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Investigation the Relationship Between the Students' Achievement and the Use of Grammar Learning Strategies

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Abstract

This study aims to investigate the relationship between the students' achievement in learning English language and the use of the grammar learning strategies in learning English language. The participants are 43 male and female students from grade 4 from the Department of English, College of Arts, University of Anbar. The study was conducted during the first semester of the academic year 2022-23. To achieve the aim, two questions were formed: "Is there a relationship between the students’ achievement and the use of grammar learning strategies?" and "To what extent do the EFL grade 4 students use grammar learning strategies?" A questionnaire and a diagnostic test were used to collect the data. The results revealed that there was no relationship between the students' achievement and the use of the grammar learning strategies. In addition, the level of the use grammar learning strategies in learning English grammar was medium.

Keywords: Students’ Achievement, Grammar Learning Strategies, Correlation relationship.
تحقيق العلاقة الارتباطية بين تحصيل الطلبة واستخدام استراتيجيات تعلم النحو

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الملخص

تهدف هذه الدراسة إلى كشف العلاقة بين تحصيل الطلبة في تعلم اللغة الإنجليزية واستخدام استراتيجيات تعلم النحو. كان عدد المشاركين 43 طالب وطالبة من المرحلة الرابعة، قسم اللغة الإنجليزية، كلية الآداب، جامعة الأنبار. تم إعداد الدراسة خلال الفصل الدراسي الأول للعام 2022-23. لغرض تحقيق هدف الدراسة، تم صياغة سؤالين: هل توجد علاقة بين تحصيل الطلبة واستخدام استراتيجيات النحو؟ وإلى أي مدى يستخدم طلبة اللغة الإنجليزية استراتيجيات تعلم النحو؟ تم استخدام استبيان واختبار تشخيصي لغرض جمع بيانات البحث. أظهرت نتائج الدراسة وجود علاقة ارتباطية إيجابية بين تحصيل الطلبة واستخدام استراتيجيات تعلم النحو. بالإضافة إلى أن مستوى استخدام استراتيجيات تعلم النحو كانت متوسطة.

الكلمات المفتاحية: تحصيل الطلبة، استراتيجيات تعلم النحو، العلاقة الارتباطية.
Statement of the Problem

The EFL students at the departments of English from the first day enrollment in the Department of English focus on learning grammar. The idea of mastering the English grammar will lead to success in English language is the most dominate idea among EFL students. In Iraq the majority students, even the students who are in non-English specialization, believe that they do their best to master the grammar in order to be good English language speakers and to use English accurately and fluently (Al-Khayyat and Diaa, 2019). The idea of devoting most of the learning time in learning English grammar must be investigated among EFL students to reveal the students' use of Grammar Learning Strategies (GLS) to diagnostic the weakness and the strong aspect of learning English grammar. To diagnostic if the students use the correct strategies to learn each aspect of the grammar, and also to identify if there is a relationship between students' language achievement and using grammar learning strategies. Reviewing the literature Khodabandeh and Soleimani (2018); Al Bataineh, et al., (2019); Mulugeta and Beyour (2019); and Zulkarnaen (2021) they investigated students' use of grammar learning strategies and found that the most used strategies were the meta-cognitive strategies, the cognitive strategies, and the social strategies. This study is an attempt to investigate some of grammar learning strategies and their correlation relationship with students' language achievement.

Aims of the Study

This study aims to reveal:

1- The relationship between students' achievement on English language and the use of grammar learning strategies.
2- The extant of male and female EFL students' use of grammar learning strategies.

The Questions

To achieve the aims, the following questions were set:

1- "Is there a relationship between the students’ achievement and the use of grammar learning strategies?
2- To what extent do the EFL grade 4 students use grammar learning strategies?
The Significance
The importance of this study stems from helping English language teachers to understand the thinking of their students when learning the English language and the extent of their reliance on grammar in learning the language. Communicative learning strategies so that the student can use the English language fluently and flexibly.

The Limits
The generalizability of the results of this study is limited to:

1- Participants: The participants were 43 male and female students from grade 4.
2- Location: The location of the study is at the Department of English, College of Arts, University of Anbar in the Anbar province in the west of Iraq.
3- Duration: The study was conducted during the first semester of the academic year 2022-23, and any change in time and place may affect the results of the study.

