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EFFECTS OF PEER TEACHING ON GRAMMAR LEARNING: DOES IT ENHANCE LEARNER AUTONOMY?

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Abstract
Peer teaching has been widely applied in university settings to assist language learners. However, concerns have been raised about the potential impact on learner autonomy as this teaching method involves a more able learner tutoring a lower-level one. Despite this, little attention has been given to examining this issue. For this reason, this qualitative study investigates whether peer teaching can help foster tertiary EFL students' autonomy in isolated grammar learning, which may serve as more intensive training to improve metalinguistic knowledge and grammar competence within restricted time frames. Based on reports from 29 survey participants and 11 interviewees, the study finds that peer teaching can promote learning autonomy, with students engaging in various activities to enhance their learning during tutoring and/or the peer teaching program. Participants reported improvements in learning motivation, subject understanding, problem-solving skills, and monitoring and evaluating skills. However, some students, especially those with lower abilities, appeared to be more reliant on peer tutors in constructing their knowledge, providing self-study materials, and frequency of grammar self-study. This study provides crucial qualitative findings that shed light on the effects of peer teaching on learner autonomy, particularly for EFL teacher education students' grammar learning.

Keywords: grammar, learner autonomy, peer teaching, tertiary EFL students

Introduction
Grammar competence is vital for tertiary students learning English as a foreign language (EFL) to communicate effectively. To assist with the challenge of learning various structures within a limited time frame, isolated grammar courses are typically provided within communicative language programs. Relying primarily on the “focus on forms” method, such courses may help students to recognize grammatical forms and meanings more quickly. Additionally, they can aid learners gain explicit grammar knowledge, which is essential for their future careers as English language professionals, particularly as EFL teachers. However, with factors such as L1-L2 linguistic differences and complex abstract concepts of grammar, many EFL students often find grammar learning difficult. To deal with this issue,

peer teaching has been implemented to help students in learning the language aspect (Mulatsih, 2018; Murtisari, Puspitasari, & Setiamunadi, 2020). The teaching method has long been recognized as a beneficial supplementary means to help learners with learning difficulties. Research has reported improvements on both the metacognitive (De Backer, Van Keer, & Valcke, 2012; Stigmar, 2016; Velez, Cano, Whittington, & Wolf, 2011) and academic aspects of the students involved in a peer teaching program (Arco-Tirado, Fernández-Martín, & Fernández-Balboa, 2011; Asgari & Carter, 2016; Bowman-Perrott, deMarín, Mahadevan, & Etchells, 2016). Offering a more individualized way of learning, peer teaching may also fill in significant knowledge gaps that regular teaching with the faculty teachers cannot deal with (Murtisari et al., 2020), which may be empowering for the assisted students.

Despite all the reported advantages of peer teaching, there has been concern that such learning support might lead to students' dependence on their tutor's assistance (Murtisari, et al., 2020; Mynard & Almarzouqi, 2006). During tutoring sessions, less able learners may be reluctant to build their own understanding of the lessons through active participation and rely largely on the tutors' explanations (Murtisari et al., 2020). Despite this issue, little attention has been paid specifically to the effects of such tutoring to the students' learning autonomy. Often utilized to reduce drop-out rates (Bohórquez, Rodríguez, & González, 2019; Muller, Shacham, & Herscovitz, 2017), the potentials of peer teaching to promote learner autonomy have yet to be a main concern. Achieving a greater academic outcome is still the main objective with little regards to the role of learner autonomy in its success. Having the Vygotskian and Piagetian theories highlighting the importance of cooperation as the underlying foundations of peer learning (Velez et al., 2011), peer teaching is likely to have impacts on learner autonomy.

Given the issue described above, this study aims to examine whether peer teaching enhances learner autonomy in terms of students' evaluation and reported behavior. Specifically, the research seeks to identify the activities that students engage in during peer teaching sessions that contribute to autonomous learning, and to evaluate its effects on learner autonomy. The findings of this research could inform the development of peer teaching programs that may promote learner autonomy.

