intelligence and type of instruction, \( F = 0.05, p = 0.827 \) at 0.05 significance level. Looking at the interaction mean plot, noticed that both lines are parallel (no interaction effect), indicating that emotionally sound web-based instructional design does not give learning advantages to students with high emotional intelligence. For high and low emotional intelligence students, both of them experienced the same increase rate (slope of the line) of score gain when emotionally sound web-based instructional design was introduced. This finding is important as it tells that emotionally sound web-based instructional design is effective and robust in improving students’ score gain regardless of their emotional intelligence. It is an effective design that works for everyone, not favoring highly emotionally intelligent students.

### Table 2: ANCOVA results and Descriptive Statistics for student’s score gain (post – pre-test) by type of instruction and emotional intelligence level, controlling for pre-test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Adjusted Mean</th>
<th>S. E.</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Effect</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low EI</td>
<td>4.97&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.464</td>
<td>96</td>
</tr>
<tr>
<td>High EI</td>
<td>8.16&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.489</td>
<td>87</td>
</tr>
<tr>
<td>WBIe</td>
<td>8.73&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.440</td>
<td>90</td>
</tr>
<tr>
<td>WBIwe</td>
<td>4.40&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.433</td>
<td>93</td>
</tr>
<tr>
<td><strong>Interaction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low EI * WBIe</td>
<td>7.20&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.637</td>
<td>44</td>
</tr>
<tr>
<td>Low EI * WBIwe</td>
<td>2.73&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.610</td>
<td>52</td>
</tr>
<tr>
<td>High EI * WBIe</td>
<td>10.26&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.710</td>
<td>46</td>
</tr>
<tr>
<td>High EI * WBIwe</td>
<td>6.06&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.636</td>
<td>41</td>
</tr>
<tr>
<td><strong>Source</strong></td>
<td>df</td>
<td>SS</td>
<td>MS</td>
</tr>
<tr>
<td>PreScore</td>
<td>1</td>
<td>499.32</td>
<td>499.32</td>
</tr>
<tr>
<td>type_wbi</td>
<td>1</td>
<td>775.84</td>
<td>775.84</td>
</tr>
<tr>
<td>tei_level</td>
<td>1</td>
<td>308.21</td>
<td>308.21</td>
</tr>
<tr>
<td>type_wbi * tei_level</td>
<td>1</td>
<td>0.79</td>
<td>0.79</td>
</tr>
<tr>
<td>Error</td>
<td>178</td>
<td>2929.91</td>
<td>16.46</td>
</tr>
</tbody>
</table>

<sup>a</sup>Covariates in the model are evaluated at Pre-test score = 68.566
<sup>*</sup>Denotes significance at \( p < .05 \)
Levene’s homogeneity test was performed to check the equivalence of error variances for score gain within the groups of type of provision, and emotional intelligence level, controlling for the pre-test scores. There were no significant differences in variance score gain across groups of type of instruction and EI level ($p = 0.295 > 0.05$; as shown in Table 3). Table 4 shows the research hypothesis, F value, and significance level.

### 8. FINDINGS

#### 8.1 Effects of the Treatment Conditions on Student’s Performance Between Students with High and Low level of Emotional Intelligence

Results of this study show that student performance differs according to the emotional intelligence levels (high and low) in WBlé and WBlwe. The students with high levels of emotional intelligence outperformed the students with low emotional intelligence in both WBlé and WBlwe. Yet the performance score in WBlé was nearly three times more than WBlwe. This is consistent with the study by Yang and Chen (2016), that emotional intelligence affects learning, and knowledge transfer takes place when an individual learner can control his or her emotions. This supports Goleman (2000) who argues that cognitive learning alone is incomplete. This finding can be explained in several ways. The first reason is that students with high emotional intelligence have higher levels of autonomy because they are more assertive and able to motivate themselves in times of stress or difficulties (Goleman, 2001).

The highly emotionally intelligent student also has a higher degree of interpersonal sophistication and stress management than the low emotionally intelligent student (Mayer et al., 2001). Emotional intelligence skills help them to settle down in learning in the classroom. Yet another explanation would be that students with high emotional intelligence can be provided with coping strategies in a well-designed emotionally sound web-based learning environment. Being able to learn has raised their cognitive anxiety and it made them able to learn by adopting this sort of strategy.

