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**| RESEARCH ARTICLE**

## **Positive Emotional Stimuli and Vocabulary Achievement among Saudi EFL Students in a Reading and Vocabulary Building Course**

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**| ABSTRACT**

Positive emotional stimuli can play an important role in vocabulary learning because they may help EFL students pay more attention, enjoy the class, and remember new words more effectively. This study examines how positive emotional stimuli may influence vocabulary learning among Saudi EFL undergraduate students enrolled in a 14-week reading and vocabulary-building course at Qassim University. The study used a quasi-experimental pre-test/post-test design with two male class sessions, each consisting of 34 students. The target vocabulary includes 300 words selected from 10 reading passages. The experimental group received vocabulary instruction supported by positive emotional stimuli, while the control group received regular vocabulary instruction without the intervention. Students' vocabulary achievement was measured using a pre-test and post-test. In addition, a final comprehensive vocabulary quiz (FCVQ) was used as supporting evidence from the course. Both groups improved by the end of the study; however, the experimental group achieved higher vocabulary gains. The post-test mean score for the experimental group was 44.90 out of 60, compared with 34.10 out of 60 for the control group. Similarly, the experimental group outperformed the control group in the final vocabulary quiz, with a mean score of 45.80 out of 60 compared with 33.40 out of 60 for the control group. This difference was statistically significant,  $p < .001$ . Overall, the findings indicate that positive emotional stimuli helped improve vocabulary achievement and made vocabulary learning more engaging and enjoyable for Saudi EFL students.

**| KEYWORDS**

Positive emotional stimuli; vocabulary achievement; Saudi EFL students; reading passages; vocabulary learning; foreign language enjoyment

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### **1. Introduction**

Vocabulary is a very crucial component of foreign language achievement because lexical knowledge represents a major linguistic element to understand texts, express ideas, and participate in meaningful communication. Fotos, (2001) found out that comprehension significantly correlates with knowledge of words. Also, many research studies showed that vocabulary is a main part in reading comprehension; if there are many unknown words, comprehension will not likely occur (Goodman, Nist, & Mohr, 1997). In reading and vocabulary building courses, vocabulary is not learned only as isolated word lists, but also through repeated exposure to words in meaningful contexts. When vocabulary items are introduced through reading passages, learners are more likely to connect word form, meaning, and use, which may support deeper processing and later recall (Nation, 2013; Schmitt, 2008; Thornbury, 2002). However, vocabulary learning remains a challenging area for many EFL learners, especially when large numbers of new words must be studied, remembered, and used within a limited course period.

Research in language learning has shown that emotional experience associated with the learning process may influence vocabulary learning. Dewaele and MacIntyre, (2014); MacIntyre and Gregersen (2012); Oxford, (2015) claim that emotions have

impact on learners' attention, motivation, classroom participation, and retention. Positive emotions may help learners become more engaged with classroom tasks and more willing to interact with new language input. This is especially relevant to vocabulary learning because vocabulary knowledge requires attention, repetition, meaningful association, and retrieval practice (Nation, 2001; Schmitt, 2010). When vocabulary learning is associated with emotional experiences, such as enjoyment and convenience, learners may process words more deeply and recall them more effectively.

Positive emotional stimuli are classroom activities or materials that make the learning experience more enjoyable and personally, cooperative, and meaningful for students. In vocabulary classes, these activities may include simple games, pair challenges, team or individual competitions, role-play, storytelling, short humorous warm-ups, memory-based activities, and positive interaction with classmates. These activities create entertainment in classrooms, but also more importantly, they help students become more involved in vocabulary learning and make new words easier to understand and remember. This strategy reduces anxiety or negative feelings toward learning a new language (Dewaele et al., 2019; Krashen, 1982). It supports the view that emotions and thinking enhance language development, in general, and vocabulary learning, in particular, and create positive feelings that may increase students' attention and memory capacity (MacIntyre & Mercer, 2014).

In Saudi undergraduate English programs, students typically learn vocabulary through reading passages, teacher explanations, quizzes, and writing activities. Although these methods can be useful, some EFL students may still face challenges in retaining new vocabulary, especially when learning becomes repetitive or when new words are not practiced in sufficiently meaningful and practical ways. Schmitt (2008) emphasizes that effective vocabulary learning requires repeated exposure and meaningful engagement with lexical items. For this reason, integrating positive emotional stimuli into vocabulary development classes may help make the learning process more engaging and effective. This is particularly important because students are often required to learn a large number of vocabulary items from several reading passages. The present study investigates the effect of positive emotional stimuli on vocabulary learning among Saudi EFL undergraduate students at Qassim University.

## 2. Literature Review

### 2.1. Emotions, Memory, and Vocabulary Recall

Learning vocabulary requires more than repeated exposure to word forms, although such exposure is a challenge for in EFL contexts. In addition to exposure, learners need to notice new words, connect them with meaning, store them in memory, and recall them when needed. This process is influenced not only by cognitive effort, but also by the emotional conditions that learning experiences go through. Memory research suggests that emotionally meaningful experiences are often remembered more clearly than neutral ones because emotion can increase associations, enforce attention, and strengthen memory traces (Bower, 1981; Gallo, 2014; Todd, 2014). In language learning, this means that enjoyable classroom moment, a personal association, a humorous example, or a cooperative task may easily enhance vocabulary retrieval.

Positive emotional moments can also affect the way learners process classroom input. Learners are more willing to participate and pay attention to learning activities when they feel relaxed and motivated. Krashen's (1982) Affective Filter Hypothesis suggests that emotional factors such as anxiety and motivation influence the extent to which learners can absorb language input. A lower affective filter enables learners to engage more openly with the target language, whereas negative emotional experiences may reduce or block language learning. Although vocabulary learning still requires practice, repetition, and retrieval, some teaching and learning strategies that include positive emotional states may make these processes less stressful and more effective.

This relationship is central to vocabulary learning because lexical knowledge extends beyond the memorization of isolated word forms. Words are connected with meaning, contextual use, sound, spelling, function, and learners' personal experiences. Paivio's (1986) Dual Coding Theory proposes that information represented both verbally and visually is more likely to help memory maintain information. In vocabulary instruction, this process may be supported when learners read a word in context, hear its pronunciation, use it in a learning activity, associate it with a visual representation, or employ it creatively in a short narrative. The more meaningful connections learners establish, the more retrievable the word may become in future use.

Depth of processing of vocabulary enhances vocabulary retention. Craik and Lockhart (1972) argue that deeper semantic processing leads to stronger and longer-lasting memory traces than surface-level processing, which is usually limited to memorizing and spelling. Positive emotional stimuli may support this deeper processing by encouraging students to use vocabulary in meaningful and enjoyable ways. For example, a group storytelling activity requires students to understand the target words, connect them with a situation, and use them creatively. Such tasks may help vocabulary move beyond short-term memorization toward more stable retention.

