

# Factors Determining Global Intelligibility of EFL Learners in Asian Contexts

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## Abstract

Assuming that global intelligibility should be the goal of pronunciation instruction at EFL classrooms, this study aimed at investigating its contributing factors. To reach the aim, this study involved five Japanese and six Indonesian senior high school students as the providers of EFL utterances, and five English native speakers and five ESL speakers as the assessors who were required to evaluate the EFL speakers' utterances. The collected data were then submitted to a step-wise multiple regression to examine the potential contribution of the investigated factors to global intelligibility. First, the results have disclosed that there was a significant difference in the assessment of the contributing factors between the ENL speakers and the ESL speakers, either for Japanese EFL learners or for Indonesian EFL learners. Secondly, the findings have disclosed that sound accuracy, word stress, and adjustments in

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## 1. Introduction

The increase of oral communication across cultures has been the instrument of the promotion of the status of English as a global language (Crystal, 1997; Jenkins, 2000; McKay, 2002), necessitating the revision of the goals of teaching English for ESL/EFL learners (Jenkins, 2000; McKay, 2002). In pronunciation teaching, a new goal should be to help learners to attain global intelligibility which ensures successful oral communication not only between native speakers of English (NSs) and non-native speakers of English (NNSs), but also among NNSs themselves (Moedjito, 2008).

A pedagogical implication of this situation for the foreign language teaching profession is that ESL/EFL researchers and practitioners have come to reappraise the importance of pronunciation for successful oral communication. For example, Tudor (2001, p. 53) claims that "command of phonology of a language [the ability to understand spoken language and to produce a comprehensible version of the language] can play an important affective role in language use." Similarly, Setter and Jenkins (2005, p. 2) also contend that pronunciation "plays a vital role in successful communication both productively and receptively."

However, Communicative Language Teaching (CLT), a predominant paradigm of today's foreign language teaching, has rather underrated the importance of pronunciation. CLT puts more focus on the message-oriented transactions in a target language between learners than their accurate pronunciation of the target language in language classrooms. Accordingly, teachers are more concerned about how to promote successful classroom interaction in a target language through games and tasks than how to enable them to pronounce a target language accurately. Learners who are involved in the message-oriented transactions tend to pay little attention to the accuracy of their pronunciation, and as a result often make pronunciation mistakes due to their native language interference (Moedjito, 2006a). Teachers are often tolerant of these pronunciation mistakes, partly because they are more interested in the result of transactions than the manner of transactions, and partly because they believe in the philosophy of learner-centered approach, which underlies CLT. Considering the importance of pronunciation in oral communication across cultures, this is not a desirable situation since too much tolerance of learners' pronunciation mistakes by sympathetic teachers may lead to the formation of a classroom dialect which may only be understandable for teachers and learners in language classroom and may hamper oral communication across cultures in real-life situations outside classrooms. It is high time, therefore, that pronunciation teaching for EFL learners be re-examined, keeping in mind the importance of pronunciation in oral communication across cultures.

In the process of re-examination of pronunciation teaching we will face an inevitable question related to the goal of pronunciation teaching: What level of pronunciation should EFL learners aim for? Traditionally, the goal of

pronunciation teaching has been to enable EFL learners to attain native-like pronunciation of English, either Received Pronunciation (RP) accents of British speakers or General American (GA) accents of American speakers. However, as more and more people have come to use English as a means of wider communication across cultures, the focus of pronunciation teaching has shifted from how learners can attain native-like pronunciation to how learners can transact information effectively in oral communication. As a result, intelligibility rather than native-like pronunciation has become a legitimate goal of pronunciation teaching (Celce-Murcia, Brinton, & Goodwin, 1996; Cole, 2002; Cruttenden, 2001; Jenkins, 2000; Morley, 1991; Pennington & Richards, 1986; Zielinski, 2003). For example, Celce-Murcia et al. (1996, p. 8) state that “intelligible pronunciation is one of the necessary components of oral communication.”

Assuming that intelligibility has become an appropriate goal of pronunciation teaching, another crucial question arises: What kind of intelligibility should EFL learners be directed to? This is not so simple a question to answer. Abercrombie (1956), a pioneer in the study of intelligibility, presented a classical concept of comfortable intelligibility, that is, the intelligibility NNSs should aim at when they try to talk to NSs. ESL/EFL learners’ accents were supposed to be comfortably intelligible to NSs. This classic concept of comfortable intelligibility, however, can be regarded as an anachronism today, because the number of NNSs (more than one billion) around the world has exceeded that of NSs (about 400,000,000) because of the advance of globalization through English (Crystal, 2004; Graddol, 2006; Kachru, 1985), and oral communication among NNSs from different first language backgrounds has been increasing significantly. This means that EFL learners are expected to engage themselves in transactions in English not only with NSs but also, more frequently, with NNSs. Therefore, the classical concept of comfortable intelligibility needs to be critically re-examined. As a solution to this problem, Jenkins (1998) proposed a new concept of intelligibility, that is, mutual intelligibility. It is the intelligibility which enables NNSs “to communicate successfully with other NNSs from different L1 backgrounds” (Jenkins, 1998, p. 119). This type of intelligibility is now regarded as a legitimate goal of pronunciation teaching today.

