

## Toward a Tripartite Model of EFL Students' Learning Strategies, Epistemic Beliefs, and Their Online Learning Engagement

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**Abstract: Toward a Tripartite Model of EFL Students' Learning Strategies, Epistemic Beliefs, and Their Online Learning Engagement. Objectives:** The main objective of this study is to understand the link between these factors. This research explored the link among EFL students' learning, beliefs about learning, learning strategies, and learning engagement since they are key factors in influencing them to learn English. **Methods:** This research applied quantitative research, notably correlational design among EFL epistemic belief, learning strategies which later is consisted of reading, speaking, and writing, and online learning engagement. **Findings:** The findings of structural equation modeling showed that EFL epistemic beliefs are associated with learning strategies and online learning engagement in a significant and positive way. **Conclusion:** Theoretical and methodological implications for studies of epistemic beliefs, learning strategies, and online learning engagement are explored.

**Keywords:** tripartite model, EFL students, epistemic belief, learning strategies, online learning engagement.

**Abstrak: Model Tripartite Terhadap Strategi Pembelajaran, Keyakinan Epistemik, Strategi Pembelajaran, dan Keterlibatan Pembelajaran Online Siswa EFL. Tujuan:** Tujuan utama dari penelitian ini adalah untuk memahami hubungan antara faktor-faktor ini. Penelitian ini mengeksplorasi hubungan antara pembelajaran siswa EFL, keyakinan tentang pembelajaran, strategi pembelajaran, dan keterlibatan belajar karena faktor tersebut adalah faktor kunci dalam mempengaruhi siswa untuk belajar bahasa Inggris. **Metode:** Penelitian ini menggunakan metode penelitian kuantitatif yaitu korelasi tentang keyakinan epistemik mahasiswa, strategi pembelajaran membaca, berbicara, dan menulis, dan keterlibatan pembelajaran online. **Temuan:** Hasil dari pemodelan persamaan struktural mengungkapkan bahwa keyakinan epistemik mahasiswa memiliki hubungan yang signifikan dan positif dengan strategi pembelajaran dan keterlibatan pembelajaran online. **Kesimpulan:** Implikasi teoretis dan metodologis dibahas dalam penelitian tentang hubungan antara keyakinan epistemik, strategi pembelajaran, dan keterlibatan pembelajaran online.

**Kata kunci:** model tripartit, siswa EFL, keyakinan epistemik, strategi pembelajaran, keterlibatan pembelajaran online

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## ■ INTRODUCTION

Learners' differences in skill, learning techniques, and values have a significant impact on EFL teaching and learning activities among the various factors that contribute to foreign language learning. One of the many advantages of taking into account such individual differences is that it aids an important process and achieves the ultimate aim of EFL learning at the university level Emaliana & Lailiyah (2018). Therefore, learners' assumptions about learning, learning methods, and learning engagement are all important factors in shaping learners' desire to learn English.

A lot of research has gone into figuring out how much personality differences affect others. Sanders-Reio, et al., (2014) found that assumptions about learning predicted variation in English achievement scores beyond what self-efficacy and apprehension might account for. Some findings are revealed in relation to self-efficacy beliefs, which display a mild association with English scores: (1) audience orientation is the best positive indicator of the students' grade; and (2) transmission (a belief in relying on information published by authorities) has a negative correlation. Another variable related to learning techniques isn't well known. As a result, these findings support the idea that learning belief can be used as a leverage point when teaching English to students Sanders-Reio, et al., (2014).

Individuals engage in online learning through not only synchronously, but also asynchronously by using networked computer technologies (Moore, Dickson-Deane, & Galyen, 2011). Furthermore, as technology advances, online learning may incorporate a variety of learning techniques (i.e., project-based learning, watching videos, and team based together with their colleagues (vanOostveen, Desjardins, & Bullock, 2019). Learning through online platform can be conducted anywhere and at any time and having goal of it being controlled by a preparatory requirement.

The essential problem in creating a remote learning domain in order to enhance teaching and learning activities has been addressed in the study of remote teaching and learning (Weidlich & Bastiaens, 2019). An essential but understudied problem was determining present state of remote teaching and learning performed by pupils and their teachers, including their engagement in remote teaching and learning and what components influence their remote teaching and learning activities. Remote learning, in particular, has taken at different times, in different forms, and with different methodologies that are not confined to education in general such as formal education that can result in diverse learning involvement which deserve to be investigated (Colson & Hirumi, 2018).