## ***2.2. Positive Emotions in Foreign Language Learning***

For many years, research on emotions in foreign language learning focused mainly on negative emotions, particularly anxiety (Horwitz et al., 1986; Horwitz & Young, 1991). More recent studies, however, have paid increasing attention to the role of positive emotions in language learning. Positive psychology has encouraged researchers to examine enjoyment, confidence, engagement, and resilience as important parts of learning (MacIntyre & Gregersen, 2012; Oxford, 2015; Seligman & Csikszentmihalyi, 2000). This shift is important because successful language learning is not only about reducing anxiety, but also about increasing motivation through creating learning conditions in which students feel motivated and willing to participate.

Foreign language learning enjoyment has become one of the most widely discussed positive emotions in second and foreign language research. Dewaele and MacIntyre (2014) refer to foreign language enjoyment as positive classroom emotions that involve pleasure, challenge, interest, and social connection. Enjoyment does not simply mean that students experience funny classes; rather, it means that students are exposed to meaningful, manageable, and personally rewarding situations during learning. In this sense, enjoyable vocabulary instruction may encourage students to take more risks, interact with classmates, and use new words more confidently.

EFL teachers have an important role in creating the emotional environment of the classroom. They can enhance positive classroom emotions through the relationship between themselves as teachers, learners, learning materials, classroom tasks, and peer interaction. Positive emotions that teachers can create may include, for example, using clear instructions, encouraging participation, avoiding threatening correction, creating opportunities for cooperation and peer corrections (Arnold, 2011; Dewaele et al., 2018; Gregersen & MacIntyre, 2014). In vocabulary instruction, this may be done through short positive activities that invite students to interact with words in less mechanical way. Games, challenges, role-plays, and peer praise can make the classroom more active while still serving clear course learning outcomes.

At the same time, positive emotion should not take over teacher instruction. Vocabulary learning still depends on exposure, practice, feedback, and review (Nation, 2001; Schmitt, 2010). Positive emotional stimuli are better perceived as a supportive condition that may make vocabulary instruction more engaging and memorable. This balance is important for the present study because the emotional stimuli are not separate from the reading and vocabulary course. They are integrated into vocabulary instruction and connected with the target words selected from the course reading passages.

## ***2.3. Vocabulary Learning through Reading Passages***

Vocabulary knowledge is strongly connected to reading development. EFL Learners need vocabulary to understand texts. Unlike native speakers, who often acquire vocabulary through daily language interaction, EFL learners commonly rely on reading as one of the main sources through which they encounter new vocabulary in context (Grabe, 2009; Nation, 2013). Research on vocabulary learning emphasizes that repeated encounters with words are necessary for retention, especially when learners are expected to remember spelling, meaning, and use (Nation, 2001; Schmitt, 2008; Webb, 2007). When students meet words inside reading passages, they can observe how those words function in meaningful sentences and larger ideas. This contextual exposure can support understanding more effectively than learning words in isolated lists, especially when the teacher guides students to do the related exercises and practice meaning, form, and use. Therefore, EFL vocabulary instruction in reading courses should include repeated exposure, active recall, and opportunities to use the words in different forms.

Another important element in vocabulary learning is assessment. Vocabulary tests can measure whether students recognize, understand, and use target words. However, a single type of test may not capture all aspects of vocabulary competence. Nation (2001) distinguishes between different dimensions of vocabulary competence, including form, meaning, and use. For this reason, the current study uses a pre-test and post-test as the main research instruments. It also uses a FCVQ that serves as supporting course-based evidence. This quiz can include dictation, meaning recognition, and contextual use, giving a broader view of students' vocabulary achievement.

## ***2.4. Positive Emotional Stimuli in Vocabulary Instruction***

Positive emotional stimuli in this study refer to short classroom activities that were designed to create enjoyment, curiosity, cooperation, creativity, and personal connection during vocabulary learning. They included warm-up funny images or short stories, vocabulary games, pair challenges, team competitions, personal memory connection activities, role-play, creative sentence competitions, group and individual storytelling, positive peer praise, vocabulary review games, and final reflection activities. These stimuli were not added as unrelated entertainment. Instead, they were connected to the reading topics and target vocabulary so that students experienced the words in more memorable classroom situations.

Such classroom activities can support vocabulary learning in several ways. First, they increase attention by making the practice of the lesson more engaging. Second, they create associations between words and meaningful experiences. Third, they encourage students to use vocabulary socially through pair or group interaction and competitive situations. This is significant because it

helps learners move from receptive vocabulary state, or knowledge to productive vocabulary state, or use (Nation, 2001; Schmitt, 2010). Productive activities such as role-play and storytelling may be particularly useful because they require students to place words in meaningful contexts.

Cooperative atmospheres in EFL classrooms may also improve the emotional quality of vocabulary learning. Work in pairs or teams may make the learning less threatening and more interactive. Peer praise and positive correction may further help students notice their progress without feeling embarrassed by mistakes. This is relevant in EFL classrooms where students, according to Krashen (1982), may experience high effective filters and become hesitant to participate or fear giving wrong answers. A supportive classroom atmosphere can encourage students to try, repeat, and improve, which are all necessary for vocabulary development (Dewaele & MacIntyre, 2014; Gregersen & MacIntyre, 2014).

Previous research has shown that positive emotional stimuli can improve declarative vocabulary knowledge and increase foreign language enjoyment, which eventually may lead to active or procedural vocabulary use, although it may require longer and more repeated practice. In the study by Kralova et al. (2022), vocabulary instruction associated with positive emotional stimuli were showed a significant increase in vocabulary knowledge and foreign language enjoyment among the experimental group, while the effect on speaking-based vocabulary use was limited. This distinction is important for the present study. The aim is not to claim that emotional stimuli alone can produce full vocabulary mastery. Rather, the study examines whether they can support vocabulary achievement and make the learning process more enjoyable within a structured reading and vocabulary building course.

Overall, the literature suggests that vocabulary learning is most effective when learners' cognitive practice is supported with positive emotional stimuli. In the Saudi EFL context, where students have limited exposure to language and may study large numbers of vocabulary items within a formal reading course structure, such an approach may offer a practical technique to make vocabulary learning both more effective and more enjoyable. Therefore, the current study follows this view by examining the effects of positive emotional stimulus activities on vocabulary learning of Saudi EFL learners.