Literature Review
Learning English language in the Iraqi context has based heavily on mastering English grammar and vocabulary memorizing. The English textbooks are designed based on communicative language teaching approach, but most students still adopt the learning strategies that focus on grammar and vocabulary (Al-Khayyat, 2021). The researchers in this study believe that the mentioned fact is due that the Iraqi students do not have opportunities to practice the English language outside the classroom. Thus, the students' goal is to focus on the grammar and vocabulary to pass the English language exam. Based on this fact, it is worth to investigate students' grammar learning strategies and their relation to students' achievement. The aim of this study is derived from the general English language students' learning behaviors.

There are several definitions of language learning strategies, the most comprehensive one is of Oxford (1990) who defined language learning strategies “specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective and more transferrable to new situations” (P.9). Oxford's division of the strategies
refers that there are two main field: The direct strategies (memory, cognitive and compensation) and indirect strategies (metacognitive, affective and social strategies).

The language learning strategies have witnessed a bid progress from 1977 to 2018, the strategies have changed based on several reasons, in the recent two years the teaching and learning process have shifted from face to face to distance learning, the integration of technology has a big influence on students' learning strategies (Kölemen, 2021).

Studies of language learning strategies have gained prominence over more than four decades and have become one of the most sought-after topics in applied linguistics to find solutions to foreign language teaching practices inside and outside the classroom and to be helpful to both language learners in their foreign language learning adventure, guiding them towards autonomy, as well as teachers facilitating their students' learning and relieving them of foreign language teaching etc. (Razak, et al., 2020).

There are several variables that can affect language learning strategies, including:

**Learner characteristics:** Factors such as age, prior knowledge, motivation, and learning style can impact how an individual approaches language learning (Dörnyei, 2001; Gardner & Lambert, 1972; Oxford, 1990).

**Learning environment:** The type and quality of instruction, as well as the availability of resources and opportunities for use of the target language, can influence language learning strategies (Swain, 1985; Wong-Fillmore, 1991).

**Task characteristics:** The complexity, authenticity, and relevance of language tasks can affect how learners approach them, and thus their strategy use (Long, 1981; Skehan, 1998).

**Cultural context:** The cultural background of the learner and the target language can also impact language learning strategies, as learners may draw on their own cultural schemas and pragmatic knowledge in their approach to the language (Gudykunst, 2003; Kramsch, 1986).

There are many strategies that can be used to help students learn English as a foreign language (EFL). Some of these include:
Communicative Language Teaching (CLT) - This approach emphasizes the use of authentic, real-life situations to help students learn language skills (Richards and Rodgers, 2001).

Task-based Language Teaching (TBLT) - This approach focuses on having students complete meaningful tasks using the language they are learning (Willis and Willis, 2007).

Content-based Language Teaching (CBLT) - This approach uses subject matter from other academic areas to provide context for language learning (Snow and Genesee, 1989).

Self-directed Learning (SDL) - This approach encourages students to take responsibility for their own learning and to develop their autonomy (Oxford, 1990).

Vocabulary Learning Strategies - Vocabulary is a key component of language learning. There are a variety of strategies that can be used to help students learn new vocabulary words, including flashcards, word lists, and mnemonics (Nation, 2001).

Cooperative Learning - Students working together in small groups to complete a task or achieve a goal (Johnson, et al., 1994).

These are some of the most common and effective strategies used in teaching EFL, but there are many other strategies that can be used as well, depending on the needs and goals of the students.

Research has shown that there may be some differences in the language learning strategies used by male and female students. Some studies have found that:

Female students tend to use more cognitive and metacognitive strategies, such as setting goals, planning, and monitoring their own learning, while male students tend to use more memory and practice strategies (MacIntyre and Charos, 1996).

Female students tend to have a stronger motivation to communicate, while male students tend to be more motivated by achievement and the desire to demonstrate their language skills (Gardner and Lambert, 1972).
Female students tend to have a stronger preference for working in collaborative and interactive learning environments, while male students tend to prefer more independent and competitive learning environments (Johnson and Johnson, 1989).

Female students tend to have better language learning anxiety management than male students (MacIntyre and Gardner, 1989).

It should be mentioned that these findings are not universal and may vary based on cultural and individual differences, but the above findings are based on studies that have been done on the topic.

Grammar Learning Strategies

Indirect grammar learning strategies involve learning grammar through exposure to the language in context, such as through reading, listening, or interacting with native speakers. Examples of indirect grammar learning strategies include:

Input-based instruction, which emphasizes exposure to authentic language input and encourages learners to notice and infer grammatical rules from context (Swain, 1985). Content-based instruction, which integrates language instruction with instruction on a specific subject or theme (Krashen, 1989). Task-based instruction, which focuses on using language to complete meaningful tasks and activities (Long, 1983). Direct grammar learning strategies involve explicit instruction and practice of specific grammar rules and structures. Examples of direct grammar learning strategies include:

Grammar-translation method, which emphasizes the study of grammar rules and their application through translation exercises (Odlin, 1989) Audiolingual method, which emphasizes drilling and repetition of grammar structures and patterns through oral practice. (Richards and Rodgers, 2001) Explicit grammar instruction, which focuses on providing clear explanations and examples of grammar rules and providing opportunities for practice and application (Ellis, 2003).

