Investigating the Impact of Student Interest and Perception on English Phonology Learning in Indonesia

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ARTICLE INFO	ABSTRACT

Purpose. Learning capabilities of the English language are essential elements to survive in the international market. The current study aimed to investigate the impact of student interest and student perception on the English phonology learning of the undergraduate EFL students of the English language learning institutions in Indonesia. **Methods.** In this quantitative research study on English phonology, the constructs included student interest and student perception which examined the moderating influence of institutional role among the association of student interest, student perception and English phonology learning of the students of English language learning institutions in Indonesia. Questionnaires were used to collect the relevant data from the selected respondents. Data was executed through smart-PLS for the assessment of validity, reliability, and association among the variables. **Findings.** The results exposed a positive association of student interest and student perception with English phonology learning. It was also found that institutional role positively moderated the nexus between student interest and English phonology learning while negatively moderated the association of student perception and English phonology learning of the students of English language learning institutions in Indonesia. **Implications for Research and Practice** This article would prove a good source of information for policymakers, English language service providers and English language practitioners aiming at improving student learning of English phonology.

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Introduction

Learning English phonology concerns producing sounds. Much more importantly, English phonology is also acclaimed as a science as it describes the character of sounds; it has a production system, character, and sound perception (Bricault, 2015). Given the importance of English phonology, learning English phonology is undoubtedly the foundation of learning English (Pei & Qin, 2015). English phonology students can produce, describe characteristics, and distinguish each sound. They can perceive each sound for themselves and judge its consequences with other sounds. They can also produce sounds according to IPA and RP standards (Hamka, 2016). One must make up for any pronunciation deficiency by learning English phonology for a better level (Carr, 2019).

Learning English phonology provides the choice and arrangement of sounds in a language (Deiniatur, 2019; Hong & Ganapathy, 2017), how usefully the sounds function in a language, and what it means to be in the realm of English phonology. English phonology aims to help students how to produce the correct sound (Swingley, 2019; Wang & Zhan, 2020). One must make up for pronunciation deficiency by learning English phonology for a better level (Meade, 2020; Su, 2019). The students of English phonology no longer produce sounds based on imitation and in accordance with the speech of people.

Students' conditions represented by student interest and student perception are as much influential to the English phonology learning as the institutions, along with favorable policies, learning material, financial resources, management practices, and good teaching methods. Student interest is represented by their attention, preferences, and behaviors towards English learning, course of learning, English sounds and structure, and English classes which determine the ability and efficiency of learning English phonology (Chacón-Beltrán, 2018; Piotrowska et al., 2019). Students' perception is comprised of their thoughts, senses, emotions, beliefs, and confidence regarding English phonology learning with its phoneme, meanings of sounds, structure, and pronunciation. The positive students' perception stimulates the ability to learn English phonology accurately (Cao et al., 2017; Fryer et al., 2017).

Though in Indonesia, the English foreign language is given due importance and many leading organizations also conduct special English learning programs. Despite that many of these programs are unable to achieve the goals of English learning programs since the students of English education programs still do not understand the structure of English sounds, or even they do not show any interest in English phonology (Zen & Starr, 2021). The students do have an awareness of the benefits of English learning, still they consider English phonology an additional part of the course, and they fail to give any serious attention. Moreover, there is also a problem in learning process since students internally do not have the ability to generate, state, or understand all sounds in English (Karlina et al., 2020). Hence, there is a need for researchers to pay attention to English learning phonology. The previously conducted studies have emphasized the role of English phonology learning in the English foreign language, but little attention has been given to the conditions of students or learners.

The current study is learner-centered and focuses on students' interest and students' perception of the effectiveness of English phonology learning. In the past studies, however,

there are studies that have discussed the direct relationship of institution role with student interest, student perception, and English phonology learning. This is the first research study that stresses upon the moderation impact of institution role on the relationship of student interest and student perception with English phonology learning. In addition, prior to this research, students' struggle, students' interest, and students' perception have been separately discussed but the current study makes a distinction by simultaneously examining the role of students' interest and students' perception in English phonology learning.