### **3. Research Questions**

The present study examines whether positive emotional stimuli can improve vocabulary achievement and enjoyment among Saudi EFL students in a reading and vocabulary building course. The study is guided by the following research questions:

1. Do positive emotional stimuli improve vocabulary learning among Saudi EFL undergraduate students?
2. Is there a statistically significant difference between the experimental and control groups in their vocabulary post-test scores after the intervention?
3. Do positive emotional stimuli increase students' foreign language enjoyment?
4. Does the experimental group perform better than the control group in the final comprehensive vocabulary quiz?
5. How do students perceive the use of positive emotional stimuli in vocabulary learning?

### **4. Material and Methods**

#### **4.1. Research Design**

The study employed quantitative and qualitative data. Quantitative data was collected through a quasi-experimental pre-test/post-test design, FCVQ, EHCS, and FLES. Students' vocabulary achievement was measured through a Vocabulary Pre-test and Post-test. These instruments were designed using the 300 target vocabulary items taken from the 10 course reading passages. The pre-test was conducted in the first week before students were exposed to the emotional-stimulus intervention, while the post-test was conducted at the end of the course following the intervention.

Qualitative and descriptive data were collected through the questionnaire. This methodological triangulation allowed the study to examine not only vocabulary achievement, but also students' emotional responses and perceptions of the classroom activities (Creswell, 2015).

The participants were already organized into two course sessions. Random assignment of individual students is not practical in the natural classroom setting. One session represented the experimental group and the other group served as the control group.

#### **4.2. Participants**

sixty eight Saudi EFL undergraduate male students participated in this study. They were enrolled in a reading and vocabulary building course at Qassim University. Their ages range from 20 to 26 years. The students were distributed across two reading

class sessions, with 34 students in each session. One session was assigned as the experimental group and the other as the control group.

All participants shared similar educational backgrounds because they were Saudi high school graduates and were enrolled in the same department. Assigning students to different sessions is normal organization of university classes depending on the number of students. Before the experimental treatment, both groups completed the vocabulary pre-test and emotional scales to check their initial comparability. Students were informed about the purpose of the study. They were also informed that their participation in questionnaires will follow ethical principles of voluntary participation and confidentiality.

### **4.3. Course Context and Target Vocabulary**

The study was conducted during a 14-week reading and vocabulary building course. The course was based on reading passages. Students completed 10 reading passages covering 30 selected vocabulary items. The total target vocabulary items were 300 words. The vocabulary items were selected from the reading passages so that students studied them in context rather than as isolated word lists. This is important because contextualized vocabulary learning allows students to connect new words with the topic, sentence meaning, and communicative use of the passage. Both groups studied the same passages and vocabulary items, which helped ensure that any expected difference in vocabulary achievement was associated with the emotional-stimulus intervention rather than differences in content.

### **4.4. Instruments**

#### **4.4.1. Vocabulary Pre-test and Post-test**

In order to compare vocabulary performance levels before and after the experiment, the study run the same pre-test and post-test. Both tests consisted of 60 questions, one point for each question. The questions were selected from the target vocabulary items. The questions addressed students' vocabulary knowledge in terms of spelling, meaning recognition, and vocabulary use. The test consisted of three sections: dictation questions, matching words with their meanings, and vocabulary gap-filling in short sentences.

To ensure content validity, the test items were selected directly from the course reading passages and reviewed by another English instructor who was teaching a similar course and thus familiar with the course learning outcomes (CLOs) and the students' proficiency level. A pilot version of the test was administered to a small group of students with similar characteristics who were not included in the main study, particularly from the other reading class taught by the other instructor. Based on the pilot results, unclear or overly difficult items were revised. Internal consistency was calculated using Cronbach's alpha to determine the reliability of the test before using it in the final analysis.

#### **4.4.2. Final Comprehensive Vocabulary Quiz (FCVQ)**

A final comprehensive vocabulary quiz was used as supporting course-based evidence of vocabulary achievement. Unlike the pre-test and post-test, which served as the main research instruments, the final vocabulary quiz was connected to the normal assessment procedures of the reading and vocabulary building course. It was administered to the two groups at the end of the 14-week course after students had studied all the 10 reading passages and the 300 target vocabulary items. The quiz included three parts. The first part included 20 dictation questions, in which students listened to selected vocabulary words and were required to spell them correctly. The second part contained 20 questions designed to assess students' recognition of the meanings of the target words. The final part included 20 questions that measured students' ability to use vocabulary words appropriately in context.

The purpose of this quiz was significant to the methodology of this research. It served to provide an additional indicator of students' vocabulary achievement after the course. Since the target words were taken from the reading passages, the quiz reflected vocabulary learning in context rather than memorization of unrelated word lists. The final quiz results were compared between the experimental and control groups to determine whether the vocabulary advantage of the experimental group was also visible in course-based assessment.

#### **4.4.3. The Emotional Habitual Subjective Comfort Scale (EHCS)**

The study applied the Emotional Habitual Subjective Comfort Scale to measure students' general emotional comfort before and after the intervention. The scale was created and verified by Dzuka and Dalbert (2002) to measure the self-reported frequency of positive and negative emotional experiences and physical feelings. In the study by Kralova et al. (2022), the EHCS was used to examine whether the emotional-stimulus intervention influenced learners' broader emotional state, not only their classroom enjoyment.

The scale includes emotional states such as joy, happiness, delight, and physical emotional states, which represent the positive emotional states. It also includes negative emotional states, such as shame, guilt, fear, sadness, pain, and anger. The original scale is based on 6-point Likert response format, ranging from "always" to "almost never." Higher scores on the positive emotional items indicate stronger emotional comfort and higher scores on the negative emotional items indicate more frequent negative emotional experiences.

In this study, the two groups completed EHCS scale at the beginning and end of the course. The purpose was to determine whether the intervention was associated with any change in students' general emotional comfort. However, because the scale measures broad emotional tendencies rather than vocabulary-specific feelings, major changes were not necessarily needed within one academic course. The positive and negative emotional scores were calculated separately and included in the statistical analysis.

#### **4.4.4. The Foreign Language Enjoyment Scale (FLES)**

The present study used Foreign Language Enjoyment Scale to measure students' enjoyment of learning vocabulary before and after the intervention. The FLES was developed and validated by Dewaele and MacIntyre (2014) and is widely used in studies measuring positive emotions in foreign language learning. The scale measures learners' positive emotional experiences in relation to the learning process, classroom environment, peers, and teacher.

The original FLES consists of 21 positively worded items. It is based on 5-point Likert response scale, ranging from "strongly disagree" to "strongly agree." The total score started from 21 to 105. The higher scores indicate higher levels of foreign language enjoyment. The scale also reflects two main dimensions of enjoyment: private enjoyment, which relates to the learner's personal feelings of achievement and interest, and social enjoyment, which relates to the classroom atmosphere, teacher support, and peer interaction. In the present study, however, the FLES was administered to both the experimental and control groups before and after the intervention in order to determine whether positive emotional stimuli increased students' enjoyment of vocabulary learning in the reading and vocabulary building course.