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**Figure 3:** Interaction effect of students’ emotional intelligence and the type of instructions on the students’ score gain

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**Table 3:** Levene’s test of equality of error variances for score gain across groups of type of instruction and emotional intelligence level, controlling for pretest score

<table>
<thead>
<tr>
<th>Levene’s statistics</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.334</td>
<td>3</td>
<td>179</td>
<td>0.265</td>
</tr>
</tbody>
</table>

*The significance value for homogeneity of variances is < 0.05*
Table 4: Hypotheses, analyses and results of the study

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>F values and significant level</th>
<th>Evidence from data</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₀A₁</td>
<td>There is no significant difference in the student’s performance between students with high and low level of emotional intelligence in WBI and WBIwe.</td>
<td>F (1,178) = 18.72 p &lt; 0.001 (Significant)</td>
<td>H₀A₁ rejected</td>
</tr>
<tr>
<td>H₀A₂</td>
<td>There is no significant interaction effect between treatment condition and student’s emotional intelligence level on student’s performance.</td>
<td>F (1,178) = 0.05 p = 0.827 (Not Significant)</td>
<td>H₀A₂ failed to reject</td>
</tr>
</tbody>
</table>

The findings in the study were similar to the study of Yahya et al. (2012). There are several possible explanations for this finding. First of all, this is because students with high levels of emotional intelligence are more self-confident and have the ability to motivate themselves in times of stress or when they are going through difficulties (Goleman, 2001). These studies also pointed out that emotional intelligence is important to the school success of students. In a nutshell, high adaptive capacity is given to students who have high emotional intelligence levels instead of low emotional intelligence level students. This will manifest in them learning through the internet way of learning. This will be a house-made instruction design so they can adjust the learning, with web emotional savvy.

8.2 Interaction Effect Between Treatment Conditions and Student’s Emotional Intelligence on Student’s Performance

There is no significant interaction effect between the type of instruction and student’s emotional intelligence level on performance. This indicates that emotionally sound web-based instruction does not give learning advantages to students with high levels of emotional intelligence. For high and low levels of emotional intelligence students, both of them were experiencing the same increased rate of score gain when emotionally sound web-based instruction was introduced. This shows that the emotionally sound web-based instruction (WBIe), is effective and robust in improving students’ score gain regardless of their emotional intelligence. This shows that it is an effective web-based instruction that works for everyone, not favouring high emotional intelligence students. This finding supports the study of Liaw and Huang (2000) claim that designing and enhancing the interactivity if web-based instruction can enhance students’ learning. Besides that, Northrup (2001) also claims that interactive web-based instruction that captures students’ attention in learning can enhance their performance and make their learning experience more fruitful and enjoyable. Based on this discussion, it can be said that emotionally sound web-based instruction is an effective tool for both high and low-level of intelligence students.

9. CONCLUSIONS

This study aimed at developing an emotionally tailored web-based instructional design effective for learning English Grammar among the high and low emotional intelligence levels of the students. The present study focuses more specifically on the evaluation of the effect of web-based instruction on the performance of the students. Below are some conclusions based on the findings to the research question posed by this study, the first findings of this research covered evidence that the overall emotional intelligence level has an impact on the level of performance on the score in the WBIe and the WBIwe. Students with high levels of emotional intelligence had a higher score compared to those with low levels of emotional intelligence in terms of performance. Responding to the research question mentioned in the introduction of the current study the findings showed that web-based instruction with emotional theory has a substantial influence on student academic performance in English Grammar. The significance of this study lies in its potential to well equip educators and instructional designers with the benefits of integrating emotional elements into web-based learning environments. By acknowledging the role of emotional intelligence in learning outcomes, this research offers valuable insights into how emotionally tailored web-based instruction can improve student performance and engagement. This can lead to the development of more effective educational technologies that cater to the emotional needs of students, thereby enhancing their learning experiences and outcomes. Future research could explore the long-term effects of emotionally tailored web-based instruction across different subjects and educational levels to validate and extend these findings. Additionally, investigating the influence of cultural differences on the effectiveness of emotional design elements could provide a more comprehensive understanding of how to optimize instructional strategies for diverse student populations. Further studies could also examine the specific emotional elements that have the most significant impact on learning, helping to refine and improve web-based instructional designs. By expanding
on these areas, future research can continue to advance the integration of emotional intelligence in educational technologies, fostering more effective and inclusive learning experiences.

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