

Concept Checking Questions: A Comprehension Assessing Tool for Developing EFL Learners' Language Systems, and Motivation

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Abstract

The use of Concept Checking Questions (CCQs) has gained increasing attention in English Language Teaching (ELT) as a practical tool for assessing students' comprehension. This technique helps teachers to identify learners who may be struggling and determine whether additional practice is needed. However, the full scope of CCQs' effects on various language skills, systems, and learner motivation has yet to be thoroughly investigated. To address this gap, the present study explored the effect of CCQs on two language systems, namely vocabulary and grammar, as well as motivation of Iranian EFL learners. Accordingly, a total of 36 EFL learners from a private language institute in Iran participated in the study. Using a quasi-experimental design, the learners were divided into an experimental group and a control group. The findings from independent samples t-tests showed that students in the experimental group significantly outperformed their peers in vocabulary and grammar development. Additionally, a chi-square test indicated a strong relationship between the use of CCQs and increased motivation among the learners. The study's implications are discussed in light of these findings.

Keywords: Concept Checking Questions, EFL Learners, Grammar, Motivation, Vocabulary

Introduction

In recent times, there has been an increasing interest in learning the English language due to a variety of compelling reasons. Individuals aspire to attain proficiency in English rapidly and effectively to achieve their goals (Chen et al., 2020). A critical factor in this process, beyond the efforts of the language learners themselves, is the quality of language teachers. Teacher quality, including knowledge of learning and learners, pedagogical techniques, and classroom

methodologies, significantly influences learners' success (Al-Muslim & Ismail, 2020; Rastislav, 2020; Sakkir et al., 2021, Kashef, et al 2023). While some language institute managers and policymakers continue to believe that exceptional teachers are inherently gifted, recent research challenges this notion. It suggests that effective teacher training and professional development can promote excellence through efficient learning and feedback mechanisms. Consequently, successful language institutes and adept language teachers must stay abreast of current research and innovations, continuously updating their beliefs, attitudes, and practices to understand and enhance educational processes. This approach benefits both teachers and learners. A recently proposed and employed technique by language teachers, reported to impact learners' performance, is the use of Concept Checking Questions (CCQs). CCQs are questions that teachers use to gauge students' genuine understanding, allowing them to identify those who are struggling with the material and determine if additional practice is necessary (Workman, 2005).

Lexis and grammar are recognized as essential language systems, forming the bedrock of any language and directly influencing the advancement of the four language skills (Choi & Zhang, 2018; Yule, 2022). Mastery of these foundational elements is imperative for learners to enhance their language proficiency and ultimately form their language achievement. Language researchers and teachers have introduced various techniques to facilitate and improve the development of learners' lexis and grammar. One such approach is the use of Concept Checking Questions (CCQs), which have been identified as influential in language learning. Moreover, a substantial body of research has examined learners' motivation to acquire English proficiency, acknowledging that motivated learners engage in more active and effective learning (Dörnyei, 2020; Seven, 2020). Thus, motivation plays a pivotal role in language learning.

A comprehensive review of the relevant literature on the impact of CCQs on language skills and systems reveals a noticeable research gap. This gap can be attributed partly to the recent introduction and adoption of this technique by language teachers. Empirical investigations into the effects of CCQs on language skills and systems are sparse, with studies conducted by Hadi, Al-Khateeb, & Akbar (2020) focusing on reading comprehension, Barghi (2014) on lexis, Demetgül (2019) on language skills and systems, Kargar and Divsar (2019) on grammar, Ivanovna (2020) on vocabulary and grammar, and Nugraha (2017) on reading, vocabulary, and grammar. Across these studies, a consensus emerges affirming the significance of CCQs. Furthermore, there is a clear absence of research exploring the potential of CCQs to enhance the motivation of EFL learners. Therefore, to address this gap in the literature regarding the limited studies on the influence of CCQs on language skills and systems, the present study aims to investigate the impact of CCQs on EFL learners' lexis, grammar, and motivation, particularly within the Iranian context. This research seeks to address the following three questions:

RQ1. What is the influence of incorporating Concept Checking Questions on EFL learners' lexis development?