#### **4.4.5. Feedback Questionnaire**

The study investigated students' perceptions of the course, vocabulary learning process, and emotional-stimulus activities by a feedback questionnaire that was administered at the end of the course. They described their experiences and opinions in their own words through answering closed-ended and open-ended questions. These questions enabled them to rate different aspects of the course.

As stated above, the questionnaire was given to both groups, but the experimental group received additional questions about the positive emotional stimuli. For example, for both groups, the questionnaire asked students about their perceptions of vocabulary learning, the usefulness of reading passages, FCVQ, and their general experience in the course. For the experimental group, on the other hand, additional questions asked whether the emotional activities helped them remember vocabulary, which activities they found most useful, and whether the activities made vocabulary learning more enjoyable.

Examples of the questionnaire items included, for example, The activities helped me remember new vocabulary; I was more motivated to learn vocabulary; and Competitive situations or group tasks encouraged me learn the words better. Open-ended questions gave students opportunities to describe the most useful activity and why, the most enjoyable part of the course and why. They also had the chance to express themselves about any difficulties they experienced and their suggestions.

#### **4.5. Intervention**

The emotional intervention was conducted throughout the 14-week course, during which both groups, the experimental and control, completed the same course requirements and studied the same reading passages, practiced the same target vocabulary, and took the same FCVQ. The only difference between the two groups was the positive emotional intervention that the experimental group received. The emotional stimuli were related to the reading topics and target vocabulary. Students needed approximately 10 to 15 minutes to complete each activity. The emotional intervention did not intend to replace regular vocabulary instruction, but to enrich it with short and meaningful activities that might enhance memory capacity of the target vocabulary and the make learning process more enjoyable.

The positive stimuli consisted of warm-up short stories by imposing the use of the target words, vocabulary games, group and individual competitions, role play with target vocabulary and creative sentences by using words from the target vocabulary in the same context in which words were used in the passages. The stimuli also included group storytelling, positive peer praise, vocabulary review games, and a final reflection and enjoyable review activity. These activities were designed to create enjoyment, curiosity, cooperation, and personal connection with the target words.

In order to examine whether the emotional-stimulus intervention promoted higher vocabulary achievement and greater foreign language enjoyment, the control group did not receive the emotional-stimulus activities. However, students in the this group studied and experienced the same vocabulary but through regular classroom procedures. They read and discussed the reading passages, studied the meanings, practiced spelling, and completed comprehension and vocabulary exercises. This design allowed the study to examine whether the additional emotional-stimulus activities contributed to higher vocabulary achievement and greater foreign language learning enjoyment.

**4.6. Data Analysis**

The quantitative phase of the study was analyzed using descriptive and inferential statistical methods. Means, standard deviations, percentages, and mean gains were reported for students’ scores on the vocabulary pre-test, vocabulary post-test, EHCS, FLES, and FCVQ. Before applying inferential tests, the researcher examined the data for missing values, normal distribution, and reliability. Cronbach’s alpha was used to assess the internal consistency of FCVQ and the questionnaire scales.

The study used independent-samples t tests to compare the experimental and control groups in the pre-test, post-test, EHCS, and FLES, and final quiz scores. Paired-samples t tests were used to compare pre-test and post-test scores within each group. A mixed-design analysis was used to examine the interaction between group and time, especially for vocabulary achievement and foreign language enjoyment. Effect sizes such as Cohen’s d and partial eta squared were reported to indicate the practical strength of the expected differences (Cohen, 1988; Field, 2018; Pallant, 2020).

The responses of the students were analyzed descriptively, and students' written comments were classified through using thematic codes. Repeated ideas were grouped into broad themes, such as enjoyment, recall, cooperation, motivation, and confidence. These qualitative findings were used to support and explain the quantitative results.

**5. Results**

**5.1. Vocabulary Pre-test and Post-test**

The vocabulary pre-test and post-test showed improvement in both groups; however, the improvement was greater in the experimental group. Since both groups studied the same reading passages and the same 300 target vocabulary items, the control group achieved some improvement as a result of regular instruction. Nevertheless, the integration of positive emotional stimuli in the experimental group lead to stronger vocabulary gains.

Pre-test scores did not differ significantly between the two groups,  $t(66) = 0.46, p = .647$ , indicating comparable baseline performance. Post-test scores, however, were significantly higher for the experimental group than for the control group,  $t(66) = 6.62, p < .001$ , Cohen’s  $d = 1.60$ . The mixed-design analysis confirmed a significant group  $\times$  time interaction,  $F(1, 66) = 28.40, p < .001$ , partial  $\eta^2 = .30$ , suggesting stronger vocabulary growth in the emotional-stimulus condition.

*Table 1: Vocabulary Pre-test and Post-test Scores*

<b>Group</b>	<b>N</b>	<b>Pre-test Mean /60</b>	<b>SD</b>	<b>Post-test Mean /60</b>	<b>SD</b>	<b>Mean Gain</b>
Experimental group	34	18.60	5.20	44.90	6.10	26.30
Control group	34	19.20	5.40	34.10	7.30	14.90

