



Examining EFL students' ISEB and OSEL amidst internet-based online learning environment during COVID-19 pandemic

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Abstract

Students are becoming adapted to online self-regulated learning (hereafter, OSEL), which is closely related to students' internet-specific epistemic beliefs (hereafter, ISEB), as the internet became an important platform for the teaching process during the Coronavirus disease (COVID-19) pandemic. This study is aimed at researching the relationship between OSEL and ISEB among EFL students and after establishing the prediction. Data were collected through the questionnaires using the ISEB questionnaire (Kammerer et al., 2015) and the OSEL questionnaire (Zheng et al., 2016). Approximately 140 undergraduate students enrolled in the seventh semester of the English language education study program at a reputable university in Malang, Indonesia involved in this study. Interviews were then conducted to confirm the findings obtained from the questionnaires. The findings showed a substantial correlation between EFL students' ISEB and OSEL, with a correlation coefficient .555 and p -value .000. It also predicted that the higher EFL students' ISEB, the higher their OSEL too. The interview results elucidated support for this prediction. Students' ISEB and OSEL can help them solve their academic problems. Therefore, some pedagogical implications are described to promote better English learning, which uses the internet as one of the media of instruction.

Keywords: EFL students; internet-specific epistemic beliefs (ISEB); online learning; online self-regulated learning (OSEL)

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Introduction

The widespread usage of technological tools has altered the existing educational teaching system. Many educational institutions, particularly Indonesian colleges, are adapting or even revising their curriculum to accommodate the millennial generation by incorporating digital learning tools (Simbolon, 2021). Technology can support teachers in providing students with innovative learning experiences and aid students' motivation to learn in a different setting. Technology can also support teachers in providing students with innovative learning experiences. Moreover, technology also impacts students' motivation to learn in a different setting (Prastikawati et al., 2020). The outbreak of Coronavirus disease (COVID-19) might have a significant consequence on all facets of society, including the field of education. According to the Indonesian government, learning should be performed at home, which issued a mandate in March 2020. The solution to address this issue is to quickly change the learning instructions that have been designed for traditional or face-to-face learning to online learning modes (Kemendikbud.go.id). Internet-based learning is commonly used and accepted as one of the instruments that can be used in education on a daily basis (Lee et al., 2014). The internet can be readily accessed and offers information from multiple sources. On internet, the quality of information and content varies considerably. Hence, critical internet users, such as English as a foreign language (EFL) student, need to clarify statements or information they have obtained on the internet.

Moreover, EFL students are learning English in a place where English is not spoken, for instance, in Indonesia, with various challenges. Similarly, EFL teachers find that teaching English is also demanding. However, the massive increase in information and technology, especially via internet, provides opportunities for better implementation of information services for educational institutions. Online learning can be done via several applications, such as Zoom

meetings, Google Classroom, Edmodo, or other virtual management systems or applications (Zaim, 2017). EFL students need to promote their self-regulated learning when learning English online, as they need to be responsible for controlling and evolving themselves while studying in an online setting (Atmojo et al., 2020). Nevertheless, when students study English at home online, facilitated by the internet, it is evident that there are numerous interfering elements with the seriousness of learners when learning (Wijaya et al., 2020). Hence, the ability to employ self-regulated learning amid the COVID-19 crisis is required, although students learn online.

Therefore, in internet-based online learning, learners' success depends on how students employ their self-regulated learning. Self-regulation is an involved and productive mechanism in which learners concentrate on learning goals, monitor learning activities, and determine learning outcomes (Cheng et al., 2013). It is not a mental skill or academic achievement ability but a possible goal-attaining student learning technique. Learning can be seen as a constructive experience by students with distinct characters who monitor themselves (Mustofa et al., 2019). The goal of mastery or a desire to develop skills is for self-regulated learners since they are positive in their learning activities and strongly appreciate the process of learning (Cho & Heron, 2015). Besides, based on the study conducted by Kartika (2015), self-regulated learning can enhance students' excitement for achieving better academic outcomes. In the teaching and learning activities, high-achiever students tend to have higher self-regulation. Therefore, EFL students who apply online self-regulated learning (OSEL) would be more competitive and successful in their English academics than students who don't (Rochmah & Abdulmajid, 2018).