RQ2. What is the influence of incorporating Concept Checking Questions on EFL learners' grammar development?

RQ3. What is the influence of incorporating Concept Checking Questions on EFL learners' motivation improvement?

Literature Review

Constructive feedback is crucial for refining learners' foundational knowledge and competencies, particularly within the domain of EFL education (Sánchez Calderón & Pacheco Plaza, 2021). It plays a vital role in enhancing the achievements and proficiency of EFL students, potentially leading to higher levels of motivation. Black and William (1998) identified two distinct types of feedback: directive feedback, which involves the teacher providing guidelines and explanations, and facilitative feedback, which empowers learners to develop their own language learning practices. Concept Checking Questions (CCQs) are a feedback technique used by language teachers to assess learners' comprehension. According to Workman (2005), concept checking involves verifying learners' understanding of challenging aspects of the target structure in terms of both function and meaning. This technique helps teachers determine whether learners have thoroughly grasped the material. In contrast, general questions like "Do you understand?" or affirmations such as "OK" may not elicit honest responses from all learners and fail to effectively assess comprehension. Learners might mistakenly believe they understand the material, or they may be hesitant to admit their lack of understanding due to embarrassment.

Workman (2005) outlined several guidelines for employing CCQs in English language teaching, including pre-planning CCQs, formulating straightforward questions, diversifying CCQ formats, and considering vocabulary utilization. This technique is intricately connected to various language learning models, approaches, and hypotheses, with notable significance attributed to the Interaction Hypothesis, Comprehensible Input, Comprehensible Output, and Negotiation of Meaning. Long (1996) asserted that language proficiency development is facilitated through face-to-face interaction and the use of display and referential questions in communication. The incorporation of display and referential CCQs by language teachers is believed to evaluate learners' comprehension of the input. Additionally, Brock (1986) suggested that this questioning technique increases student talking time and interactivity, thereby enhancing the quality of language output.

Another factor facilitating language learning is motivation. As emphasized by Dörnyei (2018), motivation plays a fundamental role in explaining academic achievement, which in turn can generate further motivation. Similarly, numerous scholars, including Vu et al. (2022), Dwinalida & Setiaji (2022), and Alamer & Alrabai (2023), have demonstrated a direct association between learning accomplishment and motivation. They have affirmed that motivation raises determination, leading to success and fulfillment. Conceptually, CCQs have the potential to enhance language learning and subsequently influence the growth of learners' motivation.

While there has been some theoretical discourse regarding the effect of CCQs on language learning, language skills, and systems, empirical studies in this domain are limited. To bridge the gap between theory and practice, some researchers have explored this subject matter. Hadi et al. (2020) conducted an experimental investigation to explore the influence of CCQs on the reading skills of learners in Iraq. The findings revealed a significant positive impact, indicating that the utilization of CCQs markedly enhanced learners' reading comprehension proficiency. Similarly, Kargar and Divsar (2019) conducted an experimental study to determine the role of CCQs on EFL learners' grammar. The findings of this research revealed that incorporating CCQs was beneficial in improving the grammatical abilities of EFL learners.

Florkowska (2018) examined the use of CCQs by CELTA trainers and trainees, assessing their impact on learning development at two proficiency levels: pre-intermediate and advanced. The study found that opinions on the appropriateness of CCQs for students at different proficiency levels varied, with a majority expressing disagreement. This inconsistency might be attributed to differences in teachers' academic backgrounds, training, teaching experience, and attitudes. Furthermore, the study established that any adverse effects of this technique could be mitigated by employing referential questions, which have been empirically demonstrated to positively impact language learning. In another study, Nugraha (2017) confirmed the positive influence of CCQs on cadets' vocabulary, grammar, and reading comprehension. Similarly, Barghi's (2014) experimental study explored the effects of both CCQs and Use Questions (UQs) on vocabulary retention and language learners' accuracy. The results indicated that participants subjected to CCQ intervention exhibited significant improvements in lexical learning and accuracy compared to those who did not receive such intervention. Consequently, the study concluded that CCQs and UQs significantly contributed to the development of learners' lexicons.