Literature review

Grammar learning

Grammar is a fundamental aspect of English. It not only serves as a set of rules that one should apply accordingly, but also as a means of meaning making (Murtisari, Salvadora, & Hastuti, 2020; Richards & Reppen, 2014). However, it is often debated whether grammar should be taught or not, with contra arguments likely to be rooted in Krashen's comprehensible input theory (Larsen-Freeman, 2015). Despite this, there is a growing consensus in the field of second language acquisition that a combination of implicit and explicit methods can enhance the learning of grammar for L2 learners. This view suggests that these methods are complementary, as argued by scholars in the field such as Ellis (2016) and Spada and Lightbown (2008). Supporting Schmidt's Noticing Hypothesis (1990), Newby (2006) contends that explicit declarative knowledge can also contribute to a person's

language acquisition. Although this knowledge may not be immediately applicable in communication, it can improve a learner's ability to notice language patterns and can become part of their internal language learning process. Therefore, in EFL contexts, where learning time and L2 exposure are often limited, explicit instruction can be highly useful in promoting L2 learning. Research has shown that both teachers and students perceive explicit grammar instruction, primarily associated with the focus on forms approach, as "necessary and effective," despite being unpleasant (Jean & Simard, 2011, p. 467).

Despite the crucial role of grammar, the learning of grammar is commonly perceived as a daunting part of an EFL student's language acquisition journey. According to Grauss and Coppen (2015), the challenges in grammar learning may result from complex interactions between different aspects: grammar features (the complexity of certain forms), the learner (e.g., motivation), the pedagogical arrangement (e.g., teaching approaches/methods), and the teacher (e.g., teaching style). Furthermore, in an EFL context where students' L1 grammar differs significantly from English, the learning process can become even more challenging. Tertiary EFL programs also add pressure as students generally have limited time to master various grammatical forms and reach a post-intermediate level by graduation. Therefore, it is crucial to address such difficulties to assist students learn grammar more effectively.

While learning grammar can be demanding, there are various strategies that students can use to make it easier. Cohen (2010) identifies four types of such strategies: cognitive, metacognitive, social, and affective. Metacognitive strategies involve learners deliberately attempting to supervise and manage their learning (Cohen, 2010), and therefore are closely linked to learner autonomy. Using metacognitive strategies, students can perform autonomous learning of grammar (Stephen & Singh, 2010) by planning, monitoring, and evaluating it to control its progress.

Learner autonomy

Learner autonomy is often defined as the ability to take responsibility for one's learning. This includes determining the goals, deciding the content and method of learning, monitoring the learning progress, and evaluating the learning achievements (Holec, 1981). Research suggests that learner autonomy yields positive effects on learners' academic outcomes. For example, in Hu and Zhang's study (2017), students who participated in a learner autonomy program performed better on a post-test than on a pre-test.

Furthermore, autonomous learning is an ability that can be developed through natural or formal learning processes, rather than being an innate gift (Holec, 1981). It is critical to note that as a socio-cultural concept, learner autonomy does not take place in isolation but rather within an interdependent socio-cultural context (Lamb, 2017). This aligns with Bergen's concept of autonomous learning, which includes both independent work and cooperative acts with others (Dam et al., 1990, as cited in Lamb, 2017). Learning within an environment that encourages peer interaction and collaboration is therefore beneficial for the development of learners' autonomy.

As grammar learning is a substantial undertaking, Pawlak (2017) emphasizes the importance of promoting autonomous learning for grammar acquisition. He argues that learners need to learn grammar independently outside formal environments to achieve adequate mastery of grammar. Simply familiarizing oneself with rules and completing exercises is insufficient to be able to apply grammar in spontaneous communication. To achieve this, learners must develop explicit and implicit grammar knowledge, which can be facilitated with learner autonomy. This approach can be particularly helpful in EFL settings, where exposure to the target language is limited in and out of the classroom.

Although learner autonomy has the potential to promote grammar learning, there has been a lack of research on this specific issue. Typically, autonomy in grammar learning is examined within the context of students' writing skills, which normally draws on the focus on form approach (e.g., Nazari, 2014; Vickers & Ene, 2014). Here, learner autonomy is seen to promote students' L2 writing skills by enhancing their grammatical accuracy. This can be achieved by noticing and self-correcting grammatical errors in their writing in comparison to the writing model produced by native speakers of the language (Nazari, 2014). However, as English grammar involves complex abstract mechanisms, peer teaching focusing on specific forms may assist EFL students to better understand the semantic and pragmatic aspects of rules and how to apply them in context.

Peer teaching

Peer teaching or tutoring is frequently described as a practice in which more knowledgeable learners help those who are less able. It goes by different terms, including peer-assisted learning, reciprocal peer teaching, near-peer teaching, and supplemental instruction (Dawson, van der Meer, Skalicky, & Cowley, 2014). One of the most prominent theories in this area is Vygotsky's Sociocultural Theory of Learning, which emphasizes the importance of active participation from peers, adults, or teachers with better knowledge to assist the learning process (Velez, et al., 2011). By assisting less able learners with the support of their peers, peer teaching places its basic foundation on sociocultural theory.