Furthermore, some research aims to increase learners' learning engagement by using an instructional tool that they are familiar with. The creation of an online learning environment and operation is one of the most interesting and motivating media (Beach, 2017; Lee & Brett, 2015; Rolando, et al., 2014). There is proof that there is a correlation connecting learner engagement and learning motivation (Tananuraksakul, 2015; Amirian et al., 2016). Few researchers, however, have investigated the relationship between students' learning epistemic beliefs, learning methods, and their online learning engagement. As for learners' learning beliefs and strategies shed light on their real engagement in learning (Yeh, 2010; Amirian et al., 2016).

Recent research has expanded on the individual differences that affect English performance among students. Unlike learning beliefs (i.e., learners' beliefs about their own writing skill, which answer what good writing is and what good writers do), EFL epistemic beliefs examine students' overall beliefs about learning English, as well as some of their methods of learning English. EFL epistemic beliefs depict larger structures and ideas within students'

motivations for studying English as a foreign language. They stress the importance of the teaching and learning approach as the basis of fundamental principles that are applied in teaching and learning approaches and strategies that students have received and internalized (Emaliana, 2017). This creates a void for the current study to fill in when it comes to comparing self-efficacy beliefs to beliefs in an EFL environment.

Learning strategies tend to be another aspect that influences learning. Individual differences, as well as environmental and social variables, are thought to influence language learning strategies. As a result, certain factors, such as learning and learner variables, influence the effectiveness of learning strategies. According to Nguyen & Terry (2017), inconsistent results in past studies made researchers doubt the transfer approach's competence and turn to a situation-specific method that conceives EFL learning strategies as distinct types arising in the course of learning or using English. Furthermore, Gerami and Baighlou (2011) discovered EFL learners' competency used a broader scope of learning approaches than their incompetent peers. The former frequently used metacognitive approaches, whilst the latter preferred surface-level cognitive approaches. Furthermore, learners rely on a variety of learning strategies while learning a foreign language, as employing language learning strategies provides and improve language learning while also assisting language learners in various ways. Moreover, it is discovered that language proficiency and language learning methods have a direct relationship (Griffiths, 2003; Yang, 2007; Ya-Ling, 2008). Learning approaches have been aimed at the communication skill's principal objective and enable learners to become more self-assisted while still getting assistance (Oxford, 2003). As a result, learning strategies have an impact on

students' ability to learn in a specific instructional context, including learning English, especially in the areas of listening, reading, writing, and speaking.

The current research, which is based on a previous conceptualization of factors influencing EFL learning, offers an evaluative perspective on the directions of causal influences among them. Similar to Zang & Liu's (2019) research, which found that beliefs about learning English are linked to motivational beliefs, motivational control, and online learning engagement, the current study examines EFL epistemic beliefs that are linked to learning strategies for listening, reading, writing, and speaking practices, as well as online learning engagement.

Previous studies have suggested some approaches to identify aspects that may lead to influence English learning, one of those is a reference to epistemic values, or ideas regarding procedural knowledge linked to teaching and learning techniques and students' learning engagement. The circumstances in which teachers assist students in strengthening and developing their ideas by transferring them from basic primary beliefs to complex beliefs are inextricably linked to students' learning techniques and engagement (Sosu & Gray, 2012). Students that have more complex epistemic beliefs have better degrees of intrinsic effectiveness, interest, self-regulated learning, and goal orientation that contribute to their academic success (Ulucinar, et al., 2012; Akbari & Karimi, 2013).

In other words, in the context of EFL learning, the assumption of the existence of a causal relationship chain between EFL epistemic beliefs, learning strategies, and online learning engagement can be elicited, despite the fact that most prior studies do not explicitly examine the precise path of influences among them beginning with epistemic beliefs. Epistemological beliefs, in

particular, affect learning engagement indirectly through their impact on learning strategies, according to a growing body of published research (Mellat & Lavasan, 2011). Epistemic beliefs are commonly thought to be the most important influence on learning methods and therefore online learning participation, which is the void to be filled in this research.

As a result, the findings of the present research contribute to the interpretation of how students' epistemic values influence their learning strategies, which in turn influence their decision to use specific online learning materials when communicating with online content. More generally, the findings of recent research have implications for university English instruction. The current research answers the following research questions for the reasons mentioned above. "Do EFL epistemic belief, learning strategies, and online learning engagement have any significant relationships?" In finding the answer to that research question, the hypotheses are constructed as follows: based on current indications and various theories derived from findings in studies on the analysis of possible relationships between EFL learning strategies, epistemic beliefs, and online learning engagement hypotheses on the relationships between them are developed.