To date, a comprehensive examination of the existing literature reveals that only a limited number of researchers have investigated the impacts of CCQs on language skills and systems such as reading comprehension, vocabulary, and grammar. The scarcity of investigations in this domain underlines the need for additional research to elucidate the efficacy of CCQs across various language skills and systems. Moreover, there is a noticeable dearth of research exploring the motivational aspects that CCQs may instigate among language learners.

Method

The Design of the Study

The objectives of the current investigation were to explore the potential effects of CCQs on two language systems, lexis and grammar, as well as on the motivation of EFL learners. To achieve this, a quantitative quasi-experimental design was employed to establish the relationship between CCQs as an independent variable and lexis, grammar, and motivation as the three dependent variables. Consequently, language learners participating in the study were allocated to either experimental or control classes. The experimental class received CCQs as part of the treatment. The subjects for this study were recruited from an English Language Institute in Kerman, Iran.

Participants

This study involved 40 Iranian intermediate EFL learners. It is worth noting that after administering the Oxford Placement Test (OPT), (Allen, 2004), to assess both the actual and desired proficiency levels and ensure participant homogeneity, four learners were excluded. Consequently, the final sample comprised 36 intermediate learners, consisting of 17 males and 19 females. The participants, selected through a convenient sampling procedure, were approximately aged between 18 and 25 ($M=21$) and had been enrolled at a private English language institute in Kerman, Iran in 2024. It should be noted that in conducting this study, informed consent was

obtained from all research participants, and learners were assured of the privacy and confidentiality of their data.

Instruments

The present study employed four instruments, namely (1) Oxford Placement Test, (2) the Cambridge Intermediate Vocabulary for IELTS test, (3) a researcher-made intermediate grammar test, and (4) a motivation test.

Oxford Placement Test

The researchers employed the Oxford Placement Test (OPT) (Allen, 2004) to accurately assess the participants' proficiency level, which was established as intermediate. The OPT comprises 200 multiple-choice questions encompassing listening, structure, and vocabulary sections, and participants are allotted 100 minutes to complete the test. Allen (2004) noted that the OPT's validity and internal consistency underwent thorough evaluation. According to the test results, the intermediate level corresponds to scores ranging from 120 to 149. Furthermore, the researchers affirmed the overall test reliability by computing Cronbach's alpha, which yielded a value of 0.79.

Lexis Test

After confirming the homogeneity of participants in terms of their proficiency level, the researchers administered a lexis test to evaluate the intermediate learners' knowledge of lexis. This assessment comprised 30 multiple-choice questions and was conducted within a 30-minute time frame, utilizing material from the intermediate Cambridge Vocabulary for IELTS book by Cullen (2008). After the administration of pre-tests and treatment, the same IELTS lexis evaluation was employed at the study's conclusion to determine whether significant differences could be observed in the scores between control and experimental classes. Despite the assessment being derived from a standardized source, the intermediate Cambridge Vocabulary for IELTS book by Cullen (2008), its reliability and validity were thoroughly examined and found to be satisfactory. Specifically, a panel of experts assessed the content validity of the evaluation. To assess the reliability of the vocabulary test, Cronbach's alpha was employed, resulting in a value of 0.76.

Researcher-Made Grammar Test

The investigation utilized a researcher-made grammar assessment test, based on the intermediate-level English grammar presented in Murphy's fifth edition book (2019), to evaluate language learners' grammar knowledge at the beginning of the study. The assessment comprised 45 multiple-choice questions, and learners were allotted 45 minutes for completion. The same grammar assessment was administered after the CCQ treatment at the study's conclusion to determine any meaningful differences between the classes. To ensure the validity of the test, three TEFL university instructors analyzed it, and after making necessary modifications, it was deemed

acceptable. Additionally, this research employed Cronbach's alpha to assess the reliability of the grammar tool, resulting in a value of 0.75.