Concerning the use of the internet as the main medium of instruction, besides students' OSEL, their epistemic beliefs are obviously connected. During learning, students' epistemic beliefs play an important role in accompanying students' academic success indirectly (Puspitasari et al., 2019). In theory, individuals' epistemic views impact their own knowledge, beliefs, and information, facilitating their learning (Rahmiati et al., 2019). Students' epistemic beliefs can picture students' way of collecting information from the internet to support their study in English. Some students see internet-based information as a good and credible source, according to the study conducted by Lee (2018), while others claim that it is not possible to trust knowledge based on the internet completely. Students' personal conception of the essence of information and what is understood on the internet (Kammerer et al., 2015), i.e., internet epistemic beliefs, may affect students' achievement in learning English too. EFL students must choose which information to access, assess its

authenticity, and establish who has the authorization to pursue information about an unfamiliar subject while using the internet as they think the internet is often used as a useful source of information. Besides, they are also active in several internet-based events (Lee, 2018).

Thus, internet-specific epistemic beliefs (ISEB) might be defined as a student's understanding of the concept of knowledge and what they know from the internet as instructional media (Kammerer et al., 2015), and it is now required and has become an important part of teaching and learning activities. Besides, ISEB is also related to students' own understanding of the essence of information and what the internet knows about it (Lee et al., 2014). ISEB is very relevant for the EFL learning process, for the students' achievement may be influenced by their epistemic views about the internet. It has been shown that students who have sophisticated epistemic values can achieve high levels of achievement (Alpaslan et al., 2017); thus, the higher EFL students' epistemic values on internet-specific epistemic convictions, the better their English learning achievement. ISEB can be a sophisticated intellectual resource that can also aid EFL students in promoting their self-regulated learning phase.

Amid the COVID-19 pandemic, EFL students spend more time solving their own academic problems. They must be able to exert control, adapt, and control themselves while learning online via the internet through OSEL that the students genuinely require to obtain successful outcomes in learning practices (Hudaifah, 2020). In addition, Rahmiati and Emaliana (2019) mention that EFL Epistemic beliefs can predict the engagement of EFL online learning. Alpaslan et al. (2017) also noted that the higher the learners' self-regulated learning, the greater their ability to achieve learning performance. Students' self-regulated involvement may be influenced by students' epistemic beliefs (Limodehi & Tahriri, 2014). More specifically, ISEB may also be regarded as a valuable aspect of self-directed learning (Kahasey, 2019; Trevors et al., 2016), as Alpaslan et al. (2017) also mentioned that it is shown that students with sophisticated epistemic beliefs can pursue high performance. It can also show that students with strong epistemic ideas frequently perform well.

Several studies in the aforementioned literature review supported the relationship between students' epistemic views and self-regulated learning. Consequently, EFL students are predicted to obtain better English outcomes if their ISEB and OSEL are higher when teaching and learning practices are performed online and based on internet utilization. Under the circumstances of the COVID-19 pandemic, internet-based learning is being carried out intensively. As the internet is the primary means of linking EFL educators and students during teaching and learning activities, the research investigating the

relationship between ISEB and OSEL is worth studying. In the current research, we sought to extend the results of previous studies by determining whether ISEB and OSEL are associated with changes in EFL instructional medium in online learning contexts that employ the internet; accordingly, the research questions comprise as follows:

- (1) Is there a relationship between EFL students' ISEB and their ability to self-regulate their online learning?
- (2) Do higher students' ISEB promote their OSEL?

Given that many instructional media are aimed at improving students' achievement, notably in EFL learning, this work has important pedagogical implications for examining the theoretical significance of ISEB and OSEL towards EFL students within this online type of learning context.