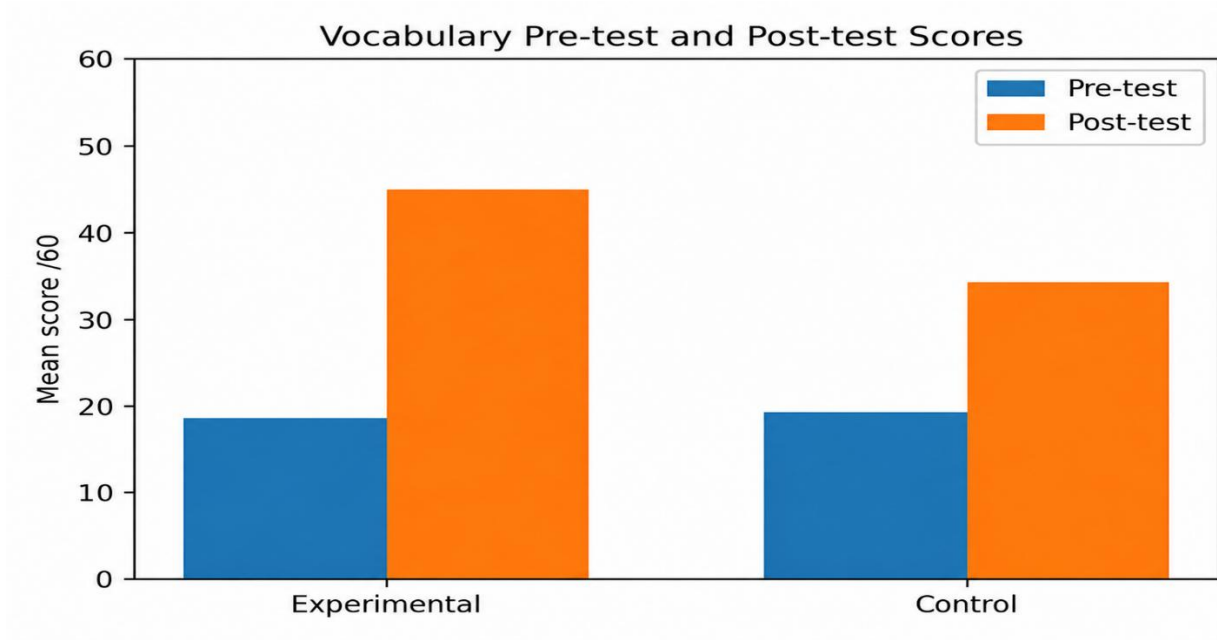


Figure 1. Vocabulary pre-test and post-test comparison

**5.2. Final Comprehensive Vocabulary Quiz**

FCVQ added more insight to the research results. It was applied to the research methodology as supporting course-based evidence. Its aim was to confirm the same general pattern found in the post-test. The result of the FCVQ showed that the experimental group achieved a higher mean score than the control group. An independent-samples t test showed a statistically significant difference,  $t(66) = 7.00, p < .001, \text{Cohen's } d = 1.70$ . This result supported the assumption that the emotional-stimulus intervention might help students remember and use vocabulary more effectively by connecting the target words with enjoyable and meaningful classroom activities.

Table 2: FCVQ Scores

Group	N	Mean /60	SD	Percentage	Interpretation
Experimental group	34	45.80	6.40	76.3%	High achievement
Control group	34	33.40	8.10	55.7%	Moderate achievement

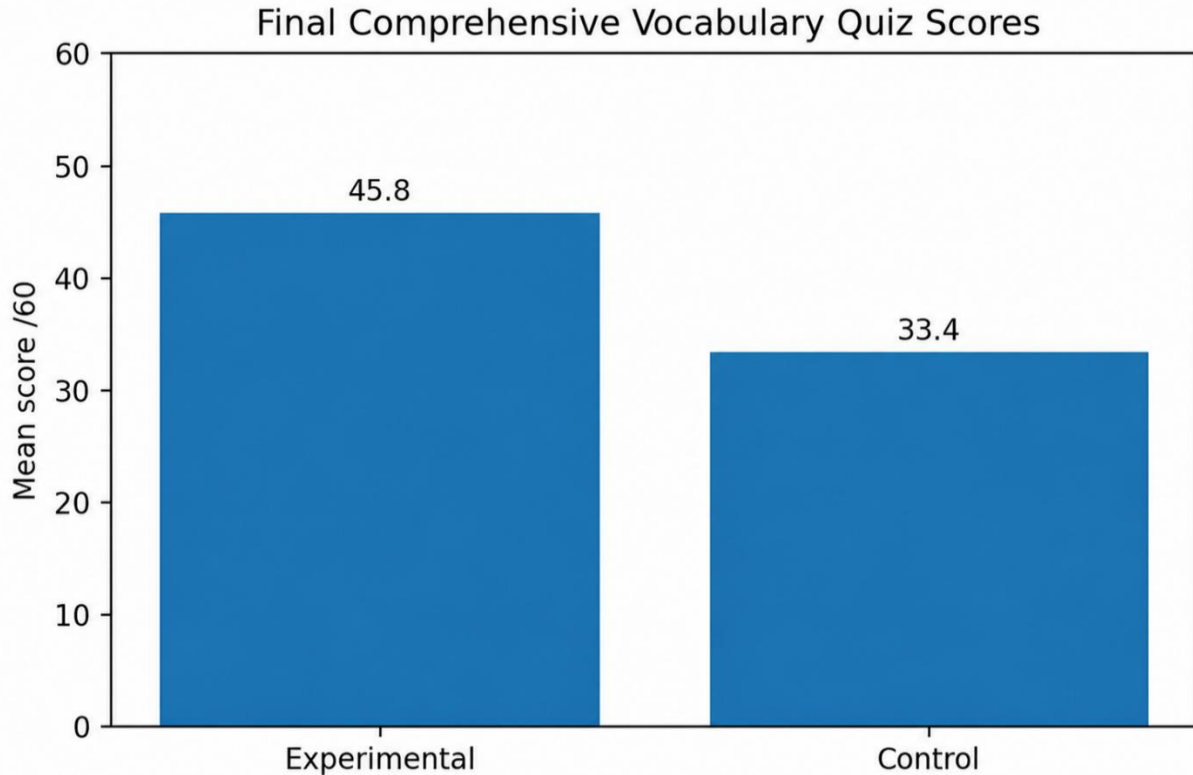


Figure 2. FCVQ comparison.

**5.3. Emotional Habitual Subjective Comfort Scale**

The Emotional Habitual Subjective Comfort Scale showed only limited change in both groups. This was because the EHCS measured students' general emotional comfort, which was relatively stable and less likely to change significantly during one academic course. Therefore, while the experimental group showed a slight increase in positive emotional comfort and a slight decrease in negative emotional comfort, these changes were statistically significant.

Table 3: EHCS Scores Before and After the Intervention

Group	EHCS Positive Pre	EHCS Positive Post	EHCS Negative Pre	EHCS Negative Post
Experimental group	15.80	17.20	17.10	15.90
Control group	15.60	16.10	17.30	16.80

Note. The difference was not statistically significant,  $p > .05$ .

**5.4. Foreign Language Enjoyment Scale**

The Foreign Language Enjoyment Scale proved a clearer difference between the two groups. Since the experimental group experienced vocabulary games, pair and individual challenges, team competitions, role-play, group storytelling, peer praise, and other enjoyable classroom activities, their foreign language enjoyment increased more than that of the control group.

The experimental group reported significantly higher FLES post-test scores than the control group,  $t(66) = 3.25, p = .002$ , Cohen's  $d = 0.79$ . These findings suggest that positive emotions improved both vocabulary acquisition and students' enjoyment of learning.