The current study examines the influences of student interest and student perception on English phonology learning and English teaching institutions. and their mutual association in the education sector of Indonesia. English is taught to students as a primary-secondary language (Savitri, 2021) with the reason behind is that English is the international or global language. The global status of this foreign language is partly because of the number of individuals who speak it. It is considered compulsory for Indonesian domestic workers to communicate or interact in English as it will be helpful for them to understand and perform their jobs better, particularly as communication determines the basis of domestic works (Septianasari, 2019). In Indonesia about 79 English language schools are functioning with multiple branches. Some of the most important institutions promoting English learning, in Indonesia, are EF Balikapapan, EF Bandung International School, EF Banjarmasin, EF Bekasi, EF Bogor, English Faster EF Cirebon, EF Bali, EF Dpot, EF Kediri, Briton English education, ILP International Language Program, EF Makassar, EF Malang, EF Kupang, EF Lampung, and Biton English Education etc. (Zen, 2020).

This paper is organized into five sections. The first section presents the background introduction of the subject of the study. The next section presents the contemporary and past research studies to facilitate setting the appropriate hypotheses regarding the relationship among student interest, student perception, institution role and English phonology learning. The section following it concerns the research methodology adopted in this study to analyze the variable and their relationship. The next section presents the results of the study and their reliability in line with the past studies. The paper ends with a conclusion, implications, and future directions.

Literature Review

As the universal language, English is used in almost all countries as mode of communication beside being the national language of a few. In international organizations with multinational operations, English is the only language of communication and interaction. It is also critical for politics, economy, and human welfare (Widagsa et al., 2019). In non-native countries, authorities launch English language programs to promote English learning. English phonology becomes the foundation of learning English as a foreign language. English phonology learning is not only dependent on the institutional policies, development practices, or English teaching methods but also on the conditions of the English learners (Diani & Azwandi, 2021). The current study focuses on both institutional role and conditions of students, such as students' interest in learning English phonology and their perception of English phonology. The influences of student interest and student perception on English phonology learning and the impact of institutions on

the association of student interest and student perception with English phonology learning has been the subject of much previous research. The following hypotheses are established based on a few of these studies.

- *Student Interest and English Phonology Learning*

Savitri (2021) investigated the influence of interest and attitudes of learners towards English phonetics learning among Indonesian English foreign learners. In this research of a descriptive quantitative method, the responses were taken from 103 students from batch 2015 to 2017 in the English Language Education Program at the University of Brawijaya. The variables chosen in the study included vowel system, speech rhythm, accent difference, and intonation analysis. The study revealed that English learners must be aware of English sounds, particularly English phonemes, to understand and digest the English Language minutely and accurately. The study concluded that it was the students' interest, their preferences, their differences in pronunciation and their attitudes that can improve their skills and abilities to apprehend the English phonology. Similarly, Chen et al. (2020) examined the relationship between learning of English foreign language in early childhood, English achievement, students' interest in English phonology, and their attitudes to English learning in China. Two groups out of the population of 892 children were chosen to study the differences of having early English phonology experience. This study applied propensity score matching (PSM) and coarsened exact matching (CEM) for analysis and found that children with early English learning showed more interest in learning English sounds and showed a positive attitude towards English phonology learning. Based on the above arguments, the following hypothesis is established:

H1: *There is a positive relationship between student interest and English phonology learning.*

- *Student Perception and English Phonology Learning*

Goriot et al. (2020) analyzed the relationships among Early-English education benefits, students' perception of English phonetic contrasts, and English phonology learning for native speakers in the Dutch language. This study analyzed and examined the Dutch students in the early English-Dutch program. The bilingual children were categorized based on their knowledge of phonetics as easy, intermediate, difficult, and very difficult. These bilingual children studying early English-Dutch programs showed a positive perception of phonetics and outperformed all others in all categories. Their perception was positive about the learnings and speaking as their knowledge about phonetics was easy and accurate. They performed efficiently with in exams and were award 100 percent results in English learning phonology. Utami et al. (2017), too, analyzed the role of students' perceptions of English phonology in learning the English Language. Their study implied that students' thinking, feelings, and beliefs about the quality of teaching methods applied by tutors in English language classes and their ability absorbed the sound pronunciation and their structure accurately and influenced their learning of the English phonology.