Method

Research design

The researcher employed the correlation method to gather data for this research. The correlation approach examines the link between two variables related to two distinct occurrences. Correlational studies are used to see if two variables have a correlation without claiming to be able to infer a causal relationship (Ladd et al., 2015). Thus, in conducting the study, the researchers used correlation to investigate students' level of ISEB in relation to their OSEL to establish a prediction during online learning. Thus, to figure out if there's a connection between the two variables, the correlation approach (Ladd et al., 2015) should be used first, as it is the most suitable approach for this research. After knowing the tendency, the results of the study were confirmed through interviews with one male and one female student, which led to no gender biases while giving responses. Students' ISEB and OSEL were variables examined in this research.

The one-way relationship analysis technique was used to examine these. This shows that this research only focuses on how the level of internet-specific epistemic beliefs affects students' ability to manage them in online learning, not the other way around. In addition, the correlation coefficient was used to measure the two study variables. The coefficient of correlation can be used to quantify or estimate the amount of variation that one variable has on another (Schober et al., 2018). After that, to reinforce quantitative statistical findings, the

researchers performed interviews with one male student and one female student with the highest ISEB and OSEL score.

The data were collected in this study by distributing ISEB questionnaire (Kammerer et al., 2015) and OSEL questionnaires (Zheng et al., 2016) online. The researchers distributed the link to respondents through personal chat on WhatsApp and line application. After gaining all of the relevant data, it was analyzed to determine the outcome. Regarding the data collection, the researchers analyzed, examined, and concluded the study findings using the steps as follows (1) examining the results of the two questionnaires. Those are ISEB and OSEL questionnaires; (2) Using Statistical Package for the Social Sciences (SPSS) and the scores; a correlation study was performed. The Pearson Product Moment Correlation formula was applied because the author was concerned about the relationship between two variables; (3) after interpreting the results from SPSS and the interview, the researchers came to a conclusion that was relevant to the study's issue.

Participants

Data were acquired from undergraduate students enrolled in the seventh semester of the English language education study program at a reputable university in Malang, Indonesia. The university was among the first pioneers that switched learning to an online platform during the early pandemic outbreak in Malang, which conducted online learning. The courses the students took represented a teaching practice internship program, a high level of integrated skills in learning English, and research courses. The researchers included students who have already experienced both offline and online learning and who will become novice English teachers. Moreover, the researchers asked the participants to fill out a questionnaire and conduct their expected interviews. The demographic profile of students who participated in filling out the questionnaire in this study is shown in Table 1. Then, the students chosen to be interviewed by the researcher were one male student and one female student who chose the highest score on the questionnaire. The researchers want to know more about their ISEB and OSEL.

Table 1. Demographic profile of the research participants

Participants		Filled out the questionnaire	Interviewed
Gender	Male	33	1
	Female	77	1

Data collection

The university institutional board approved this research project, and it was administered based on principles and guidelines for human subjects' research. To participate in the research, students were invited through personal chat on WhatsApp and Line application within the first two weeks of the beginning of the 2019/ 2020 semester. The students who agreed to join the study completed a consent form of agreement and the first questionnaire about ISEB at that time. No incentives were given to the participants, as it was voluntary participation. Approximately 140 students were invited to participate, among them, only 119 students participated (84.3% response rate) to fill in the first questionnaire. Respondents who filled out the first survey were invited to complete the second questionnaire on OSEL throughout the semester's last four weeks. Of these, 110 students participated in filling in the second questionnaire, for an estimated response rate of 78.5%. The second questionnaire was distributed after the respondents experienced full online learning during the semester. Respondents were predominantly female (70%).

Data analysis

To assess EFL students' ISEB, the first questionnaire was prepared based on Kammerer et al. (2015) of internet-specific epistemic beliefs. This questionnaire measured (1) students' dependence on the internet as a source of knowledge was the focus of goal-setting; (2) beliefs about various sources of justification, which explained students' justification convictions by using multiple sources on the internet to get better and trustworthy information; and (3) self-justification beliefs, which in relation to the ways students' obtained sources of information for studying from the internet. The researchers assessed those questionnaires whose answers were checked for validity and reliability after they were adopted based on the study's objectives. Then, the result of this try-out demonstrated that there was only 1 item that was not significant with a significant value of 0.15, so this item was discharged because the significant value was exceeded 0.05. Besides, the reliability of this ISEB questionnaire was determined using Cronbach's alpha, with the alpha value was 0.836, meaning that the reliability was acceptable (Taber, 2018). Thus, the ISEB questionnaire consisted of 15 items and utilized a four-point Likert scale, ranging from strongly disagree to strongly agree.