Motivation Questionnaire

To evaluate the levels of motivation among intermediate EFL learners, a questionnaire based on Laine's (1987) model and adopted by Salimi (2000) was utilized. The questionnaire comprised 36 items and employed a 5-point Likert Scale, with 1 indicating strong agreement, and 5 indicating strong disagreement. Both groups completed the motivation tool before and after the intervention. According to Rahimi, Riazi, & Saif (2008), the internal consistency of the questionnaire was considered satisfactory, with a coefficient of 0.80. In the present study, Cronbach's alpha was employed to assess the reliability of the questionnaire, demonstrating a satisfactory level of consistency at 0.78.

Data Collection and Analysis Procedures

A total of 40 intermediate EFL learners were selected from an English language institution in Kerman, Iran. After administering the Oxford Placement Test (OPT) (Allen, 2004), 36 participants were identified as intermediate learners and recruited for the study. Subsequently, the language learners were divided into two separate experimental (N = 17) and control (N = 19) classes. Prior to initiating the research, both groups underwent three pretests, a vocabulary test, a grammar assessment, and a questionnaire assessing motivation.

The teaching materials utilized for the study comprised the Intermediate Cambridge Vocabulary for IELTS book, designed for intermediate learners and authored by Cullen (2008), and Intermediate English Grammar in Use, fifth edition, by Murphy (2019). The lexis and grammar classes each consisted of 10 sessions, and the data collection phase took 3 months. It is worth noting that the initial 10 lessons of the lexis book and the first 20 lessons of the grammar book were selected for teaching. In the control class, language learners experienced conventional methods of lexis instruction, involving engagement, meaning, pronunciation, and form, followed by written and oral exercises, and concluding with an activation phase. Learners in the control class were encouraged to report any challenges they encountered. On the other hand, participants in the CCQ class underwent the same practice as the control group, with the addition of incorporating CCQs. Subjects were asked concept checking display and referential questions.

Upon completion of the treatment, post-tests (the same lexis and grammar tests used before the treatment) were administered to assess the subjects' learning and conclude if there were meaningful differences in grammar and vocabulary scores between control and CCQ classes. Additionally, the same motivation test was administered to assess changes in the learners' motivation towards language learning.

After confirming the presence of a normal distribution by means of a Shapiro-Wilk test, independent samples t-tests were utilized to examine two aspects: (1) the homogeneity of learners in both classes in terms of grammar and vocabulary knowledge before the treatment and (2) whether there were any meaningful differences between the control and experimental classes'

pretests and posttests. Additionally, a chi-square test was employed to identify the motivational homogeneity of learners in both groups before the instruction and whether there was a significant difference between the classes' pretest and posttest in terms of language learners' motivation level. It should be noted that that the researchers utilized Cronbach's alpha to assess the reliability of the instruments employed in this investigation.

Results

RQ1. What Is the Influence of Incorporating Concept Checking Questions on the Lexis of Intermediate EFL Learners?

The first objective of the present study was to assess how CCQs influence the enhancement of lexis in intermediate language learners. With regard to the small sample size, 36 participants, it was crucial to assess the distribution of lexis scores to select an appropriate statistical method. Consequently, a Shapiro-Wilk test was conducted, and the results indicated a lack of evidence for non-normality. In light of this finding, the researcher opted for a parametric test. Therefore, to determine whether there were significant differences between the pretests and posttests of the groups, the independent samples t-test was employed.

Table 1

Descriptive Statistics for Lexis Pretests

	Exp – Cont	N	Mean	Std. Deviation	Std. Error Mean
Lexis Pretests	Exp	17	12	1.17	.284
	Cont	19	11.7	.97	.224

Tables 1 provides descriptive analyses of the lexis pretests in both classes. As indicated in Table One, the mean scores for the CCQ and control classes were 12 (SD = 1.17), and 11.7 (SD = .97, respectively.