Peer teaching has been shown to aid students learning. A study by Colver and Fry (2016) demonstrated that students from across academic subjects who received peer tutoring were reported to obtain significantly better grades in the subject compared to those who did not. The participants revealed improved understanding, completion of assignments, and increased confidence. The positive effects of peer teaching might be attributed to its nature which provides more opportunities for learners to ask and respond to questions, more focus on tasks, and greater chances for practice and feedback (Bowman-Perrott et.al, 2016) and draws on mutual respect and openness to others' ideas (O'Sullivan & Cleary, 2014). The tutors' ability to provide easy-to-understand explanations due to a similar knowledge base is also found to be a significant factor in the success of peer teaching (Cornwall, 1980, as cited in Stigmar, 2016).

Apart from its well-known impacts on students' academic outcomes, research has also shown that peer teaching improves learners' social skills, such as their confidence and how to relate to others (Topping, 2001, as cited in Miller, Topping, & Thurston, 2010). Riese, Samara, and Lillejord (2012) contend that peer teaching's social benefits may result from the peer interactions during tutoring.

According to the authors, such tutoring interactions are characterized by four different traits. First, they employ negotiation tasks, which allow tutors and tutees to decide what they want to do. Second, the talk is characterized by questioning and meaning-making. Third, they allow disagreements between tutors and tutees as peer tutoring provides a less formal learning environment. Last, there is a utilization of mediational means such as concrete tasks, tutoring session rules, and traditional tools such as whiteboards, books, and pencils. Such interactional traits may ultimately enhance students' learning.

While positive results have been found in studies that examine peer teaching in language learning (Arthurson, 2021), research on grammar-focused peer tutoring is still limited (e.g., Mulatsih, 2018; Murtisari et al., 2020). Previous studies have mostly investigated grammar as part of the tutoring of language skills such as writing (e.g., Kim, 2018; Snyder, Nielson, & Kurzer, 2016; Winder, Kathpalia, & Koo, 2016). In Mulatsih's study (2018), peer tutoring was shown to enhance grammar learning by allowing students to study more intensively and gain a better understanding of grammatical forms. However, the potential issue of students becoming overly reliant on tutors (Murtisari et al., 2020) warrants further investigation.

Peer teaching and learner autonomy

While peer teaching has been shown to have positive effects, there are concerns that it may create a dependence among tutees. Mynard and Almarzouqi (2006) found that 60% of tutors reported tutees relying on them as a common issue. Tutees would ask for extra sessions before tests and even requested tutors "to do their homework" (p.18). However, Murtisari et al. (2020) argue that Mynard and Almarzouqi did not clearly explain what they meant by dependence. While requesting additional sessions could be problematic, it may not necessarily indicate dependence. Nonetheless, Murtisari et al. (2020) found that some tutees relied heavily on their tutors to explain concepts instead of trying to develop their own understanding. Such reliance may have resulted from rote learning strategies that promote passive learning (Menezes & Premnath, 2016). As a result, students who are used to receiving knowledge may struggle to be active participants in the learning process. Another possible reason is tutees may find the subject matter too challenging so they cannot participate in knowledge construction.

However, other research, albeit limited, has also shown that peer teaching is beneficial to promote learner autonomy. Stigmar (2016) found that such tutoring may improve one's self-regulation, which "includes elements of motivation, self-efficacy, time management, goal setting, metacognition, self-reflection, and organizational skills" (p.132). Supporting this, Bohórquez et al.'s (2019) study demonstrated that students involved in a peer teaching program improved their self-concept of autonomy by moving to a more practical, goal-oriented, and collaborative view of it. Collaborative activities such as "active questioning, explaining, monitoring, and regulating in the learning process" (Stigmar, 2016, p.131) can further enhance students' autonomous learning.

With this in mind, the present study investigates the effects of peer tutoring on EFL students' learner autonomy in grammar learning based on students' reports. By exploring this issue, we seek to gain more insights into the potential benefits

and challenges of peer teaching in EFL contexts, which could inform pedagogical practices and advance our knowledge of language learning.

Research Method

Context of the study

This qualitative research aims to explore whether or not peer teaching may enhance learner autonomy in grammar learning based on students' evaluation and reported behavior. In order to answer this question, it has the following two subsidiary queries:

1. What specific activities related to learner autonomy do students engage in during the peer teaching sessions/program?
2. How do students evaluate the effects of peer teaching on their autonomy in grammar learning?