Grammar learning strategies are techniques or approaches that learners use to acquire and improve their knowledge of grammar in a second or foreign language (Oxford, 1990). Some examples of grammar learning strategies include:
Rule presentation: This strategy involves the teacher providing explicit explanations or examples of grammar rules (Ellis, 1994).

Inductive learning: This strategy involves learners discovering grammar rules through examples and patterns, rather than being presented with explicit explanations (Skehan, 1998).

Error correction: This strategy involves learners identifying and correcting their own errors in grammar (Van Patten and Benati, 2010).

Self-monitoring: This strategy involves learners being aware of their own language production and making adjustments as needed (Kramsch, 1986).

Metacognitive strategy: This strategy involves learners reflecting on their own learning process and making adjustments as needed.

Previous studies (Azizmohammadi and Barjesteh, 2020; Philips, 1991; Zekrati, 2017) have pointed out the importance of using GLS in relation to language learning. These studies confirmed the positive association between student use of GLS and their performance. For example, Azizmohammadi and Barjesteh (2020) found a positive and significant association between the use of GLS by ESL learners and their grammatical performance. Similarly, Mistar and Zuhairi (2020) reported that GLS use was positively correlated with grammar knowledge. Yeh (2021) found that GLS use was positively related to the achievement of Asian students.

More evidence for the role of personal characteristics in students' use of LLS can be found in Tang and Tian's (2015) study. They examined the relationship between Chinese EFL graduates' beliefs about language learning and their LLS and found that gender, age, major and language level influence the use of learning strategies by a subset of students.

Previous Studies

Baghaei and Baghaei (2022) investigated the relationship between the creativity of advanced learners of English as a second language and the use of grammar learning strategies. They also tried to find out whether advanced learners of ESL differed in their use of grammar learning strategies. The participants were 69 Iranian EFL students. Data were collected via creativity and grammar learning strategy questionnaires. The Pearson Product-moment correlation analysis and independent-samples t-test were used to
analyze the data. The results showed that there was a significant association between the creativity of advanced EFL learners and the use of the grammar learning strategy. In addition, the female students used the grammar learning strategy more than male students.

Pawlak ans Csizér (2022) investigated the use of grammar learning strategies in Hungary and Poland. The participants were 205 university students from Hungary and 173 university students from Poland. The students are specialized in English language. A questionnaire was used to collect the data. The results revealed that there is some variance between the students' use between the two countries, but both of them use grammar learning strategies in similar way.

Alsied, et al. (2018) investigated Libyan EFL most frequently used of the grammar learning strategies at the Department of English in "Sebha University", also to reveal if there is a significant difference between the male and the female learners' use of grammar learning strategies. The participants were 121 from grade one and two at the Department of English. A questionnaire was used to collect the data. The results revealed that students used different kinds of grammar learning strategies, the most used was the memory strategies which came in the first rank; metacognitive strategies in the second rank; socio-affective strategies in the third rank; and cognitive strategies in the fourth and last rank. In addition, there was no significant difference between the male and female students of the use of grammar learning strategies.

Pawlak (2009) investigated a research's findings which sought to research the connection among using grammar studying strategies (GLS) said through 142 English Department college students and goal language attainment, operationalized as their overall performance in a sensible grammar path and the final examination. Information approximately GLS use changed into acquired with the aid of a device that changed into designed on the idea of a theoretical scheme proposed through Oxford, Rang Lee and Park (2007) wherein GLS are divided into 3 classes relying on whether or not they constitute implicit studying with recognition on form, express inductive studying and express deductive studying. The evaluation didn't discover a robust fantastic courting among using GLS and...
achievement, regardless of the extent of the BA program, or statistically large variations on this appreciate among lower-stage and higher-stage participants. The highest, albeit very weak, correlation changed into diagnosed among using GLS related to express deductive studying and grammar path grades, which testifies to the conventional nature of education the topics receive. The findings function a foundation for placing ahead a handful of suggestions for studying, coaching and checking out grammar in addition to instructions for destiny research into grammar studying strategies.

The previous studies and the above-mentioned outcomes revealed that the language learning strategies can be useful in learning English language for the EFL learners if the learners adopted them or some of them, in addition using grammar learning strategies can foster English language mastery. This study is trying to investigate the relationship between language learning strategies and grammar learning strategies on EFL students' language achievement.