Table 2

Independent Samples T-Test between the Lexis Pretests

Levene's Test		t-test for Equality of Means					95% Confidence Interval of the Difference
F	Sig.	t	Df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	

									Lower	Upper
Lexis Pretests	Equal variances assumed	.55	.46	.58	34	.56	.21	.35	-.51	.93
	Equal variances not assumed			.58	31.3	.56	.21	.36	-.52	.94

As can be seen in Table 2, the results of the independent t-test revealed no significant differences between the CCQ and control classes in terms of vocabulary level prior to the implementation of the CCQ treatment ($t = 0.58$, $p = 0.56 > 0.05$). Consequently, it can be asserted that the learners in both groups exhibited homogeneity at the beginning of this investigation.

Table 3

Descriptive Statistics for Lexis Posttests

		Exp – Cont	N	Mean	Std. Deviation	Std. Error Mean
Lexis Posttests	Exp		17	16.00	1.061	.257
	Cont		19	13.53	1.020	.234

Tables 3 focuses on the learners' performances in the lexis posttests in both groups. As indicated in this table, the means for the posttests in the control and experimental classes were 13.53 (CG-SD = 1.02) and 16 (EG-SD = 1.06), respectively.

Table 4

Independent Samples T-Test between Lexis Posttests

		Levene's Test for Equality of Variances		t-test for Equality of Means		95% Confidence Interval of the Difference	
F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	Lower Upper

Lexis Posttests	Equal variances assumed	.002	.96	7.1	34	.000	2.47	.34	1.76	3.17
	Equal variances not assumed			7.1	33.2	.000	2.47	.34	1.76	3.18

Table 4 reveals a meaningful difference when comparing the vocabulary posttests of the classes ($t = 7.1, p = 0.000 < 0.05$). Therefore, based on the means and the p-value, it can be asserted that EFL learners in the experimental class demonstrated a significant improvement in lexis compared to learners in the control class. Based on the information provided in Tables 2 and 4, we could establish that the CCQ intervention had a significant effect on the language learners' vocabulary improvement.

RQ2. What Is the Influence of Incorporating Concept Checking Questions on the Grammar of Intermediate EFL Learners?

The next objective of this investigation was to examine whether the use of CCQs influences the progress of intermediate language learners in grammar. To ascertain whether there existed a statistically significant difference between the pretests and posttests of both classes, independent samples t-tests were used. It is important to highlight that the normal distribution of the data in all groups was confirmed utilizing a Shapiro-Wilk test.

Table 5

Descriptive Statistics for Grammar Pretests

	Exp – Cont	N	Mean	Std. Deviation	Std. Error Mean
Grammar Pretests	Exp	17	12.59	.795	.193
	Cont	19	12.47	.905	.208

Tables 5 presents the results of descriptive statistics regarding the grammar pretests of both classes. As seen in this table, the mean scores for the pretests in the control and experimental classes were 12.47 (CG-SD = 0.90) and 12.59 (EG-SD = 0.79).

Table 6

Independent Samples T-Test between Grammar Pretests

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Grammar Pretests	Equal variances assumed	.436	.514	.401	34	.691	.115	.285	-.466	.695
	Equal variances not assumed			.40	33.99	.689	.115	.283	-.461	.690

Table 6, displaying the outcomes of the independent samples t-test, concludes that there was no significant difference in the grammar knowledge of learners between the control and CCQ classes in the pretests ($t = 0.41$, $p = 0.691 > 0.05$). Thus, the participants' homogeneity regarding their grammar proficiency at the beginning of this investigation was established.

Table 7

Descriptive Statistics for Grammar Posttests

		Exp - Cont	N	Mean	Std. Deviation	Std. Error Mean
Grammar posttests	Exp		17	17.12	.928	.225
	Cont		19	14.11	.994	.228

Tables 7 provides information on descriptive statistics regarding the grammar posttests of CCQ and control classes. The data in this table indicates that the posttests' mean scores of the participants in the CCQ and control classes were 17.12 (SD = .92) and 14.11 (SD = .99) respectively.