This study was conducted in an English Education Program at a private university in Central Java, Indonesia. The program implemented peer teaching to assist undergraduate students taking Basic and Intermediate grammar courses to improve their understanding of class lessons and provide more opportunities for practice. The tutors were mostly third- and second-year students and selected based on their communication skills and grammar knowledge. A short preparatory briefing was conducted for the tutors, but no specific guidelines or strategies were given before their teaching, and, therefore, the tutoring methods may have varied among the tutors. Flexible learning sessions were provided in small groups of no more than four students, with one-to-one tutoring available upon request. As encouraged, students generally grouped with those of similar levels and could have multiple sessions within a week.

Participants

This research involved 29 Indonesian EFL learners consisting of 27 first-year students and 2 repeating fourth-year students who took the Basic or Intermediate Grammar course during the period from August 2019 to August 2020 and had joined the peer teaching program within an offline, face-to-face setting. Eleven of the participants who agreed to give more information were selected to participate in follow-up interview sessions. To represent different groups of students with relative abilities, the following GPA ranges were used to select the students: low: $x \leq 2.50$, lower mid: $2.50 < x << 2.75$, upper mid: $2.75 \leq x < .3.25$, and lower high: $3.25 \leq x < 3.50$. The 11 participants were given initials to protect their privacy and confidentiality, as shown in Table 1.

Table 1. Interviews of the participants' backgrounds

Student	Gender	Age	Academic Year	GPA
F	F	18	2019	Low
V	F	21	2017	Low
G	M	20	2019	Low
D	F	18	2019	Lower Mid
N	F	19	2019	Lower Mid
H	F	19	2019	Upper Mid

SM	F	19	2019	Upper Mid
M	F	19	2019	Upper Mid
S	F	21	2019	Lower High
P	F	19	2019	Lower High
A	M	21	2017	Lower High

Data collection

In the present study, data was collected using a questionnaire and semi-structured interview protocols. Both instruments were piloted and revised before administration. The questionnaire consisted of 19 close-ended and two open-ended questions, developed based on Holec's definition of learner autonomy (1981), and was administered online through Google Forms. It also collected demographic data that included students' GPAs, gender, and batch year. In contrast, the interviews were conducted online through Google Meet to collect more in-depth data, and several follow-ups were performed to clarify the results.

Data analysis

The data obtained from the close-ended questions was converted into percentages, whereas those collected from the open-ended questions and interview transcripts were examined using content analysis. To conduct the content analysis, the first researcher read the material repeatedly and worked with the second researcher to categorize the data. The categories were then coded and verified for accuracy by a colleague through independent cross-checking. Any discrepancies were resolved through mutual review. The results of the interview were subsequently used to complement the questionnaire findings.

Findings and Discussion

The present study's findings strongly suggest that peer teaching may enhance learner autonomy in grammar learning. For ease of reading, this section is divided into parts, each addressing one subsidiary research question.

Activities related to learner autonomy students engaged in during the peer teaching sessions/program

Overall, the survey demonstrates that the students reportedly performed various activities contributing to autonomous learning during the peer teaching program (Table 2).

Table 2. Learner's autonomy reflection during the peer teaching program

Questionnaire Item	Percentage					
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Strongly Agree and Agree
1. While joining peer tutoring, I decided on the topic discussed in the tutoring sessions more appropriately.	10.3	58.6	31.0	0.0	0.0	69.0

2. While joining peer tutoring, I chose the activities in the tutoring sessions.	10.3	51.7	37.9	0.0	0.0	62.1
3. While joining peer tutoring, I decided on the learning method for the tutoring sessions.	6.9	58.6	31.0	3.4	0.0	65.5
4. While joining peer tutoring, I tried to figure out the grammar rules by myself.	0.0	58.6	34.5	6.9	0.0	58.6
5. I tried to re-explain what I had learned from my discussion with the tutor in the tutoring sessions.	0.0	62.1	31.0	6.9	0.0	62.1
6. During the peer tutoring program, I tried to review feedback from the tutors independently.	24.1	58.6	17.2	0.0	0.0	82.8
7. During the peer tutoring program, I analyzed the grammatical errors that I made in the tutoring sessions by self-reviewing the lessons.	17.2	62.1	17.2	3.4	0.0	79.3

As shown in Table 2, the two activities that received the highest positive responses from students were analyzing tutors' feedback and reviewing errors or mistakes made during peer tutoring. 82.8% and 79.3% of students agreed or strongly agreed, respectively. This indicates that peer teaching is beneficial for enhancing learners' ability to reflect on their mistakes and increasing their motivation to improve their weaker areas through feedback. In addition, deciding on tutoring session topics received the third-highest positive response (69%), suggesting that peer teaching also helps students plan their grammar study effectively.