The students who showed positive perceptions about teaching methods, their own ability to learn the subject, and learning environment were more likely to learn English

Phonology learning. Similarly, Stern et al. (2018), presented their arguments about the English learners' perception and its impact on English phonology learning. The study showed that the English phonology learning effectiveness of learners was dependent on their thoughts on how they took the language, speed, or convenience to learn it, and efficiency of the teacher and course if study designed to teach. If the students' perceptions were positive, they could more easily, accurately, and speedily learn English phonology. Hence, it can be hypothesized that:

H2: *There is a positive relationship between student perceptions and English phonology learning.*

- *Moderating Impact of Institutional Role*

The institutions which carry the English learning programs play a significant role in developing learning interest in individuals and English phonology learning along with other areas of the language. The policies, strategies, course of study, teaching methods, learning environment, and teaching classes of the institution were influential in this regard (Tambunsaribu & Simatupang, 2021). The institutions offering the English learning programs preferred to hire the services of efficient English language tutors who had a complete knowledge about English phonology (vowel system, phonemes, sound structure, speech rhythm, accent differences, and intonation), and sufficient experience in this field. Such tutors only could be regular in teaching classes and showing a serious concern towards learners' performance in learning phonology. When institutions have such skilled English tutors, students are attracted and are likely to develop an interest in learning the English Language from those institutions. Similarly, with such skilled teaching staff, the institutions produce many students who are fluent in English pronunciation.

Toyyibah (2021) focused on the institution's role in developing students' interest, the attitude to the English phonology and the extent to learn English phonology learning. According to the arguments of these authors, the institution's favorable policies regarding the learning material, teaching staff, class duration, and students' learning evaluation enhanced the students' interest in English foreign language and were useful in making the students learn English phonology accurately. Thus, such institutions can improve the influences of students' interest on English phonology learning. Hence:

H3: *Institutional roles have moderating influences on the relationship between student interest and English phonology learning.*

Individuals' learning perceptions and English phonology learning, as well as other aspects of the language, are greatly influenced by the institutions that offer English learning programs. The institution's policies, strategies, courses of study, teaching methods, learning environment, and instructional strategies have an impact on learners' thinking, emotions, and confidence level, and English phonology learning (Rahmatunisa & Syarifudin, 2021). The study of Suciati and Diyanti (2021) suggests that the institutions' investment capacity and policies lead to the research and development, which improves teaching methods, learning material, learning environment, and evaluation methods. They also report about the research and development activities carried on by institutions, which present that English language learning programs create awareness in individuals about the

convenience and utility to learn English phonology, and improve students' perceptions. Tabandeh et al. (2019), in another research, emphasizes the role of students' perception in English phonology learning for English foreign learners. This study implies that students' perceptions are influenced by institutional education with its materials, teaching environment, and the innovation adoption in teaching. The positive thinking and emotions, along with the high level of trust because of improved teaching staff, learning sources, good learning environment and assistance of up-to-date technology required, lead to students' capacity to learn English phonology thoroughly with a high level of accuracy and fluency. Based on the above discussion, the following hypothesis could be stated:

H4: *Institutional roles have moderating influences on the relationship between student perception and English phonology learning.*

Methodology

Research Design

The current study investigated the impact of student interest and student perception on English phonology learning and examined the moderating role of institutional role among the association of student interest, student perception and English phonology learning of the students of English language learning institutions in Indonesia. The study adopted two predictors such as student interest and student perception, while the institutional role was used as the moderator and English phonology learning was used as the predictive variable. These variables are presented in Figure 1.
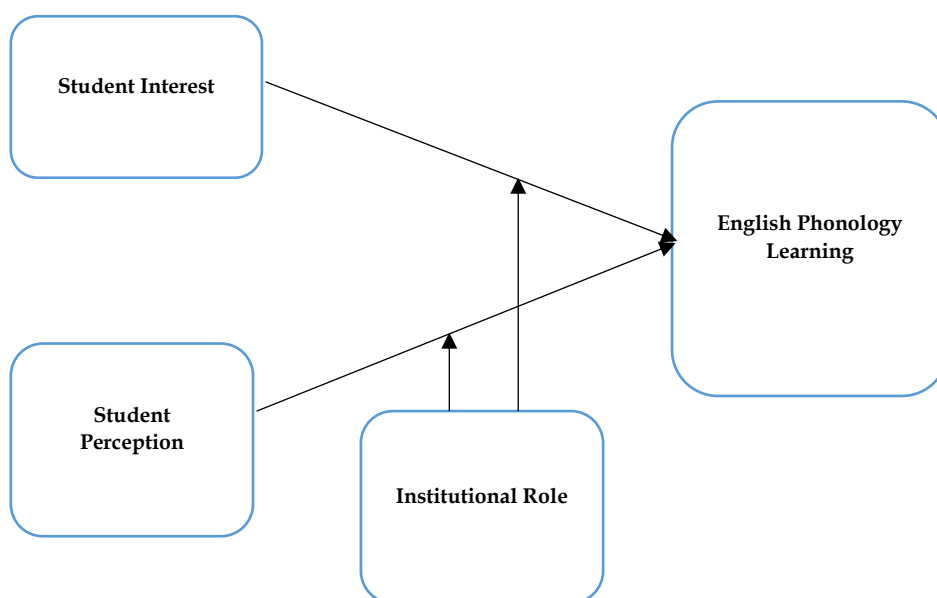
Figure 1. *Theoretical Framework*