Methodology

The methodology of this study is consisted of the participants, the instruments, the validity and the reliability of the instruments, the procedures, and data gathering and analysis.

The Participants

The participants are 43 male and female students from grade 4 from the Department of English, College of Arts, University of Anbar. The study was conducted during the first semester of the academic year 2022-23. The distribution of the participants is shown in table 1.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four</td>
<td>14</td>
<td>29</td>
<td>43</td>
</tr>
</tbody>
</table>

The Instrument

To collect the data, the students' previous grades in the exams and the quizzes were gathered. A grammar learning strategies questionnaire adopted from Alsied, et al. (2018) was used. The students' achievement grades were collected from two midterm exams, 3 quizzes and one summative exam.
The averages of 70% midterms and 30% of the quizzes were collected. The averages of 70% of these exams and 30% of the summative exam were calculated. The students, who get 70 and above are labeled as successful, while the students who get below 70 were labeled as unsuccessful.

**The Validity and the Reliability**

The face validity has been exposed to a jury of specialists in the field of English language teaching methods and applied linguistics. All the jury member agree that the questionnaire is suitable for the students' language level and background.

Based on Brown (2010:31) definition which states that "if a test actually samples the subject matter about which conclusions are to be drawn, and if it requires the test-taker to perform the behavior that is being measured, it can claim content-related evidence of validity, often popularly referred to as content-related validity", the jury member omit some dimensions and items from the original Alsied, et al. (2018) questionnaire.

The reliability of the questionnaire has been measured via distributing the questionnaire to a pilot sample consisted of 6 male and female students who were excluded from the sample. Alpha- Cronbach Formula, the reliability coefficient has been found to be (0.85). Such high reliability is considered acceptable since it is above (0.50).

After administering the pilot study, the researcher found that:

1- The dimensions and items are clear.
2- There is no serious ambiguity.
3- The time required to answer ranges between 20-30 minutes. This means that the average length of time required for replying to the items is (24) minutes.

**The Results**

**Answer of the First question:**

To answer the first question which is stated " Is there a relationship between the students’ achievement and the use of grammar learning strategies?" a mean score, standard deviation, and t-value were used with significance value (0.05). Table 2 shows the results.
Table 2: Spearman’s rho test between GLS and students' achievement and its three subcategories.

<table>
<thead>
<tr>
<th>Spearman’s rho</th>
<th>ρ/all the participants(r)</th>
<th>ρ/top 15 (r₁)</th>
<th>ρ/rest of the group (r²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLS</td>
<td>1.001</td>
<td>1.001</td>
<td>1.001</td>
</tr>
<tr>
<td>Students' Achievement</td>
<td>-0.28</td>
<td>0.407</td>
<td>-0.081</td>
</tr>
<tr>
<td>Cognitive</td>
<td>0.106</td>
<td>0.029</td>
<td>0.103</td>
</tr>
<tr>
<td>Metacognitive</td>
<td>0.132</td>
<td>0.048</td>
<td>-0.226</td>
</tr>
<tr>
<td>Affective</td>
<td>-0.159</td>
<td>0.010</td>
<td>-0.256</td>
</tr>
</tbody>
</table>

Table 2 shows that there is a positive moderate relationship between the GLS usage and students' language achievement for the top 15 most successful students (r₁ =0.407). There is no relationship between students' language achievement and GLS affective (r₁ = 0.010) strategies. The two GLS: Cognitive and metacognitive which are positive for all three groups, the (r₁ = 0.029 and 0.048 respectively). These results implied that with the increase in the use of grammar learning strategies (cognitive and metacognitive) students' language achievement also increases moderately.

Answer of the Second Question:

To answer the second question which is stated "To what extent do the EFL grade 4 students use grammar learning strategies?" to answer the question, frequencies and percentages were used. Table 3 shows the results.

Table 3: Frequencies of using Grammar Learning Strategies

<table>
<thead>
<tr>
<th>Strategy</th>
<th>F* 1</th>
<th>P* 1</th>
<th>F* 2</th>
<th>P* 2</th>
<th>F* 3</th>
<th>P* 3</th>
<th>F* 4</th>
<th>P* 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meta-Cognitive</td>
<td>9</td>
<td>20.93</td>
<td>15</td>
<td>34.88</td>
<td>11</td>
<td>25.58</td>
<td>8</td>
<td>18.60</td>
</tr>
<tr>
<td>Cognitive</td>
<td>21</td>
<td>48.83</td>
<td>11</td>
<td>25.58</td>
<td>9</td>
<td>20.93</td>
<td>2</td>
<td>4.66</td>
</tr>
<tr>
<td>Affective</td>
<td>12</td>
<td>27.90</td>
<td>19</td>
<td>44.18</td>
<td>10</td>
<td>23.25</td>
<td>2</td>
<td>4.66</td>
</tr>
</tbody>
</table>

Note: 1=Always, 2= some times, 3= Rarely, 4= never. F* = Frequency      P* = Percentage.