However, the activities that reflect knowledge construction (Statements 4 & 5) obtained the lowest means of responses (respectively 2.86 and 2.83 out of 4, not shown in the table). Only 58.9% of students agreed that they figured out the grammar rules on their own during peer teaching. Interestingly, 6.9%, who both had low GPAs (2.00 and 2.46), categorically denied having figured out the grammar rules by themselves. These low-achieving students also reported not reexplaining the grammar concepts that they had learned during the peer teaching sessions, which seems to show some reliance on the tutors for knowledge construction. These findings align with Murtisari et al.'s (2020) study, which found less proficient learners tended to depend on their tutors' explanations rather than developing their concepts of grammar items by reading the learning materials themselves. These findings suggest that peer teaching may not encourage less able learners to take an active role in grammar knowledge building. It is possible that the students' learning

skills or attitudes may have hindered their active engagement, but more research is necessary to confirm this.

Students' evaluation on how peer teaching affects autonomy in grammar learning

The data from the survey and interviews demonstrate that students generally had positive views regarding the effects of peer teaching on their learning autonomy. Table 3 shows students' responses to the survey in terms of their planning, monitoring, and evaluating skills through such tutoring. Most students reportedly gained improvements in the areas with nearly all of the statements receiving substantial positive responses. Almost 90% or more of the participants agreed or strongly agreed with each statement, and none of them chose 'disagree' or 'strongly disagree'. All the students even believed that the tutoring assisted them to figure out areas of grammar that they found challenging.

Table 3. Planning, monitoring, and evaluating aspects of learner autonomy affected by peer teaching in grammar learning

Questionnaire Item	Percentage					
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Strongly Agree and Agree
2. By joining peer tutoring sessions, I can decide the materials that I need to learn the most.	20.7	69.0	10.3	0.0	0.0	89.7
3. By joining peer tutoring sessions, I can keep track of the progress of my grammar learning.	13.8	79.3	6.9	0.0	0.0	93.1
6. By joining peer tutoring sessions, I can figure out the areas of grammar that I find difficult.	37.9	62.1	0.0	0.0	0.0	100
7. By joining peer tutoring sessions, I can figure out the areas of grammar that I am good at.	6.9	82.8	10.3	0.0	0.0	89.7
8. By joining peer tutoring sessions, I can figure out the best way for me to learn grammar.	17.2	72.4	10.3	0.0	0.0	89.7

Supporting the above findings, one interviewee (Student H) expressed the belief that peer teaching played a key role in enabling her to monitor her own learning progress, which is an essential aspect of autonomous learning. According to Student H, participating in tutoring sessions helped her to identify the areas where she needed the most improvement. This suggests that peer teaching can aid learners in evaluating their own understanding of the subject matter and prioritizing their

learning accordingly. Additionally, Student H revealed that she often employed grammar exercises as a means of assessing her learning, and would sometimes request further exercises from tutors to test her comprehension.

> Sometimes I asked my tutors for exercises, or after the tutoring session I asked for exercises and I filled them in [on my own]. [I also checked] whether the answers I had made to the items in the [class] materials were correct.

Besides comprehension, peer teaching was also reported to help six interviewees evaluate their learning strategies. Students D, M, S, and V pointed out that joining peer teaching guided them in finding the most suitable learning strategies. Student V, for example, stated that:

> I was able to know the most suitable and effective learning strategies for me. Previously, when I studied, I only opened my textbook and read it. But after joining peer teaching, I took notes on important things and searched for exercises. And if I didn't understand, I asked the tutor and took notes.

The students shared various reasons contributing to their ability to evaluate learning strategies in the interview sessions. Student M, for example, mentioned that learning in a comfortable environment with her tutor had helped her develop her learning strategies as she could comfortably ask questions related to how to study certain items. Additionally, Students G, H, and SM mentioned that their tutors often gave suggestions on how they should learn certain grammar topics. In other words, the tutors had also taken up the role of mentoring. Furthermore, Student F mentioned that the tutors' abilities to recognize the characteristics of their tutees helped them adjust to the tutees' learning strategies. This finding aligns with Zhang and Bayley's study (2019), which found that the tutors were able to identify the tutees' current proficiency and tailor their teaching style to match.