Research instrument and procedure

Questionnaires were used to collect the relevant data from selected respondents. Simple random sampling was adopted to select the respondents to fill these questionnaires.

Research sample

The population of the study comprised 79 English language learning institutions in Indonesia, with around 35000 students enrolled. The sample size was calculated using the Morgan formula (Krejcie & Morgan, 1970) given as under:

$$\text{n} = \frac{x^2 \, N \, P \, (1-P)}{e^2 \, (N-1) + x^2 \, P(1-P)} \quad = 380$$

Simple random sampling was then adopted to select the respondents from the institutions. The sample size of the study was calculated as 380; hence approximately 575 surveys were distributed to the respondents by making personal visits. After ten days, 385 surveys (showing 66.96 response rate) were received which was enough to analyze the data.

Data Analysis

The smart-PLS was executed for the assessment of validity, reliability, and association among the variables. The smart-PLS is the best statistical tool for analyzing the primary data (Hair Jr et al., 2021). In addition, it also provided the best results when the researchers used it for large sample size and required the best estimations when complex models are used (Hair et al., 2019). The predictor student interest (SI) had six items, student perception (SP) had eight, the moderating variable institutional role (IR) had five, and the predictive variable English phonology learning (EPL) had seven items.

Findings

The results exposed the factor loadings showing the validity of all items. The standard value for the factor loading should be higher than 0.50. The results indicated that the values of all the items were higher than 0.50. Thus, it was concluded that all items are highly correlated with each other. Table 1 shows these results.

The results also exposed the Alpha, average variance extracted (AVE) and composite reliability (CR) showing the items' validity. The standard value for the AVE should be higher than 0.50, while CR and Alpha values should be more than 0.70. The results indicated that the AVE values were higher than 0.50 while AVE and CR values were larger than 0.70. Thus, it was concluded that items were highly correlated with each other. Table 2 shows these results.

Table 1

Factor Loadings

Constructs	Items	Factor Loadings			
English Phonology Learning	EPL1	0.601			
	EPL2	0.810			
	EPL3	0.804			
	EPL4	0.664			
	EPL5	0.819			
	EPL6	0.772			
	EPL7	0.775			
Institutional Role	IR1		0.935		
	IR2		0.860		
	IR3		0.932		
	IR4		0.936		
	IR5		0.859		
Student Interest	SI2			0.861	
	SI3			0.872	
	SI4			0.880	
	SI5			0.886	
	SI6			0.864	
Student Perception	SP1				0.929
	SP2				0.946
	SP3				0.936
	SP4				0.940
	SP6				0.944
	SP7				0.901
	SP8				0.935

Table 2

Convergent Validity

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
EPL	0.871	0.901	0.567
IR	0.944	0.958	0.820
SI	0.922	0.941	0.761
SP	0.975	0.979	0.871

Fornell Larcker criteria were used to check the discriminant validity to show the association between the constructs. The results showed that the value of the linkage with the variable itself was larger than those showing the linkage with other constructs. Thus, the results proved the discriminant validity as valid and a low association between constructs. Table 3 shows these results.

Table 3

Fornell Larcker

	EPL	IR	SI	SP
EPL	0.753			
IR	0.510	0.905		
SI	0.393	0.384	0.873	
SP	0.482	0.501	0.415	0.933

The results also showed cross-loading criteria to check the discriminant validity. The values exposed the linkage with the variable itself as larger than those that showed the linkage with other constructs. Thus, the results also proved the discriminant validity and low association between the constructs. Table 4 shows these results.