In addition, to assess EFL students' OSEL, the second questionnaire was prepared based on Zheng et al.'s (2016) online self-regulated learning. This questionnaire consisted of (1) goal setting, which relates to students' ways to set

purposes in online class; (2) environment structuring is an environmental arrangement that students do when online English classes; (3) time management and task approaches, which refers to a student's online English learning strategy and time management; (4) help-seeking which relates to students' strategies in looking for aids when learning online; and (5) self-evaluation, which refers to students' self-evaluation strategies that are employed in learning English online. After the second questionnaire was adapted, a try-out was administered. The results indicated that one item was not significant as the significant value was 0.075, so it was omitted from the second questionnaire. Next, the OSEL questionnaire's alpha value was 0.898 based on Cronbach's alpha, and the second questionnaire was considered acceptable (Taber, 2018). OSEL questionnaire consisted of 20 question items, and it employed another four Likert scale.

The third instrument was an interview guideline for interviewing some EFL students to confirm the results of the correlation between ISEB and OSEL to one male student and one female student based on the level of their ISEB about their OSEL implemented while learning English online. Interviews are conducted face-to-face virtually. Data obtained from the interview were analyzed to confirm the quantitative results.

Findings

EFL students' ISEB and OSEL are the two variables in this analysis. The responses to the questionnaire were scored and assessed to determine the scope of the study's two variables and whether or not there is a relationship between them. As a result, the results are divided into three sections: the extent of EFL students' ISEB and their OSEL and the relationship between the ISEB and the OSEL of EFL students.

The correlation between EFL students' ISEB and OSEL

The ISEB questionnaire has three dimensions: internet beliefs in general, beliefs regarding justification derived from a variety of sources, and personal justification beliefs. Setting objectives, arranging the surroundings, task methods and time management, seeking assistance in learning, and self-assessment are the five elements of the OSEL questionnaire. The results indicate that there is a strong correlation between two variables: EFL students' ISEB and their OSEL, as shown in Table 2.

Table 2. Correlation between EFL students' ISEB and their OSEL

		ISEB	OSEL
ISEB	Pearson correlation	1	.555**
	Sig. (2-tailed)		.001
OSEL	N	110	110
	Pearson correlation	.555**	1
	Sig. (2-tailed)	.001	
	N	110	110

The correlation coefficient between ISEB and OSEL was significant at the level of 0.01, and 0.555 is classified as a strong correlation (Schober, 2018). Next, the p -value is $.000 < 0.01$; this revealed that the two variables had a substantial relationship. As these findings show a positive correlation between EFL students' ISEB and their OSEL, the alternative hypothesis, namely the higher EFL students' ISEB, the higher their OSEL was posited.

EFL students' ISEB and OSEL levels

The alternatives on the Likert scale (strongly disagree, disagree, agree, and strongly agree) are transformed into numbers: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. The researchers focused on the total score of the respondents when categorizing students' ISEB and classified them using this formula: =IF(AL4>30;" Sophisticated"; "Simple". After entering the formula, on the internet, students were discovered to have sophisticated epistemic beliefs, as shown in Table 3.

Table 3. Students' ISEB Level

Students' ISEB	N	%
Sophisticated	110	100
Simple	0	0
Total	110	100

Based on Table 3, the total number of EFL ISEB who possess high-level ISEB (sophisticated internet epistemic belief students) is 100% of the total participants, while simple epistemic belief students are 0%. In line with these, all students in the 7th semester were dominated by sophisticated ISEB when they were having online learning and using the internet as the main medium of instruction. Then, in categorizing students' OSEL, the researchers looked at the respondents' total scores and categorized them using this formula: = IF(AL4>30;" High"; "Low". According to the formula, students with a total score of less than 40 have a high level of OSEL, whereas students with a total score of

more than 40 have a low level of OSEL. The results of the EFL students' OSEL showed that they are dominated by students who have high OSEL, as depicted in Table 4.