In addition to improving planning, monitoring, and evaluating skills, peer teaching was also shown to enhance the students' conceptual skills. As Table 4 demonstrates, the majority of the survey participants (75.9%) believed that peer teaching improved their abilities to develop their concepts of grammatical items.

Table 4. Peer teaching affects the ability to develop grammatical concepts

Questionnaire Item	Percentage					
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Strongly Agree and Agree
4. By joining the peer tutoring sessions, I am able to define (develop the concepts of) grammatical items in my own way.	10.3	65.5	24.1	0.0	0.0	75.9

In the questionnaire, four students noted that the tutors' explanations were more detailed compared to those of their lecturers. In an interview session, Student D mentioned that the tutors' in-depth explanations helped her remember the grammar concepts more easily. Another interviewee mentioned that a good rapport with the peer teachers contributed to their understanding. A smaller age gap between the tutors and tutees allowed for a friendly learning atmosphere, which confirms Alrajhi and Aldhafri's (2015) finding. They found that a smaller age gap resulted in a closer relationship between tutors and tutees, leading to a higher level of positive self-concept and greater academic attainment.

Furthermore, two survey participants in this present study mentioned that having a smaller number of students in each tutoring session helped them to have better comprehension of the material. The faculty had set a maximum of four students per session, which allowed for more time for grammar explanations and discussions. This finding is consistent with Mulatsih's (2018) research, in which one student stated that learning in a group of fewer than six people created a better environment for discussion.

While most students had positive views about the effects of peer teaching on their learning autonomy, a significant number of survey participants remained uncertain about how much tutoring affected their ability to define grammatical concepts in their own way (24.1% neutral). This finding suggests that further investigation is needed in future research to identify potential factors contributing to this uncertainty. Previous research shows that students may struggle to understand grammatical concepts due to their complex and abstract nature. Examining a similar tutoring program, Murtisari et al. (2020) found that some students had significant knowledge gaps, making it difficult for tutors to explain things to them. Additionally, some students did not engage actively in knowledge construction (ibid).

However, the present research strongly revealed that peer tutoring helped promote students' problem-solving skills, as shown in Table 5. According to Illés (2012), problem-solving skills and decision-making are essential aspects of autonomous learning.

Table 5. Students' perceptions on peer teaching improvement on problem-solving skills

Questionnaire Item	Percentage					
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Strongly Agree and Agree
5. Peer tutoring improves my problem-solving skills.	17.2	82.8	0.0	0.0	0.0	100

As shown in Table 5, all students, regardless of their GPAs, agreed (82.8%) or strongly agreed (17.2%) that peer tutoring improved their problem-solving skills. When asked why they believed this to be true through an open-ended question, they identified three main factors. The first factor was an improved understanding of grammar (62%), which allowed them to tackle more complex grammatical problems. Some students elaborated on this point by explaining that tutors often

provided alternative explanations of grammar concepts that were easier to understand and remember. In addition, one interviewee (Student D) also noted that improved grammar comprehension boosted her confidence when approaching grammar tasks and allowed her to focus better while studying independently at home, demonstrating enhanced problem-solving ability.

> With the explanation I'd received from my lecturer, sometimes [I] still asked my friends [about the lesson]. But after joining the peer teaching sessions, I could understand things better [even] on my own, and I did not ask [them] anymore.

Secondly, 14 survey participants mentioned that peer collaboration in peer teaching created a comfortable learning environment that enabled them to have extended opportunities to ask questions and have discussions. Being in the same group with peers of a similar knowledge base was influential in creating "a more acceptable comfort zone" (Zhang & Bayley, 2019). The students reported being able to discuss grammatical problems with their peers within the same group. One survey participant even mentioned that they could ask more freely because the tutor was their friend. From this safer learning environment, students could receive suggestions on their grammatical problems which would enhance their problem-solving skills.

Furthermore, three survey participants mentioned that their tutors provided them with explicit steps to solve grammatical problems, which made the task easier for them. However, while such strategies can have positive effects, they can also lead to dependency on the tutor. Webb and Mastergeorge (2003) noted that relying on explicit problem-solving steps rather than seeking a deeper conceptual understanding could indicate low motivation or inability on the part of the learner. Therefore, tutors should identify students' characteristics before adopting a directive approach (Srivastava & Rashid, 2018).