Table 4: Foreign Language Enjoyment Scale Scores

Group	N	FLES Pre-test /105	SD	FLES Post-test /105	SD	Mean Gain
Experimental group	34	76.40	8.20	84.30	7.10	7.90
Control group	34	75.90	8.50	78.10	8.00	2.20

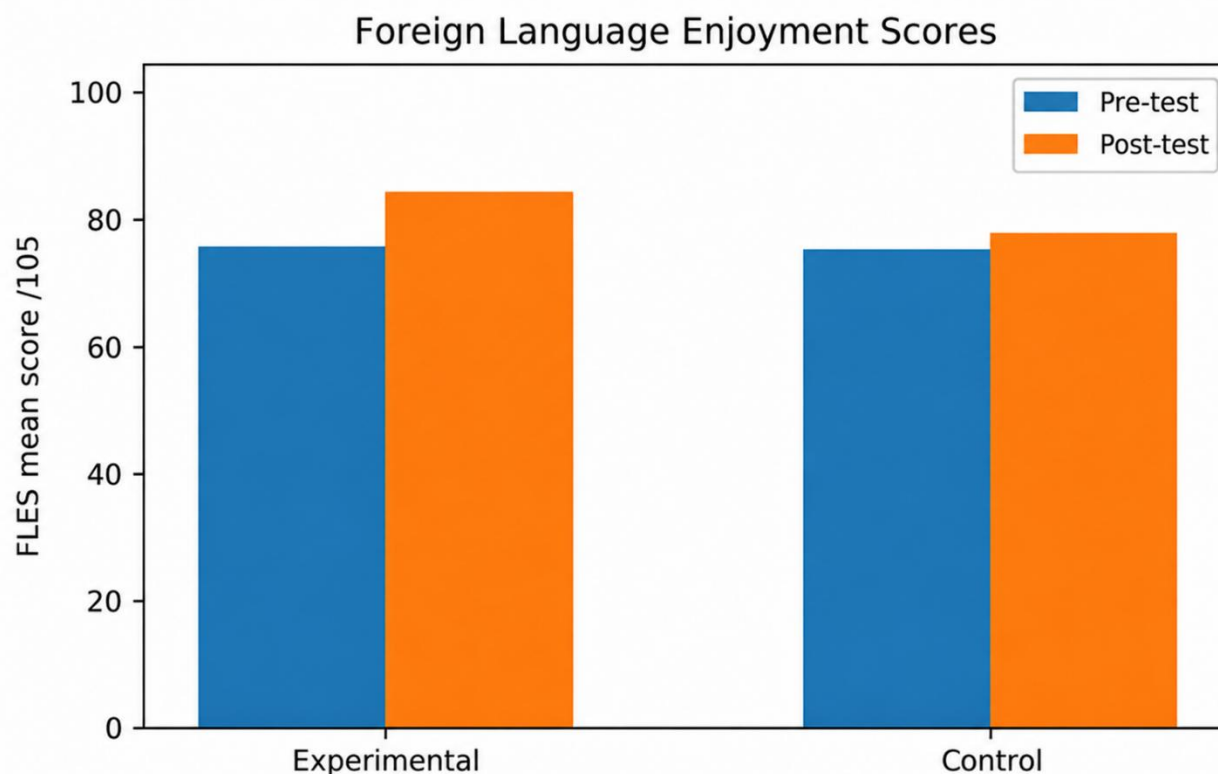


Figure 3. Foreign Language Enjoyment Scale comparison.

### 5.5. Correlations

Correlation analysis showed a positive relationship between students' vocabulary post-test scores and their FCVQ scores. This relationship occurred because both instruments measured students' knowledge of the same target vocabulary items. Moderate positive correlations were also observed between foreign language enjoyment and vocabulary achievement, particularly in the experimental group.

Table 5: Correlations among Main Variables

Variables	Experimental group	Control group
Vocabulary post-test and final quiz	.68**	.61**
FLES post-test and vocabulary post-test	.42*	.28
FLES post-test and final quiz	.39*	.25
EHCS positive and FLES post-test	.36*	.31
EHCS negative and FLES post-test	-.34*	-.29

Note. \* $p < .05$ . \*\* $p < .01$ .

### 5.6. Feedback Questionnaire

The results of the feedback questionnaire showed positive perceptions of the intervention. Students in the experimental group perceived the emotional-stimulus activities as motivating. Most of them reported that the activities helped them remember vocabulary, made vocabulary learning more enjoyable, and encouraged them to participate more actively.

Table 6: Experimental Group Feedback on Positive Emotional Stimuli

Feedback item	Expected agreement
The activities helped me remember new vocabulary.	88.2%
The activities made vocabulary learning more enjoyable.	91.2%
Pair and group activities helped me participate.	82.4%
Vocabulary games helped me recall words better.	85.3%
I would like similar activities in future vocabulary lessons.	88.2%

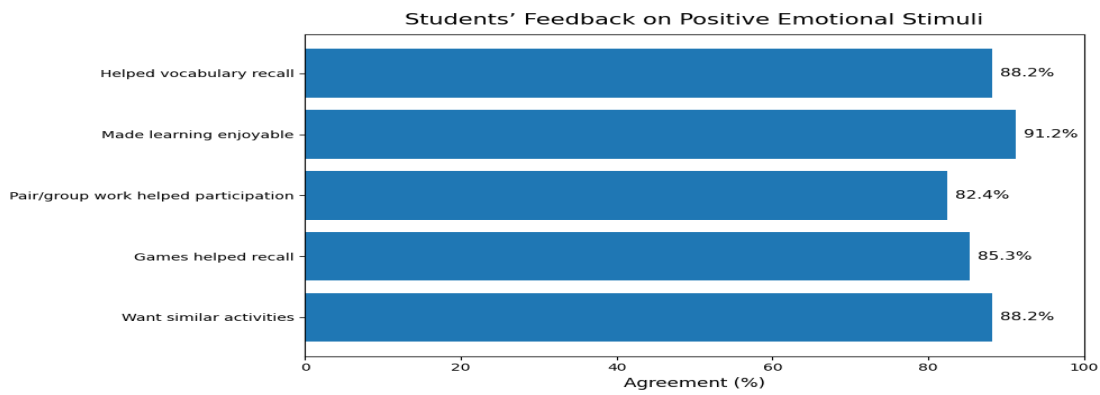


Figure 4. Students' feedback on positive emotional stimuli.

## 6. Discussion

The findings suggest that positive emotional stimuli supported vocabulary achievement among Saudi EFL students when they were integrated into a structured reading and vocabulary building course. As shown in Table 1 and Figure 1, both groups improved from pre-test to post-test, which is reasonable because both groups studied the same reading passages and the same target vocabulary. However, the experimental group showed a much larger gain than the control group. This difference suggests that the emotional-stimulus activities helped learners pay closer attention to the vocabulary, process the words more deeply, and remember them more effectively.

This result is consistent with previous research showing that positive emotions can foster attention, motivation, and memory in language learning (Dewaele & MacIntyre, 2014; MacIntyre & Gregersen, 2012; Oxford, 2015). It is also consistent with the study by Kralova et al. (2022), that compared learners receiving positive emotional stimuli to learners receiving regular instruction and found out that the former improved more in declarative vocabulary knowledge. In the present study, the post-test mean of the experimental group is 44.90 out of 60, compared with 34.10 for the control group. This difference makes vocabulary learning active and memorable, especially if students combine between studying required course vocabulary items and enjoyable classroom practices.