Table 8

Independent Samples T-Test between Grammar Posttests

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Grammar Posttests	Equal variances assumed	.06	.79	9.36	34	.000	3.012	.322	2.359	3.666
	Equal variances not assumed			9.40	33.93	.000	3.012	.320	2.361	3.663

Table 8 indicates a statistical meaningful difference between the control and experimental classes concerning their grammar knowledge after the introduction of the CCQ intervention ($t = 9.36, p = .000 < .05$). Thus, it could be observed that the EFL students in the CCQ class exhibited superior performance in comparison to participants in the control class, with respect to their grammar learning. In a nutshell, considering the data in Tables 6 and 8, it is concluded that CCQ intervention had a statistically significant influence on EFL learners' grammar improvement.

RQ3. What is the Influence of Incorporating Concept Checking Questions on the Motivation of Intermediate EFL Learners?

The final research question sought to explore whether the integration of CCQs in grammar and lexis instruction had an impact on the motivational levels of the participants. Accordingly, the responses from the motivation tool were assessed both before and after the intervention. Utilizing frequency count, cross tabulations, and chi-square tests, the specific aim was to determine if there were any meaningful differences in the motivation of the participants in the CCQ and control classes through the study.

Table 9

Motivation Pretests Crosstab

		Unmotivated	Motivated	Total
EX – CON	Experimental	11	6	17
	Control	13	6	19

Total	24	12	36
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Tables 9 displays the results of crosstabulation regarding the motivation pretests of both experimental and control groups. Examining Table 9, it is apparent that out of the 17 participants in the CCQ class, 11 were identified as unmotivated, while 6 were motivated. Similarly, the control group, consisting of 19 learners, had 13 unmotivated and 6 motivated learners.

Table 10

Chi-Square Test between Motivation Pretests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.056 ^a	1	.813	1.000	.546
Continuity Correction ^b	.000	1	1.000		
Likelihood Ratio	.056	1	.813	1.000	.546
Fisher's Exact Test				1.000	.546
N of Valid Cases	36				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.67.

b. Computed only for a 2x2 table

Tables 10 presents the results of a chi-square test comparing the motivation pretests of both experimental and control classes. As shown in this table, no significant differences in the motivation pretests between the CCQ and control classes were observed ($X^2(1) = 0.056$, $p = 0.813$). This suggested that the motivation levels of the subjects in both groups were homogeneous, and the learners did not significantly differ at the beginning of this investigation in terms of motivation.

Table 11

Motivation Posttests Crosstab

		Unmotivated	Motivated	Total
EX – CON	Experimental	5	12	17
	Control	12	7	19
	Total	17	19	36

Table 11 provides the outcomes of crosstabulation, offering a comparative examination of the motivation posttests. Examination of the table reveals distinct patterns in the motivational behaviors exhibited by participants following the implementation of the intervention. In particular, the posttest results for the CCQ class indicate that out of the 17 students assessed, 5 demonstrated signs of unmotivated behavior, while a majority of 12, exhibited motivation. Conversely, in the control group, the posttest outcomes depict a different distribution, with 12 students showcasing unmotivated tendencies and 7 demonstrating motivation. Significantly, it is evident from Table 11 that the number of motivated participants in the CCQ group posttest ($N = 12$) surpasses that of their counterparts in the control group ($N = 7$). This observation highlights a notable divergence in the post-intervention motivational states between the two groups. The apparent increase in motivated behavior within the CCQ class suggests a positive impact associated with the implementation of CCQs as an instructional strategy.