Table 4

Cross-loadings

	EPL	IR	SI	SP
EPL1	0.601	0.286	0.187	0.354
EPL2	0.810	0.491	0.319	0.397
EPL3	0.804	0.450	0.359	0.426
EPL4	0.664	0.248	0.233	0.330
EPL5	0.819	0.389	0.315	0.398
EPL6	0.772	0.404	0.284	0.304
EPL7	0.775	0.364	0.340	0.319
IR1	0.460	0.935	0.330	0.457
IR2	0.469	0.860	0.372	0.442
IR3	0.463	0.932	0.333	0.460
IR4	0.450	0.936	0.331	0.461
IR5	0.466	0.859	0.372	0.444
SI2	0.338	0.300	0.861	0.354
SI3	0.353	0.348	0.872	0.357
SI4	0.330	0.313	0.880	0.351
SI5	0.317	0.348	0.886	0.370
SI6	0.370	0.366	0.864	0.375
SP1	0.432	0.467	0.383	0.929
SP2	0.456	0.461	0.403	0.946
SP3	0.432	0.454	0.410	0.936
SP4	0.444	0.475	0.379	0.940
SP6	0.459	0.466	0.398	0.944
SP7	0.478	0.473	0.359	0.901
SP8	0.442	0.471	0.378	0.935

Heterotrait Monotrait (HTMT) ratio test was also conducted to check the discriminant validity. It was revealed that the values were not higher than 0.90. Thus, the results exposed discriminant validity and low association between the constructs. Table 5 and Figure 2 shows these results.

Table 5

Heterotrait Monotrait Ratio

	EPL	IR	SI	SP
EPL				
IR	0.552			
SI	0.431	0.411		
SP	0.521	0.521	0.437	
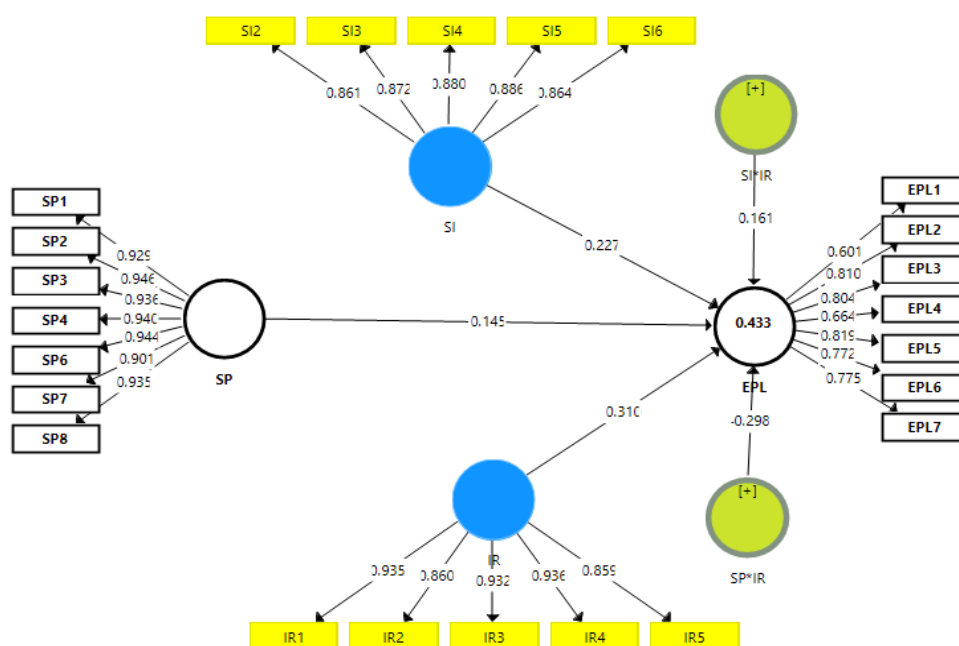
Figure 2. *Measurement Model Assessment*

The results of the direct path exposed that student interest and student perception had a positive association with English phonology learning and thus H1 and H2 were accepted. The results also showed that one percent of change in IR, the EPL would change by 31.0 per cent in the same direction and vice versa. The results also showed that one percent change in SI would lead to a change of 22.7 percent in the EPL in the same direction and vice versa. The results also showed that one percent change in SP could also lead to 14.5 percent increase in the EPL in the same direction and vice versa. These results are presented in Table 6.