In addition, the study also looked at the frequency of students' grammar study, which can be an indicator of their autonomy. As shown in Table 6, most students had positive responses to statements about the effects of studying grammar frequently.

Table 6. Students' views on peer teaching effects to independent study at home

Questionnaire Item	Percentage					
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Strongly Agree and Agree
1. By joining peer tutoring sessions, I can schedule my grammar study more effectively.	17.2	69.0	13.8	0.0	0.0	86.2

2. By joining peer tutoring sessions, I can monitor the frequency of my grammar study.	6.9	69.0	24.1	0.0	0.0	75.9
3. Peer tutoring increases the frequency of my independent study at home.	13.8	65.5	10.3	10.3	0.0	75.8

The results of the study indicated that the most positive feedback was received in relation to the planning and monitoring of students' grammar learning progress (Statements 1 & 2). The majority of students (62.1%) reported meeting their tutors at least twice a week, with an additional 13.8% meeting more than twice a week. These findings suggest that peer teaching has helped students to effectively structure their study habits, as evidenced by the data presented in Table 7. Moreover, the implementation of peer tutoring has resulted in students allocating more time to study automatically. Notably, the survey revealed that four students were motivated to engage in more peer tutoring due to the supportive interactions and conducive learning environment it provided.

Table 7. Students' frequency of peer teaching sessions

Questionnaire Item	Percentage			
	Once a week	Twice a week	More than twice a week	Other
How often do you study with your tutor?	20.7	62.1	13.8	3.4

In terms of the frequency of self-study (Table 7), most students also believed that peer teaching had favorably affected their independent grammar learning (75.8 %). Their responses to an accompanying open-ended question revealed that it had improved their frequencies of independent study for three main reasons: learning motivation (14 students), increased subject understanding (7 students), and tutors' support (4 students). Further examination of these reasons, as discussed below, reveals that peer tutoring can act as a scaffolding tool that helps students enhance their learning autonomy:

Learning motivation

According to Spratt, Humphreys, and Chan (2002), learning motivation is a prerequisite for the development of learner autonomy. The survey conducted in this study found that the most frequently cited reason (48%) for improving students' study frequency was students' enhanced learning motivation. Moreover, during a follow-up interview, Student S reported that peer teaching had helped her overcome her previously low motivation to study independently. She acknowledged that prior to joining the peer teaching program, she had been lazy and seldom studied on her own. However, after participating in peer teaching, she became more aware of her responsibility to study grammar independently, even after discussing the lesson with her tutor.

> As for the effect, I myself felt like I had more of a desire to study [grammar] further. […] before joining peer teaching, I thought that I did not need to review [the lesson] after studying it in class. After joining the tutoring sessions, I thought that I still needed to study more to get a better understanding of the lesson. So, it was very helpful; it motivated me to get a better grade.

This finding reinforces the outcomes of Bohórquez et al.'s (2019) study, in which students reported that they often pursued further learning on topics covered with their tutors independently. It implies that peer teaching can foster learners' autonomy in mastering grammar.

Furthermore, the present study's survey and interview participants indicated that the motivation they received often came from the motivational support and assistance provided by their tutors. Verbal motivation and the sharing of experiences in dealing with similar grammar difficulties were cited as influential factors in helping students learn more independently.

The tutors also occasionally provided small rewards, such as ice cream or chocolate bars, for high achievement on grammar tests to increase students' motivation. As Student F stated:

> For example, before tests, the tutor often said that if we scored high on the tests and passed the minimum score requirement, he would give us a reward. It made his tutees become more motivated to study at home and review [the test materials].

Tutors' support

During the interviews, two participants (Participant V and D) noted that the peer teaching was less formal and more flexible than traditional classroom learning. As a result, the tutors were able to establish open communication channels with their tutees outside of the sessions, providing learners with support whenever they encountered difficulties during self-study. Additionally, the informal setting allowed tutors to incorporate humor into their teaching, which helped create a positive attitude towards learning grammar. This was exemplified by Student H:

> It depends on the tutor. My previous tutor was kind and friendly, so the teaching sessions were not too tense. Sometimes we joked and laughed, but it also became serious when he was giving us motivation. So, we became happier when learning [grammar].