Table 12

Chi-Square Test between Motivation Posttests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1- sided)
Pearson Chi-Square	4.100 ^a	1	.043	.054	.045
Continuity Correction ^b	2.857	1	.091		
Likelihood Ratio	4.190	1	.041	.054	.045
Fisher's Exact Test				.054	.045
N of Valid Cases	36				

a. 0 cells (0.0%) have an expected count of less than 5. The minimum expected count is 8.03.

b. Computed only for a 2x2 table

Table 12 provides a presentation of the outcomes derived from a chi-square test, comparing motivation posttests. The data presented in Table 12 unveils a statistically meaningful difference in motivation posttests between the control and CCQ classes ($X^2(1) = 4.1, p = 0.043$). Considering the statistical results, one could conclude that a statistical meaningful difference exists between the groups in terms of the number of motivated EFL learners. In practical terms, the observed increase in motivated learners in the CCQ class's posttest, as opposed to the control group, highlights the impact of the CCQ treatment. The statistical evidence, coupled with the numerical comparison, suggests that the instructional use of CCQs contributed to a higher proportion of motivated participants within the experimental group.

Table 13

Strength of Association between Motivation Posttests

		Approximate		Monte Carlo Significance		
		Value	Significance	Significance	95% Confidence Interval	
					Lower Bound	Upper Bound
Nominal by	Phi	-.337	.043	.056 ^c	.000	.130
Nominal	Cramer's V	.337	.043	.056 ^c	.000	.130
N of Valid Cases		36				

c. Based on 36 sampled tables with starting seed 329836257.

Table 13 presents the strength of association between motivation posttests using two measures: Phi and Cramer's V. The Phi coefficient indicates a weak inverse relationship of -0.337 between the variables, with an approximate significance of 0.043, suggesting statistical significance at the 5% level. Similarly, Cramer's V yields a value of 0.337, reinforcing the weak but significant association observed. The Monte Carlo significance, slightly higher at 0.056, along with a 95% confidence interval ranging from 0.000 to 0.130, supports these findings. With 36 valid cases analyzed, the results indicate a noticeable, albeit weak, relationship between motivation posttests, highlighting statistical significance despite the modest strength of association.

Discussion

This investigation examined three primary objectives, with a focus on the influence of implementing CCQs on the enhancement of lexis, grammar, and motivation among learners of English at an intermediate level. The primary research question sought to evaluate the impact of CCQs on enhancing learners' lexical proficiency. It was determined that the utilization of CCQs significantly affected the improvement of intermediate language learners' vocabulary. This significant influence can be attributed to specific characteristics of the CCQ technique. This technique is associated with multiple models and hypotheses, including the interaction hypothesis, comprehensible input, comprehensible output, and negotiation of meaning. Essentially, the integration of CCQs in the classroom stimulates increased interaction, greater student participation, and enhanced learning. Furthermore, learners are exposed to more comprehensible input, which leads to more comprehensive output. Teachers can ensure that the majority, if not all, of the learners attain the lesson objectives through incorporating CCQs, thereby reinforcing the guarantee of vocabulary learning as learners leave the classroom.

These findings support Brock's (1986) assertion that, increased interaction in the classroom can facilitate more effective language acquisition for learners. Long (1996) further identified that the types of questions used by language teachers play a crucial role in language improvement, particularly emphasizing the significance of referential questions in language learning development. Additionally, the use of CCQs by teachers has been found to increase the prevalence

of display and inferential questions, contributing to a more robust language learning environment. These results align with Nugraha's (2017) research, which confirmed the positive effects of CCQs on cadets' vocabulary. Similarly, Barghi's (2014) study, which investigated the effects of CCQs and Use Questions on EFL students' vocabulary retention and accuracy, concurs with the results in this study by affirming the constructive impact of CCQs on learners' vocabulary development.

Regarding the second research question in this study, it was discovered that the utilization of CCQs had a significant influence on the improvement of grammar skills among EFL learners. This impact can be attributed to the explicit characteristics of CCQs. Specifically, the incorporation of CCQs by teachers in grammar instruction allows them to ensure that learners have comprehended the grammar concept being taught. In cases where learners do not respond adequately to CCQs, teachers may opt to reteach the concept, provide additional examples and explanations, and offer more structured and independent exercises to guarantee that learners have achieved the learning objectives of the grammar lesson. Prominent features of CCQs that contribute to the enhancement of grammar achievement include more interactivity, increased student participation, more quality comprehensible input and output, and greater emphasis on the negotiation of meaning.