Table 6

Direct Path

Relationships	Beta	Standard Deviation	T Statistics	P Values	Lower Limits	Upper Limits
IR -> EPL	0.310	0.059	5.248	0.000	0.203	0.399
SI -> EPL	0.227	0.065	3.478	0.000	0.107	0.314
SP -> EPL	0.145	0.070	2.066	0.021	0.040	0.261

The results of the indirect path also explored that institutional role positive moderated among the nexus of student interest and English phonology learning while negatively moderated among the association of student perception and English phonology learning of the students of English language learning institutions in Indonesia and thus H3 and H4 were accepted. These findings are shown in Table 7 and Figure 3.

Table 7

Indirect Path

Relationships	Beta	Standard Deviation	T Statistics	P Values	Lower Limits	Upper Limits
SI*IR -> EPL	0.161	0.055	2.961	0.002	0.047	0.247
SP*IR -> EPL	-0.298	0.058	5.117	0.000	-0.395	-0.198
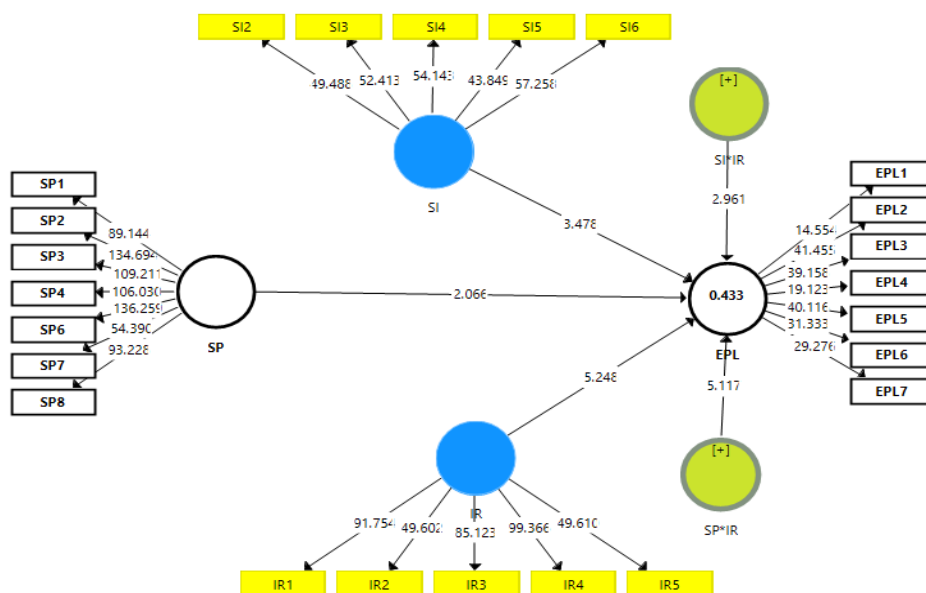
Figure 3. *Structural Model Assessment*

Discussion

Several undergraduate students of English language programs in Indonesia still do not understand the science of English phonology. However, when asked about the benefits of English phonology, they would agree in unison that English phonology was important but at the same time stress that it was just an additional course. Setyosari and Cahyono (2021) have illustrated problems related to teaching material, time allocation, learning resources, learning media, participation of related parties, and finance for learning English phonology. It was thus established that learning English phonology was problematic. The ability of students to produce, describe and perceive every sound in English was problematic. The current study attempted to find proper learning methods with relevance to the problem of the students' character.

The current study was carried out under the belief that learning in the twenty-first century was increasingly more learner-centered rather than teacher-centered. Adeoye (2019) and Praherdhiono et al. (2019) have found out that learner-centered learning emphasized digital literacy, critical thinking, and interpersonal skills. For example, learning English phonology demanded a change from imitating and practicing English sounds to producing, describing, and perceiving all English sounds themselves. In this case, the emphasis on digital literacy, critical thinking, and interpersonal skills were closely related to measuring the ability to produce, describe and perceive every sound of English. Likewise, Li-Hong (2019) applied learner-centered learning methods by covering task-based learning, problem-based learning, cooperative learning, inquiry learning, case-based learning, and independent learning. In short, learner-centered learning method put forward the analysis of conditions, methods, and improved learning outcomes. The past research have thus adequately examined these factors and attempted to resolve issues related to learning English phonology.