The FCVQ results presented in Table 2 and Figure 2 further support this interpretation. They follow the same pattern observed in the post-test scores, where the experimental group performed better than the control group. Specifically, the experimental group obtained a mean score of 45.80 out of 60, compared with 33.40 for the control group. This finding suggests that the impact of the intervention was not limited to the main post-test alone. Rather, its effect was also reflected in the final course-based vocabulary quiz. Taken together, these results provide stronger evidence that positive emotional stimuli may contribute to improving vocabulary achievement across different types of assessment.

One possible explanation for this result is that the intervention allowed students to engage with the target words in a more meaningful and contextualized way. In this study, the vocabulary items were taken from 10 reading passages, with 30 words selected from each passage. This means that students were first introduced to the words through regular reading instruction and classroom discussion, and then practiced them through different class activities. However, students in the experimental group received additional reinforcement through games, pair challenges, team and individual competitions, role-play, storytelling, personal memory tasks, and peer praise. These activities may have helped them build stronger connections with the words and use them in a wider range of situations. This is consistent with the view that vocabulary learning improves when learners encounter words repeatedly and process them through meaning, use, and context (Nation, 2001, 2013; Schmitt, 2008, 2010; Webb, 2007).

The results of the Emotional Habitual Subjective Comfort Scale, shown in Table 3, indicated only limited effects. The experimental group recorded a small increase in positive emotional comfort and a small decrease in negative emotional comfort; however, these changes were not statistically significant. This result is reasonable because the EHCS measures students' general emotional comfort rather than their emotions only during vocabulary lessons. Since general emotional comfort tends to be relatively stable, it may not change noticeably within the duration of a single course. This finding is also in line with Kralova et al. (2022), whose study showed that emotional habitual comfort did not change significantly after the treatment intervention.

In contrast, the results of the Foreign Language Enjoyment Scale showed a clearer difference between the two groups. As presented in Table 4 and Figure 3, the experimental group's mean score increased from 76.40 to 84.30, whereas the control group showed only a slight increase from 75.90 to 78.10. This suggests that positive emotional stimuli may have a more direct

effect on students' enjoyment of vocabulary learning than on their general emotional state. This is logical because the activities are designed specifically for the English vocabulary classroom. By encouraging students to participate actively, interact with their peers, and experience vocabulary learning in a more engaging way, these activities may have made the learning process more social and enjoyable, which in turn could have strengthened students' positive feelings toward the course.

The distinction between the EHCS and the FLES is important in interpreting the findings of this study. The EHCS measures students' broader emotional comfort, whereas the FLES focuses more specifically on enjoyment in foreign language learning. For this reason, the FLES appeared to be more sensitive to the classroom intervention. This finding is consistent with Dewaele and MacIntyre's (2014) view that foreign language enjoyment is closely related to classroom experience, teacher support, peer interaction, the learning environment, and learners' sense of achievement. In the present study, the emotional-stimulus activities may have increased students' enjoyment because they provided more opportunities for interaction, positive competition, sentence creation, games, storytelling, and supportive peer feedback.

The correlation results presented in Table 5 further support the link between vocabulary achievement and classroom enjoyment. The strongest correlations were found between the vocabulary post-test and the FCVQ, which is expected because both instruments assessed the same target vocabulary. At the same time, the results showed moderate positive correlations between FLES scores and vocabulary achievement, particularly in the experimental group. This suggests that students who enjoyed the vocabulary learning process tended to achieve better results. However, enjoyment alone cannot fully explain vocabulary achievement, as successful vocabulary learning also depends on repeated exposure, practice, review, and assessment.

The feedback questionnaire results presented in Table 6 and Figure 4 provide useful qualitative support for the quantitative findings. Most students in the experimental group reported that the emotional-stimulus activities helped them remember vocabulary more effectively and made the learning process more enjoyable. Activities such as vocabulary games, team and individual competitions, role-play, and group storytelling were likely among the most positively evaluated because they encouraged participation, cooperation, and creativity. Positive peer praise also appeared to be valuable, as it may have reduced students' fear of making mistakes and made feedback feel less threatening. This interpretation is consistent with the previous studies discussed earlier.

These perceptions are important because the extent of students' involvement in vocabulary learning is influenced by their attitudes toward vocabulary learning. When EFL students view vocabulary learning mainly as a memorization task, they may study the words only for the test and forget them soon afterward. However, when vocabulary learning is connected to interaction, personal and social meaning, humor, and classroom cooperation, students may become more motivated to use and revisit the words. This does not mean that emotional stimuli replace serious learning. Rather, they may support it by making vocabulary practice more meaningful and by helping students retain and retrieve words more effectively over time.

## 7. Conclusions

Overall, the findings suggest that positive emotional stimuli can be a useful and practical addition to vocabulary instruction in Saudi EFL reading courses. The intervention is simple, low-cost, and easy to include within normal classroom routines. Additionally, it supports learning outcomes of the English departments. More importantly, it does not require changing the course content and the requirements. The same reading passages and target vocabulary can still be used, but students' interaction with the vocabulary becomes more active, meaningful, and enjoyable. In this sense, the study suggests that vocabulary achievement can be improved not only by giving students more words to study, but also by improving the emotional and instructional conditions in which they learn those words. The most reasonable interpretation is that emotional stimuli are most effective when they are combined with structured reading-based instruction, repeated vocabulary practice, and opportunities for meaningful classroom interaction.

## 8. Limitations

The findings of this study should be understood in light of some limitations. First, the study used a quasi-experimental design, which means that the two groups may not have been completely equal before the intervention started. These initial differences may have affected the results to some extent. However, the use of a pre-test helped check whether the two groups were similar in their vocabulary level at the beginning of the study.

Second, the participants were limited to male Saudi undergraduate EFL students at Qassim University. Because of this, the findings may not apply in the same way to female students, younger learners, students from other universities, or learners studying English in different EFL contexts.

Third, the study focused mainly on vocabulary achievement within a reading and vocabulary course. Although the vocabulary post-test and the FCVQ were useful for measuring improvement in students' vocabulary knowledge, they may not fully show

how well students can use the words naturally in speaking or writing. Therefore, future studies could include oral tasks, writing tasks, or delayed post-tests to examine long-term retention and students' ability to use the target vocabulary more productively.

Finally, the study used several types of positive emotional stimuli, such as games, pair work, competitions, storytelling, role-play, and peer praise. While this reflects how such activities are often combined in real classroom practice, it also makes it difficult to identify which activity contributed most to students' vocabulary learning. Future studies could examine these activities separately to determine which ones have the strongest effect.