The findings of Long (1996), Brock (1986), Kargar and Divsar (2019), and Nugraha (2017) align with the present investigation in relation to the influence of CCQs on the grammar achievement of EFL learners. Long (1996) suggested that teachers' questions, including referential questions, can facilitate learning in a general sense. In the context of grammar instruction, CCQs are typically employed through the utilization of teacher display and inferential questions. This aligns with the findings of the present study. Brock's (1986) assertion regarding the correlation between the amount of high-quality classroom interaction and language learning is consistent with the outcomes of the current investigation. The study conducted by Kargar and Divsar (2019), which explored the impact of CCQs on the grammar proficiency of EFL students, supports the notion that the implementation of CCQs is advantageous for the development of grammar skills among EFL learners. Additionally, Nugraha (2017) conducted a study that supported the beneficial impact of CCQs on grammar development, aligning with the present study findings.

The final question addressed the impact of CCQs on the motivation of language learners. The findings revealed that the utilization of CCQs by teachers had a significant influence on enhancing motivation among EFL learners. This enhanced motivation can be attributed to specific characteristics of CCQs, as acknowledged by various researchers such as Vu et al. (2022), Dwinalida & Setiaji. (2022), and Alamer & Alrabai (2023). These researchers have highlighted a direct correlation between achievement and motivation, affirming that motivation raises determination and leads to success and accomplishment. As emphasized by Dörnyei (2018), motivation plays a crucial role in determining academic achievement, and achievement in learning, subsequently, can generate increased motivation.

Based on an examination of all three research questions in this study, along with similar investigations, it has been established that CCQs exert a promising influence on enhancing vocabulary, grammar, and motivation. This technique facilitates the comprehensible input and output, negotiation of meaning, student talking time, and classroom interaction. Therefore, CCQs significantly affect the growth of learners' linguistic skills and systems, ultimately resulting in increased motivation among students. The potential of the findings from this particular study lies

in the capacity to enhance awareness among those involved about the positive influence of CCQs on language teaching and learning. Multiple parties stand to gain advantages from the integration of CCQs in English classes, including language institutes, teacher trainers, language school supervisors, observers, language teachers, and notably, language learners. Additionally, the results of this investigation contribute to the current understanding of CCQs, offering further substantiation and validation of their efficacy in language education.

Conclusion

Checking the comprehension of EFL learners in various language skills and systems is a vital responsibility of teachers, as it significantly impacts their language learning progress. One technique that focuses on assessing learners' understanding is the use of Concept Checking Questions. A thorough examination of studies on CCQs in the context of EFL learning, showed a clear gap in empirical research, which this investigation sought to address. In details, this attempt specifically addressed the impacts of CCQs on the development of grammar, vocabulary, and motivation among intermediate EFL learners.

The findings emphasize the influential role that CCQs play in shaping the vocabulary, grammar, and motivation of EFL learners. The results affirm that when CCQs are appropriately employed, they exhibit notable characteristics that enhance language learning. The contribution of CCQs to EFL learning is rooted in their potential to facilitate increased interaction and student talking time, more comprehensible input and output, and the negotiation of meaning, which are all critical aspects of language learning. Ultimately, CCQs contribute to an overall positive language learning experience.

The practical application of CCQs in assessing learners' comprehension provides teachers with a valuable tool for gauging the achievement of lesson objectives. In contrast to common questions such as "Do you understand?" that lack specificity, well-planned CCQs, as suggested by Workman (2005), prove instrumental in obtaining a detailed understanding of students' comprehension levels. EFL teachers can tailor their approach to cater to diverse learning styles and objectives by incorporating various types of CCQs, including referential and display, yes/no, Wh, tag, and alternative questions.

Conflicts of Interest

The authors declare that they have no conflict of interest.

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