Hypothesis 1. In learning English, there is a strong positive association between EFL students' learning strategies and their epistemic beliefs.

Hypothesis 2. In learning English, there is a strong positive association between EFL students' learning strategies and their online learning engagement.

Hypothesis 3. In learning English, there is a strong positive association between EFL students' high online learning engagement and their high level of EFL epistemic beliefs

The aim of the study is to determine a causal association between EFL students' learning strategies, epistemic beliefs, and online learning engagement. This research finding may have a big impact on how appropriate teaching materials, media, strategies, and approaches are implemented. This would be helpful to lecturers as it is used to be the addition to the English teaching by modifying the curriculum or learning goals..

## ■ METHODS

### Participant

During the 2017/2018 academic year, 120 learners from four classes consented to take part in this research. Sugiyono (2001), simple random sampling is the process of randomly selecting samples from a population without taking into account the population's stratification. Using a random sampling technique, 100 of them have been picked, however, to guarantee that the responses were complete. The learners responded with either a yes or no answer. The survey was answered in English by the participants, with research staff assisting them through the procedure.

### Research Design and Procedure

This study used qualitative approach, more specifically structural equation modelling (SEM) technique. A measurement model and a structural model are the two primary components of SEM. The structural model defines the relationships among the latent factors, among the observed variables, and between the factors and observed variables other than factor indicators, whereas the measurement model defines the relationships between observed factor indicators and latent factors (Muthen & Muthen, 2017). Due to scheduling constraints, the questionnaires were distributed prior to the final test. In ten minutes, these questionnaire were completed by the

learners. In addition to it, the respondents will finish six separate sessions.

### **Instrument**

Five instruments will be used in this research, namely English foreign belief students' epistemic belief. Next is learning techniques covering English skills such as reading, speaking, and writing. In this regard, the goal of this study is to identify English language teaching learners' epistemic belief (Emaliana, 2017), remote teaching and learning techniques (Zheng et al., 2016), reading skill techniques (Mokhtari & Sheory, 2002), writing skill techniques (Hwang & Lee, 2017), and speaking skill techniques (Huang, 2016). There are 35 items of EFL epistemic beliefs' questionnaire that were split into several sub-sets: definite knowledge (4 items), linkable skill (7 items), understanding skill (5 items), manageable knowledge (4 items), L2 ability (4 items), learning and communication techniques (4 items), and motivation and expectation (4 items). Zheng et al. (2016) utilized an online self-regulated English learning survey as their online learning approach. This survey was split into five sections (10 items), which were as follows: purpose environment (1 item), setting arrangement (1 item), assignment techniques and time attainable (3 items), help-seeking (3 items), and self-evaluation (2 items).

Furthermore, a reading learning technique had been utilized to analyze learners' reading technique (Mokhtari and Sheory 2002). The classifications were constructed in the sub-scales: global reading techniques (12 items), analytical techniques (7 items), and support techniques (8 items). English writing technique list (Hwang & Lee, 2017) was used to reveal students' writing technique. Its goal is to classify learners' writing technique into preparatory

writing. This inventory consists of 3 items on cognitive, 2 items on the L1, 1 item on the L2, 1 item on adjustment), whilst writing (1 item on analytical, 1 item on cognitive, 1 item on the first language, and 1 item on compensatory), and post-writing (2 items on self-aware, 3 items on correction, 1 item on social, and 4 items on writing improvement).

### **Data Analysis**

To analyze the data gathered for this study, qualitative analysis is used. This study used a Google Form Link survey to obtain responses from students in accordance with the questions they were asked. Following the processes below, the author analyzed, evaluated, and reached a conclusion on the data after gathering it as needed. To analyze the information from the disseminated questionnaire, the researcher employed SPSS. To derive general information, the researcher generated and read the data. The researcher attested to the value of the data produced. The researcher made connections between the data generated and additional findings from specific hypotheses in the literature. The researcher looked at and analyzed the advantages and disadvantages of the discovery.

## **RESULTS AND DISCUSSION**

SPSS 20 was used to evaluate the validity and reliability of each questionnaire. Only items with received coefficients less than .05 were deemed correct. The results were based on a sample of 100 participants, it was discovered that 81% of EFL students had sophisticated epistemic beliefs, while 19% have basic epistemic beliefs. Correlation Results about Epistemic Beliefs, Learning Strategies, and Online Learning Engagement

**Table 1.** Summary of the correlation

		Correlation		
		EB	OSEL	LS
EB	Pearson Correlation	1	,210*	,246*
	Sig. (2-tailed)		,036*	,014
	N	100	100	100
OSEL	Pearson Correlation	,210*	1	,197
	Sig. (2-tailed)	,036		,049
	N	100	100	100
LS	Pearson Correlation	,246*	,197*	1
	Sig. (2-tailed)	,014	,049	
	N	100	100	100

\*. Correlation is significant at the 0.05 level (2-tailed).