The current research too applied the learner-centered method of learning English phonology. The main analysis concentrated on determining the positive relationship between student interest and English phonology learning. The findings indicated a positive influence between student interest and English phonology learning as the increased interest of the students motivated them to learn English phonology accurately. These results were in line with the previous study of Treiman (2017), which analyzed the role of student interest in English learning phonology. This study implied that for learning foreign languages minutely and accurately, the personal interests of learners did matter. The non-native or foreign learners who showed a high interest in learning the English language accurately to the largest possible extent could learn to organize the sound patterns to speak or write a particular word with clear meaning. These results are supported by the study of Baumann (2018), which examined how the interest of individuals affected their thinking, capacities, and performance. The students who had an interest in learning English as a foreign language could easily learn the meanings of sounds, pronunciation, decipher sounds, and appropriately use them in practical conversations.

The current study results also indicated that there was a positive relationship between student perception and English phonology learning. These results are in line with a previous study of Bartolotti and Marian (2019), which highlighted that it was students

perceptions comprising their thoughts, feelings, and beliefs about tutors, classmates, situations, and events, that influenced their English phonology learning. The students who had positive perception about the teaching methods, their own ability to learn the subject, and learning environment were more likely to learn English Phonology learning. These results coincide with the results of Tomaschek et al. (2021), which suggested that student perception developed self-confidence and urged the students to learn their subject seriously. Thus, the students having positive perceptions could learn English phonology with haste and accuracy.

The findings have also shown institutional role having moderating influence on the relationship between student interest and English phonology learning. These results agree with the past study of Beguš (2020), which showed that the institutional policies, strategies, climate, and development activities aroused interest in the students to maintain the focus on and learn the English language phonology, in order to achieve effective learning performance. The current study also revealed that institutional roles had moderating influences on the relationship between student perception and English phonology learning. These results are also supported by a previous study of Sun et al. (2018), which implied that the institutional education material, educational environment, and the application of innovation in teaching affected student perception and that may not contribute to students' ability to learn English phonology.

Conclusion, Implications and Limitations

The authors commenced this research with the objective to check the extent to which student interest and student perception could be effective in English phonology learning and to examine the role which institutions played in building a relationship between student interest and student perception and English phonology learning. It was an empirical analysis of the efforts made by English language institutions to manages English foreign learning programs and learners' response to this language in Indonesia. The variables included student interest and student perception in English phonology learning as well as to determine the institutional role in developing student interest, and how it improved student perception. The findings indicated a positive influence between student interest and English phonology learning as the increased interest of the students motivated them to learn English phonology accurately. The results also stated that when the students had positive perceptions of their ability to learn English phonology, teachings methods, and learning environment etc., they were more likely to learn English phonology minutely. The study also concluded that the institutions with favorable policies, financial resources, effective management, and good teaching methods could bring improvement in the student interest and student perception, which further assisted in English phonology learning.

Theoretically, this study has made a large contribution to the domain of the English language learning, particularly the English phonology. This study has expostulated how student interest and student perception influenced English phonology learning. It also examined the influence of institutional role (along with all its features and practices) on student interest and student perception of English phonology learning. Student interest and student perception were the two different terms that made an impact on English

phonology learning, but the relationship of student interest and student perception with English phonology learning had hardly been examined in previous studies. The current study deals with the role of student interest and student perception in English phonology learning in single research. Moreover, this research examined the moderating influence of institutional role on the mutual association of student interest and student perception with English phonology learning, which is also a novel theoretical addition to the contemporary literature on English phonology.

Empirically, this study would prove a useful reference to policymakers while making effective policies for the improvement of students learning in institutions. It would also be significant to English foreign learners and institutions that are authorized to teach English language. It will help make decisions regarding English learning or teaching by elaborating how to make the learning of English phonology easier and more convenient. The study has suggested that English phonology learning could be easier when there is high student interest and student perception.

The study faced a few limitations too which future studies are expected to address. First, this study focused only on two factors, student interest and student perception to study the effect on English phonology learning. There are still several other factors like government educational policies, sources of learning, and management roles that could influence English phonology learning and have utterly been ignored. Future studies are expected to pay attention to these factors while analyzing the English phonology learning. In addition, English learning is a very wide concept that concerns all countries, but this study analyzed only the education sector of Indonesia. Therefore, in order to ensure the generalizability and increase the limits of its comprehensibility, future research is recommended to investigate the nexus among institutions, student interest, student perception and English phonology learning in multiple countries and geographical locations.

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