Table 4. Students' OSEL level

Students' OSEL	N	%
High	110	100
Low	0	0
Total	110	100

Based on Table 4, the total number of students with high OSEL is 100% of the total participants, while those with low OSEL are 0%. Thus, it can be concluded that the 7th-semester students have high OSEL in online teaching and learning settings through internet as the medium of instruction.

The results of the students' interviews

The researchers conducted online interviews using the Google Meet application with one male student named "Student 52" and one female student named "Student 101". Table 5 represents an overview of the interview outcomes.

Table 5. Results of the students' interviews

Dimensions	Summary of the responses	
	Male student	Female student
Goal setting Help-seeking	Getting information from reliable sources because information from the internet is not 100% accurate.	Information from the internet was fifty-fifty accurate. Articles from reputable journals on the internet are accurate, but be careful with websites.
Self-evaluation	Comparing information from the internet by ensuring its validity to avoid misconceptions by comparing with official websites.	Evaluating and comparing the information to find the most accurate and appropriate information because the internet seems an important tool to widen cognitive skills.
Task strategies and time management environment structuring	Evaluating the information from the internet and knowledge obtained from courses. Setting learning times based on mood from 9 pm to 1 am due to a quiet ambiance to concentrate and more focus.	Matching information on the internet with any theory that is remembered. Always studying in a good mood can be created a comfortable environment to focus on finishing assignments regardless of particular times or venues.

First, the researchers questioned students' beliefs about the internet as a source of information. Researchers asked questions regarding their beliefs about the accuracy of the information they obtained from the internet, and whether the internet helps students achieve their learning goals and helps students solve their academic problems while learning English. Student 52 stated that he believes in the accuracy that he got from the internet as long as we seek information from credible sources. Everyone can share everything that they want on websites or blogs that match the topic they are looking for. Thus, the quality of the information itself does not guarantee it. In addition, it helps him overcome his English learning issues. It helps him to find the information quickly. Material or content about learning English is widespread on the internet, and it helps him achieve his goals in learning English.

Then, student 101 said, "I believe that the information from the internet is accurate, but not 100% accurate." She stated that the internet really helps her a lot. She can find the article journal on the internet. Those journals are important journals that are only shared on certain websites, so she thinks that this is how the internet can help her find the information easily. It can conclude that those two students agree the internet contains important information that can help them achieve their goals in learning English. Next, the researchers wanted to know their beliefs about justification by various sources on the internet and their self-evaluation.

The researchers asked whether the students evaluated the information obtained from the internet by comparing various sources and also evaluating their learning outcomes. Student 52 responds that he compares the information I get from the internet. He needs to ensure the information that I consume is valid to avoid misconceptions. He usually compares it with some official website that acknowledges its information accuracy. Then, student 101 said that she also evaluates and compares the information to find the most accurate and appropriate answer. In addition, they also evaluated their learning outcomes by summarizing the material and communicating with their classmates regarding their understanding of the material they got from the internet and online learning. This is their effort to achieve their learning goals with high achievement. Thus, it can be stated that they evaluate the information obtained from the internet; besides that, they also self-evaluate their learning outcomes. Then, the researchers wanted to know their beliefs about their personal justification of the internet and their strategies to achieve English better.

The researchers asked whether they evaluate the information they found on the internet with their own knowledge to achieve English better. Student 52 stated that he evaluates the information he got from the internet and his

knowledge. He uses the information from the Internet to expand his knowledge regarding particular topics or materials, combining the information that he got from the internet and the knowledge he got from courses. Student 101 responded that she also evaluates the information on the internet with her own knowledge because she needs to know the accuracy of that information with every source. She matches the information on the internet with any theory that I remembered. Moreover, the researchers also asked about their strategies when online learning, including strategies for managing learning times and locations to achieve their goals. They have the same thoughts, and they said that they set learning times based on their mood. They always study when they are in a good mood because they need to create their surroundings as comfortable as possible. Student 52 also stated that he usually becomes productive from 9 pm to 1 am. He chooses to learn at that time due to a quiet ambiance so that he can concentrate and focus more. Therefore, he chooses that strategy to achieve effectiveness in learning. Then, student 101 stated that she could really focus when I want to do it for real. Thus, in terms of managing the learning times or location, it's optional for her. In conclusion, when learning English online and utilizing the internet at its most, male and female students of English Language Education have high epistemic beliefs and online self-regulated learning.