The associations were significant (Sig. value .05) according to Pearson Product Moment results. It said that all null hypotheses were dismissed, implying that each variable had meaningful relationships. The correlation values, on the other hand, were varied but all positive. OSEL and epistemic beliefs had a 0.20 correlation; epistemic beliefs and learning strategies had a 0.246 correlation; and OSEL and learning strategies had a 0.197 correlation. Learning strategies and online learning engagement are all linked to EFL epistemic values.

EFL epistemic beliefs, in particular, have a strong and positive relationship with writing, reading, and speaking learning methods, as well as online learning engagement, despite their low importance. Epistemic beliefs are a form of educational psychology that has its origins in epistemology. The examinations of genetic epistemology as well as research on epistemological development amongst college students are two foundational works in educational psychology epistemic belief research (Richardson, 2013). Based on Muis (2004), cognitive examination was influenced by the issue of information, also known as the epistemological problem, which cannot be separated from

intelligence growth. The research discovered that students consider many possibilities for knowledge after being exposed to a variety of academic and social experiences at universities for many years (Richardson, 2013). These two theories, which relate to epistemology as a branch of philosophy, are implicated with the essence of cognition and justifications of beliefs (Muis, 2004). Various studies use a variety of concepts, theoretical structures, and methodologies to investigate students' epistemic views, owing to the increasing interest in philosophy and educational psychology

There has been no single suppositional context within which research on epistemic beliefs and English language learning, in particular, has been performed. Regardless, research on epistemic expectations is related to first-language language learning (Fujiwara et al, 2012; Chen, 2012; Franco et al., 2012), corroborated results have already shown that students' epistemic beliefs regarding learning a foreign language, particularly in an EFL environment, have a positive relationship, which means that the higher the learners' epistemic beliefs, the higher their English foreign language mastery (Akbari & Karimi, 2013). A previous study, however, found that

epistemic beliefs specific to English language learning had not been a problem. This was in line with the result of the study. The association among learning strategies, EFL epistemic belief and online learning engagement showed significance and contributed to the previous study in proving the positive relationship among them.

As a consequence, conventional epistemic beliefs should be modified to accommodate EFL epistemic beliefs. In regards of epistemic beliefs' hypothesis, there are various conceptions that make up the form of EFL epistemic beliefs, that elaborates on two aspects, namely what knowledge is and how to obtain knowledge. What knowledge is is the first aspect. It has some aspects: some knowledge, basic knowledge, and the essence of language learning. How to acquire knowledge is the second aspect. It covers some aspects: fix competence, rapid learning, omniscient competence, difficulties in learning language, foreign language understanding, learning techniques, incentive, and anticipation. Emaliana (2017) promotes these frameworks of EFL epistemic beliefs. Accordingly, this present study finding is consistent with Akbari & Karimi's (2013) findings in a previous study that looked at the association between proficiency in English language learning and epistemic beliefs and discovered that the more advanced beliefs are connected to higher proficiency.

The following review focuses on both of the predictions that accompany the findings, namely, the more advanced the students' EFL epistemic beliefs are, the more involved they are with learning strategies, and the more engaged they are in online learning. When approached consistently, learning strategies are developmental pathways that each pupil can effectively undergo at various stages (Caswell & Mahler, 2004). The significance of learning strategies in the English learning process has increased, and variations in the abundance and variety of techniques utilized,

how they are implemented in the exercises, and the suitability of the methods for the exercises have been identified between more and less fluent learners (Ridhuan & Abdullah, 2009; Chien, 2010). For successful execution of learning strategies, this means the interaction of a variety of variables.

Despite the fact that learning techniques have been proven to arbitrate the relationship between students' epistemic belief and educational accomplishment in a variety of disciplines, less observed research have notably directed this problem in either EFL or online learning situations. Those who have done so agree that students' epistemic, learning technique used, and learning attainment are all positively related; that highly motivated learners are more likely to obtain more learning techniques in English foreign language learning; and that a higher level of strategy used associates with higher learning attainment. In other hand, most research on learners' motivation and strategic learning in EFL education have focused on either the first half of the model e the relationship between motivation and learning-strategy usage or the second part of the hypothetical relationship between motivation and learning-strategy used (Wharton, 2000).