## References

- [1]. Arnold, J. (2011). Attention to affect in language learning. *Anglistik: International Journal of English Studies*, 22, 11-22.
- [2]. Bower, G. H. (1981). Mood and memory. *American Psychologist*, 36(2), 129-148. <https://doi.org/10.1037/0003-066X.36.2.129>
- [3]. Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.
- [4]. Craik, F. I. M., & Lockhart, R. S. (1972). Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behavior*, 11(6), 671-684. [https://doi.org/10.1016/S0022-5371\(72\)80001-X](https://doi.org/10.1016/S0022-5371(72)80001-X)
- [5]. Creswell, J. W. (2015). *A concise introduction to mixed methods research*. SAGE.
- [6]. Dewaele, J. M. (2015). On emotions in foreign language learning and use. *The Language Teacher*, 39(3), 13-15. <https://doi.org/10.37546/JALTTLT39.3-3>
- [7]. Dewaele, J. M., Chen, X., Padilla, A. M., & Lake, J. (2019). The flowering of positive psychology in foreign language teaching and acquisition research. *Frontiers in Psychology*, 10, Article 2128. <https://doi.org/10.3389/fpsyg.2019.02128>
- [8]. Dewaele, J. M., & MacIntyre, P. D. (2014). The two faces of Janus? Anxiety and enjoyment in the foreign language classroom. *Studies in Second Language Learning and Teaching*, 4(2), 237-274. <https://doi.org/10.14746/sslT.2014.4.2.5>
- [9]. Dewaele, J. M., & MacIntyre, P. D. (2016). Foreign language enjoyment and foreign language classroom anxiety: The right and left feet of FL learning? In P. D. MacIntyre, T. Gregersen, & S. Mercer (Eds.), *Positive psychology in SLA* (pp. 215-236). *Multilingual Matters*. <https://doi.org/10.21832/9781783095360-010>
- [10]. Dewaele, J. M., Witney, J., Saito, K., & Dewaele, L. (2018). Foreign language enjoyment and anxiety in the FL classroom: The effect of teacher and learner variables. *Language Teaching Research*, 22(6), 676-697. <https://doi.org/10.1177/1362168817692161>
- [11]. Dzuka, J., & Dalbert, C. (2002). Vyvoj a overenie validity Skal emocionalnej habitualnej subjektivnej pohody (SEHP) [The development and validation of the Emotional Habitual Subjective Comfort Scale]. *Ceskoslovenska Psychologie*, 46, 234-250.
- [12]. Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE.
- [13]. Fotos, S. (2001). Cognitive approaches to grammar instruction. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (pp. 3-11). Boston, MA: Heinle & Heinle Publisher.
- [14]. Gallo, C. (2014). *Talk like TED: The 9 public-speaking secrets of the world's top minds*. St. Martin's Press.
- [15]. Goodman, D. J., Nist, S. L., & Moher, C. (1997). *Advancing vocabulary skills*. Townsend Press.
- [16]. Grabe, W. (2009). *Reading in a second language: Moving from theory to practice*. Cambridge University Press.
- [17]. Gregersen, T., & MacIntyre, P. D. (2014). Capitalizing on language learners' individuality: From premise to practice. *Multilingual Matters*. <https://doi.org/10.21832/9781783091218>
- [18]. Horwitz, E. K. (1996). Even teachers get the blues: Recognizing and alleviating teachers' feelings of foreign language anxiety. *Foreign Language Annals*, 29(3), 365-372. <https://doi.org/10.1111/j.1944-9720.1996.tb01248.x>
- [19]. Horwitz, E. K., Horwitz, M. B., & Cope, J. A. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125-132. <https://doi.org/10.2307/327317>
- [20]. Horwitz, E. K., & Young, D. J. (Eds.). (1991). *Language anxiety: From theory and research to classroom implications*. Prentice Hall.
- [21]. Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Pergamon Press.
- [22]. Kralova, Z., Kamenicka, J., & Tirpakova, A. (2022). Positive emotional stimuli in teaching foreign language vocabulary. *System*, 104, Article 102678. <https://doi.org/10.1016/j.system.2021.102678>
- [23]. MacIntyre, P. D., & Gregersen, T. (2012). Emotions that facilitate language learning: The positive-broadening power of the imagination. *Studies in Second Language Learning and Teaching*, 2(2), 193-213. <https://doi.org/10.14746/sslT.2012.2.2.4>
- [24]. MacIntyre, P. D., Gregersen, T., & Mercer, S. (Eds.). (2016). *Positive psychology in SLA*. *Multilingual Matters*. <https://doi.org/10.21832/9781783095360>
- [25]. MacIntyre, P. D., & Mercer, S. (2014). Introducing positive psychology to SLA. *Studies in Second Language Learning and Teaching*, 4(2), 153-172. <https://doi.org/10.14746/sslT.2014.4.2.2>
- [26]. Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge University Press.
- [27]. Nation, I. S. P. (2013). *Learning vocabulary in another language* (2nd ed.). Cambridge University Press.
- [28]. Oxford, R. L. (2015). How language learners can improve their emotional functioning: Important psychological and psychospiritual theories. *Applied Language Learning*, 25(1-2), 1-15.
- [29]. Paivio, A. (1986). *Mental representations: A dual coding approach*. Oxford University Press.

- [30]. Pallant, J. (2020). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS (7th ed.)*. Routledge.
- [31]. Schmitt, N. (2008). Review article: Instructed second language vocabulary learning. *Language Teaching Research*, 12(3), 329-363. <https://doi.org/10.1177/1362168808089921>
- [32]. Schmitt, N. (2010). *Researching vocabulary: A vocabulary research manual*. Palgrave Macmillan. <https://doi.org/10.1057/9780230293977>
- [33]. Scrivener, J. (2011). *Learning teaching (3rd ed.)*. Macmillan Education.
- [34]. Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5-14. <https://doi.org/10.1037/0003-066X.55.1.5>
- [35]. Thornbury, S. (2002). *How to teach vocabulary*. Pearson Education.
- [36]. Todd, R. (2014). Discussion with Carmine Gallo. In C. Gallo, *Talk like TED: The 9 public-speaking secrets of the world's top minds* (pp. 140-143). St. Martin's Press.
- [37]. Webb, S. (2007). The effects of repetition on vocabulary knowledge. *Applied Linguistics*, 28(1), 46-65. <https://doi.org/10.1093/applin/aml048>
- [38]. Williams, M., Burden, R. L., Poulet, G., & Maun, I. (2004). Learners' perceptions of their successes and failures in foreign language learning. *Language Learning Journal*, 30(1), 19-29. <https://doi.org/10.1080/09571730485200191>