During the interviews, Participants G, F, D, M, N, P, and SM reported that tutors not only provided immediate assistance for students during self-study but also gave additional learning materials for their tutees to study at home. However, there was a negative trend among students who often relied on tutors to search for additional learning materials. Out of the 11 students interviewed, 7 (Students F, H, SM, D, S, N, M) admitted to not looking for supplementary materials themselves. Instead, they either asked their tutor or only used exercises provided in the textbook. Four of these students (Students F, H, SM, D) also admitted that they were capable

of finding study materials but tended to be unmotivated to do so. Some students stated that their tutors had already prepared additional materials, so they did not see the need to search for them.

Although this reliance on tutors may hinder students' planning skills, it could also provide scaffolding for students with lower proficiency. The additional study materials provided by tutors could act as scaffolding for students who have difficulties finding appropriate materials or knowing where to look. Students who did not explore additional materials on their own also mentioned that their tutors gave them extra exercises to do outside of the peer teaching sessions, which increased their study time at home.

Overall, the provision of additional study materials by tutors could help weaker students study more effectively, even if it means they may rely on tutors for support. While this trend may not be ideal, it is important to acknowledge that some students may struggle to find suitable study materials on their own. It was noted that three of the seven interviewees (Students S, N, and M) expressed concerns regarding their ability to find additional grammar study materials. For instance, Student S stated that she was unfamiliar with grammar learning websites that provide grammar exercises, and therefore, she didn't know where to look for additional materials. Similarly, Student N had difficulties finding appropriate materials and exercises that matched the textbook's explanations provided by the faculty. Lastly, Participant M mentioned that she found it hard to locate suitable study material and would rather stick to the faculty's textbook. Given these challenges, it was suggested that tutors could assist weaker students in studying more effectively by providing them with additional study materials.

Increased subject understanding

Besides motivation, 24% of the survey participants and seven interviewees (Students G, M, V, S, P, H, D) believed that their improved subject understanding from peer teaching made them more motivated to do more self-study. This echoes the finding that satisfying learners' need for competence helps learners to shift toward more independent learning (Hu & Zhang, 2017). One survey participant pointed out:

> Before joining peer teaching, I honestly did not really study [grammar] regularly. When I was taking Basic Grammar course, I actually did not find too many difficulties. I only had several problems in some chapters in the course. [However], after joining peer teaching, [...] my desire to learn increased and I started to work on my difficulties.

While increased understanding of grammar was found to motivate some students to study more frequently, one participant mentioned in an open-ended questionnaire response that understanding the lesson during the peer teaching session actually led to a decrease in their individual study time. This was because they allocated their self-study time to peer teaching, and also mentioned feeling lazy. Similarly, another student mentioned in an interview that they would rather not have additional independent study sessions if they already understood the lessons from peer teaching.

Furthermore, several students with lower GPAs did not believe that peer teaching affected their independent study frequency, as they lacked motivation (2 students) or believed they already had enough understanding of the subject matter (2 students). Additionally, one interviewed participant (Student A) reported no change in their motivation to conduct self-study sessions. He mentioned that finding answers to grammatical problems on his own was sometimes difficult, so he preferred study sessions with a more knowledgeable peer.

Conclusion

In conclusion, this study suggests that peer teaching can enhance various aspects of learning autonomy, despite concerns that it may cause tutees to become dependent on their tutors. In addition to sharing their engagement in activities that may enhance their autonomy during tutoring sessions, participants also reported improved abilities in planning, monitoring, and evaluating their grammar learning. These skills are essential for autonomous learning. Peer teaching was found to have the greatest impact on students' skills evaluation, influenced largely by the practice of analysing tutors' feedback. The implementation of peer tutoring also helped students enhance their conceptual skills in grammar learning, problem-solving skills, and study frequency. However, drawbacks were observed, including low engagement in grammar concept construction, dependence on tutors' provision of self-study materials, and unimproved frequency of grammar self-study, especially among students with lower GPAs. Despite this, some level of reliance on tutors may be necessary for less able learners, and appropriate supervision can help guide them towards becoming more autonomous in their learning. Overall, this study highlights the potential benefits of peer teaching in small groups of tutees with similar abilities over a flexible term, which can promote grammar learning while fostering learner autonomy. To further enhance the effectiveness of such programs, tutors would benefit from additional training to empower their tutees and facilitate knowledge construction. Future research could expand on these findings by comparing student autonomy before and after a peer teaching program and gathering additional data, such as tutors' and tutees' journals and observations of tutoring, to gain a more comprehensive understanding of the effects of peer teaching on autonomy. This knowledge can inform the design of more effective peer teaching programs that foster learner autonomy and facilitate language learning.

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