Early literature analyzing language learning strategies focused on identifying vital practices and traits of "the successful language learner," while more recent research has attempted to explain language learning strategies' taxonomies and categorize approaches used by language learners during the learning practices. Furthermore, researchers have discovered a connection between the help and alternative of learning strategies and a variety of variables such as learning environments, learner personality and learning background and engagements, language competence, and cultural and educational histories through extensive study (Mellat & Lavasan,

2011). The results show that using language learning techniques can benefit language learners in a variety of ways, including facilitating and revitalizing language learning. It is also shown that language proficiency and language learning performance have a clear relationship (Griffiths, 2003). Learning strategies are geared toward the key objective of communicative maturity, allowing learners to become more self-directed but still assisting them in their learning (Oxford, 2003). Language instructors must integrate language learning strategies into their teaching practices and approaches in this regard, prepare students to use the right technique for a particular objective or skill field, and inspire them to apply the strategies as much as possible (Yang, 2007). Students may learn to practice language learning strategies such as listening, hearing, walking, and writing to improve their English language skills.

The findings of this study shed light on how previous studies of epistemic complexity in science education (Tsai, et al., 2011; Chen, 2012; Franco et al., 2012; Fujiwara et al., 2012; Mason et al., 2013) or epistemic beliefs' sophistication in association to reading as well as literacy (Ferguson & Bräten, 2013; Ferguson et al., 2013) predict proficiently improved students.

The spatial and temporal segregation of students and lecturers is the most visible element of online learning. As a result, researchers' emphasis has shifted to improving and maintaining learner interaction (Chen, 2017; Zhang, et al., 2019). Learning engagement is defined as the level to which students proactively engage in instructional activity, and it has been recognized as an important aspect in evaluating learner success in online learning settings (Li & Baker, 2018). A multitude of factors impacts it, including learners' self-efficacy, teachers' teaching presence, and perceived task importance (Jung & Lee, 2018). In a prior study, learners' self-efficacy, effectiveness acceptance, and

appearance are found to be constructively connected to their teaching and learning commitment. The progress of technological advancement and information, and the extensive request in educational sector, further research is being conducted to gather students' practices on online learning platforms as commitment's marker (e.g., Ding, et al., 2018). The present study result showed that online learning engagement

Three pedagogical considerations related to psychology are proposed for the association between English foreign language epistemic beliefs and English language proficiency. First, the research's findings can be used to build course profiles for the English language department's study program syllabus. It demonstrates that to achieve tremendous English aptitude, students' definitions of learning English and how they can learn English can be promoted by procedure descriptions extracted and produced from the study's findings. Second, this research shows that the communicative method of learning and teaching English for students in the English department requires a further emphasis on grammar and translation, especially in the teaching of reading, writing, and speaking.

Finally, based on the findings of this report, many teaching strategies may be presented to students with sophisticated EFL epistemic beliefs in order to accommodate good English language proficiency. Several teaching and learning approaches, such as student-centered learning, will offer a constructive learning experience. As a result, students are more likely to engage in more constructive tasks by utilizing their learning methods. Second, the cooperative learning approach should be used because it offers activities that enable students with both basic and complex EFL epistemic beliefs to interact while learning. Finally, integrated learning should be used for teaching English because it allows students who need to engage in more difficult yet controlled



learning procedures to do so. This way, they are defied to engage in early learning or learning through a scientific method.

## ■ CONCLUSIONS

The research's results can lead to a variety of conclusions. Factors impacting EFL learning, particularly EFL epistemic beliefs, can provide compelling predictions about the usage of learning techniques and involvement in online learning. The significance value of OSEL and epistemic beliefs had a 0.20 correlation; epistemic beliefs and learning strategies had a 0.246 correlation; and OSEL and learning strategies had a 0.197 correlation. The value was positive and 0.05 (Sig. 0.05). Thus, it can be concluded that there was an association among them.

Moreover, the results of the current research have created a set of direction used by EFL experts and further researchers. Educational implications almost always authorize English foreign language educator to adopt collaborative as well as blended learning. Subsequently, more studies are suggested. Because the instruments that are used in this research only provided a theoretical measurement level, that might lead to slighter accurate association usage. Modeling of constructional calculation must be examined by recruiting larger samples of EFL students to find out the relationship between personal variables that influence EFL learning. Additionally, qualitative research is required to validate the current outcomes of the research since they differ from the majority of prior research outcomes in evaluating whether cultural conditions impact the results of the relationship between EFL proficiency and EFL epistemic beliefs.

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