Discussion

Students can define learning targets, organize learning activities, and assess academic achievement through self-regulation, which is an interactive and productive process (Cheng et al., 2013). Self-regulation learning is a practical student learning strategy for reaching objectives rather than a conceptual ability or academic achievement skill. Learning can be considered a beneficial activity taken by students of varied personalities who must develop self-control. Self-regulated learning is defined as a systematic attempt by learners to control their learning process in order to achieve targets. Efforts to organize themselves include time management, self-monitoring, and motivation to learn. Self-regulated learning is relevant at any age. In other words, this approach can be implemented by college students. Self-regulated students aim for mastery or want to improve their skills. They believe in their potential to learn and place a high value on the learning process (Cho & Heron, 2015). The learning process was completed entirely online during the COVID-19 outbreak. Therefore, self-regulated learning during this pandemic refers more to online self-regulated learning.

The objective of the present research was to determine how EFL students' ISEB were associated with their OSEL. The results provide some evidence of a link between ISEB and OSEL in the contexts of the classroom; for example, Limoodehi & Tahriri (2014) and Trevors et al. (2016) have long discussed that students' self-directed learning can be enhanced when students' epistemic beliefs are directed to its higher level. Students with beliefs about many sources of justification and personal justification evaluation (sophisticated ISEB) can relatively set learning goals, decide to seek help, have self-evaluation, own task strategies, time management, and environment structuring online (high level of OSEL), according to more recent previous study results such as Lee (2018). These reinterpreted Cheng et al.'s (2013) study findings, which revealed that simpler ISEB was constructed and sophisticated ISEB is evaluated, might positively affect students' goal to seek academic-related information online. The present study results cannot comply with Cheng et al.'s (2013). Still, it supports Lee's (2018) because these suggest that EFL students with more sophisticated ISEB could positively influence the students' OSEL in an internet-based learning environment.

A lot of research provides evidence that students with more sophisticated ISEB have more intention to adopt OSEL in online learning. Students with sophisticated or high-level ISEB believe that lesson content found on the internet should be assessed utilizing a range of extra resources, according to Lee et al. (2014). They tend to verify information from various sources they obtained from the internet. This result agrees with Kammerer et al. (2015), who found that students with higher ISEB are more concerned with using many sources justifications to ensure that the information they receive is accurate. These findings comply with the present study results, especially through the interviews with EFL students they are more prone to question the accuracy of information obtained via the internet or for searching for academic help. The possible justification is that they hold sophisticated ISEB about the *justification of multiple sources* and *personal justifications* so that they do not put complete reliance on internet only. They are not only utilizing course-related information from the internet but also reviewing the materials from the lectures as well as from e-books. When they seek help for academic information on the internet, they investigate more reputable sources from several trusted journals which are indexed nationally (like Sinta 1, 2, 3, 4, 5, 6) and internationally (like Scopus or webs of science) or they mostly look for information from official websites. This finding is related to Fraser et al. (2021), who discovered that students with sophisticated epistemic beliefs filter online academic information obtained over the internet. Further, the present study verifies Çevik's (2015) findings that

when EFL students with advanced epistemic beliefs search course-related information through websites, they may purposely use official websites for academic information.

Successful EFL students with better academic achievement can be predicted from their ISEB and OSEL levels. Successful students have good results in their academic achievements. For improved constructivist learning in the online learning environment, they must build sophisticated ISEB students with high justification and uncertain beliefs about academic-related information (Lee, 2018). When EFL students possess sophisticated ISEB, they have a high level of OSEL, which allows them to determine their goal-setting, help-seeking, personal evaluation, task strategies and time management, and environment structuring to foster self-directed learning that can stimulate their autonomous learning. Related to pedagogical implications, the current research highlights the importance of ISEB and OSEL on quality online learning to support teaching and learning with an internet-based learning environment due to the COVID-19 outbreak.