Table 3 shows that the most used grammar learning strategy is the cognitive strategy with 48.83 percentage, means that about 49% of the students always use cognitive strategy in learning grammar, followed the affective grammar learning strategy with 27.90 percentage, which means that about 30% of students in addition to the cognitive strategy they always learn grammar affectively. Also, about 43% of the students sometimes learn grammar by using meta-cognitive strategy, which means they learn grammar via different strategies which they do not recognize them as
academic learning strategies, they use them unconsciously without organization.

**Discussion of the Results**

The results of the first question revealed that there is a positive relation between the grammar learning strategies and students' achievement in English language. The researchers believe that strategies such as actively seeking out opportunities to use English, self-monitoring and self-correction, and using metacognitive strategies to plan and evaluate one's own learning can help students to improve their grammar skills and overall language proficiency. Additionally, explicit grammar instruction and providing students with opportunities to practice grammar in context can also be effective in promoting language acquisition.

The use of effective grammar learning strategies can be a significant factor in students' success in English language. Grammar is a fundamental aspect of language, and mastering it is essential for effective communication. Additionally, explicit grammar instruction and providing students with opportunities to practice grammar in context can also be effective in promoting language acquisition. By using these strategies, students can improve their understanding of grammar rules, develop their ability to use grammar accurately and fluently, and ultimately, become more proficient in the English language.

This result is online with the results of Baghaei and Baghaei (2022) and Pawlak (2009) who found a positive relationship between grammar learning strategies and students language performance.

The results also revealed that the grade 4 students use grammar learning strategies in learning grammar. The most used strategy was the Cognitive Strategies. The researchers believe that the students use Cognitive Strategies to help them better understand and remember new information. In the context of learning grammar, cognitive strategies can be used to help learners actively engage with the language, make connections between new and previously learned grammar structures, and develop a deeper understanding of the rules and patterns that govern the language. Examples of cognitive strategies that can be used to learn grammar include: breaking down complex grammar structures into simpler parts, practicing and
applying grammar rules in context, and using mnemonic devices to help remember key terms and concepts. Using cognitive strategies can help learners to be more active, efficient, and effective in their grammar learning, which can lead to better retention and comprehension of the material.

In addition, Affective strategies are techniques or methods that individuals use to manage their emotions and attitudes while learning. In the context of learning grammar, affective strategies can be used to help learners develop a positive attitude towards the language, overcome anxiety or frustration, and maintain motivation. Examples of affective strategies that can be used to learn grammar include: setting personal goals, self-reflection and self-evaluation, building self-confidence, and creating a positive learning environment. Using affective strategies can help learners to manage their emotions and attitudes in a way that facilitates learning. For example, setting personal goals can help learners to stay motivated and focused, while self-reflection and self-evaluation can help learners to identify areas of strength and weakness and develop a sense of control over their own learning. Building self-confidence can help learners to feel more comfortable with the language and to take risks in using it, while creating a positive learning environment can help to reduce anxiety and create a sense of safety and support. Affective strategies can be crucial in learning grammar, as grammar can be a source of anxiety and frustration for many learners. By addressing these affective factors, learners are more likely to engage with the language, maintain motivation, and make progress. Overall, affective strategies can be effective in fostering learner engagement and motivation, which are essential for effective learning.

The results are online with the results of Pawlak ans Csizér (2022) and Alsied, et al. (2018) who found that students use grammar learning strategies in moderate way in learning English language.

Conclusion
In conclusion, using grammar learning strategies can be a effective way to improve one's language proficiency. These strategies can include things like studying grammar rules, practicing with exercises and drills, and using visual aids to help understand and retain the material. Additionally, incorporating grammar instruction into real-life situations, such as
conversation practice, and making use of technology can also be beneficial. However, it's important to keep in mind that different strategies may work better for different individuals, so it may be helpful to experiment with a variety of techniques to find what works best for you. Overall, with consistent practice and the implementation of effective grammar learning strategies, one can improve their language proficiency and achieve their language learning goals.

References
Ali Jameel, Diaa Mahmood

Investigation the Relationship Between …