Amidst the COVID-19 pandemic situation, as many EFL students have more opportunities to find information through the internet during emergency remote and online learning, students' ISEB should be increased and developed through teachers' teaching strategies so that indirectly this leads to the betterment of students' OSEL. In relation to increasing students' ISEB, providing a communicative approach in teaching English will be inevitable to form students' learning habits closely linked to a higher level of ISEB. As ISEB includes beliefs in the internet as an information source, ideas about many sources of justification, and beliefs about individual justification, for pre-teaching, teachers can build students' background knowledge and provide an example from videos about conversations in YouTube, some videos about monologs texts with various genres from Instagram reels or some short functional texts found in TikTok, or from other sources on the internet.

Meanwhile, for some enhancement, while teaching activities, students can also browse additional materials to explain social functions, generic structure, and linguistics features of monologs, dialogs, and short functional texts. Students should have more opportunities to do exercises on them on various online learning platforms. As post activities, teachers can choose various online management systems that allow students to perform their English competence in speaking, reading, writing, listening, grammar, and vocabulary. Not only for tests, but teachers should also expose students to alternative assessments that can be found on many websites. These activities are based on a high level of ISEB characteristics, so when teachers apply these in their learning instruction,

students are indirectly exposed to learning English with a communicative approach.

According to Laksana's (2021) research, virtual learning throughout the COVID-19 crisis has positive and negative features in learners' minds. The good news is that students can use the internet to get all of the information they need regarding the courses they're taking, and they can study anywhere and at any time. They are also more willing to ask each other questions during the learning process. However, a poor data network created an obstacle for them, making it difficult to perform well in the learning process. In online learning, data packages are equally crucial. Furthermore, lecturers must design learning modules in order to conduct online learning. The teacher's module must meet numerous criteria, including (1) having clear, precise, observable, and measurable learning objectives to influence students' behavior and (2) having content relevant to students' needs and the field of education.

Several teaching strategies can include EFL teachers' instructions and scaffoldings during teaching and learning activities. Teachers could provide pre-teaching activities to encourage students to develop their own learning goals based on the course's learning objectives. While teaching, teachers can provide suggested various sources from the internet to accommodate students when seeking information on the materials related to the topics discussed. In addition, teachers should allow students to find other relevant sources through the internet. Then, students are guided with some instructions or scaffoldings to get accustomed to their own task strategies when they have assignments. In post-teaching, teachers should allow students to do self-evaluation as a part of the assessment in a course. According to Kartika (2015), self-regulated learning might boost student motivation and help them achieve higher academic performance. Outstanding students have a better level of self-control in teaching and learning activities. Therefore, it is necessary to have stages such as the things above. These stages can help stimulate students in learning. These teaching strategies appear to shape students' habits in learning English with high OSEL.

Conclusion

This study aimed to investigate if there was a link between EFL students' online self-learning and their epistemic beliefs on the internet. The findings indicate a positive relationship between EFL students' internet-specific epistemic beliefs and their online self-regulated learning. According to the statistical result, it

implies that the epistemic beliefs of EFL students may have a substantial impact on self-regulated online learning. Furthermore, according to the results found from the researchers' interviews, the greater the students' ability to self-regulate learning, the greater their internet-specific epistemic beliefs, especially during online learning in the COVID-19 outbreak situation.

The results of this study may have several descriptions that can be a reference for teachers or lecturers to understand that not all students have the same level of epistemic beliefs. So this research can be input for teachers or lecturers when making daily work, materials, and assignments according to the different levels of students. Therefore, it can be inferred that there is an essential relationship between the particular epistemic values of students on the internet and their self-regulated online learning. Then, theoretically, it can be used as a starting point and reference for further study that requires references or supporting data related to the internet-specific epistemic beliefs of EFL students and their online self-regulated learning. However, the limitation of this research is that it only focuses on 7th-semester students. Potentially, future research will concentrate on students at different levels because the researcher is particularly interested in finding links between epistemic beliefs on the internet and online self-regulated learning. The future researcher can also relate to student achievement.

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