However, we believe that this cannot be a final solution for EFL learners because, although the number of NNSs is greater than that of NSs, NNSs-NSs interactions do still exist. EFL learners are still expected to be involved in oral communication with NSs as well as with NNSs. There is a need to revise the concept of intelligibility once again so that we can accommodate this situation. Moedjito and Ito (2008) have proposed a new concept of global intelligibility as a candidate to expand Jenkins’ mutual intelligibility. It is the intelligibility that NNSs should aim at when they try to talk not only to NSs but also to NNSs (NNSs-NSs and NNSs-NNSs).

While EFL researchers and practitioners in other parts of the globe have advocated intelligible pronunciation as a target of English pronunciation teaching for EFL learners, pronunciation is not so emphasized in many English classrooms in Asian contexts. In Indonesia, for example, only 2% of 145 topics of the 2004 English curriculum for junior high schools deal with pronunciation (Moedjito, 2005). Accordingly, incomprehensible Indonesian EFL learners’ pronunciation has become one of the critical problems of English language teaching (ELT) in Indonesia. Unintelligible pronunciation easily causes communication breakdown and has become a serious problem especially when Indonesian EFL speakers try to communicate with either NSs or NNSs. This situation needs to be urgently resolved by improving Indonesian EFL learners’ pronunciation. Similarly, this condition happens in Japan where English is also a foreign language. In terms of pronunciation, normally most Japanese have difficulties in pronouncing consonant-ended words, except for /n/ because Japanese language is a vowel-ended-syllabic language. Because of the pronunciation system, many untrained Japanese may experience communication breakdowns when they are doing interactions with people from different linguistic backgrounds. Consequently, English pronunciation teaching in Asian countries, like Indonesia and Japan, should be directed to enable EFL learners to attain global intelligibility.

In real language classrooms, language teachers should be equipped with the knowledge of global intelligibility, particularly the factors contributing to global intelligibility. For this purpose, sufficient information about global intelligibility is necessary. However, unlike the factors of comfortable intelligibility (e.g., Celce-Murcia et al., 1996; Morley, 1991; Walker, 2001) or mutual intelligibility (e.g., Jenkins, 2000; Jenkins, 2002), very limited information is available for EFL teachers about factors determining global intelligibility. We need to portrait the factors determining global intelligibility in the contexts of EFL classrooms. Therefore, this author decided to conduct a study which explored factors determining global intelligibility of EFL learners’ oral communication through the analysis of ENL speakers’ and ESL speakers’ assessments of EFL learners’ utterances. On the basis of the reasoning, the following research questions were formulated:

- (1) Which factors of intelligibility are important for ENL speakers?
- (2) Which factors of intelligibility are important for ESL speakers?

- (3) What will emerge as common primary factors of global intelligibility?

## 2. Methods

### 2.1 Participants

In order to answer the research questions, the study involved five Japanese secondary school students (all female) and six Indonesian secondary school students (three males and three females) as the providers of EFL utterances, and five ENL speakers and five ESL speakers as the evaluators of the EFL speakers' utterances. All the EFL learners were tenth graders and had been studying English at schools for more than three years, approximately four fifty-minute lessons per week. All the ENL speakers coming from different English-speaking countries (i.e., one American, one Australian, one British, and two Canadians) were language teachers at Japanese universities. Four of the ENL speakers had lived in Japan for more than five years while the other one had lived in Japan for one and a half years. The ESL-speaker assessors comprise two Ghanaians, one Malaysian, one Malawian, and one Filipino. All the ESL speakers had received primary, secondary, and tertiary education in English in their home country. Three of the ESL speakers had lived in Japan for about one and a half years while the other two ESL speakers have lived in Japan for about 10 months.

### 2.2 Data Collection

First, the present researcher listed nine tentative factors contributing to global intelligibility through the analysis of preceding literature on this topic (e.g., Celce-Murcia, et al., 1996; Jenkins, 2000; Morley, 1991; Ufomata, 1996). Then the researcher recorded EFL learners' utterances (one-minute self-introductions). Finally, the researcher designed an assessment sheet which provided the main source of data of the study. The assessment has ten components for evaluation: overall intelligibility and its nine tentative contributing factors. The assessment of these ten components was carried out in three rounds. In the first round, the assessors were required to evaluate (1) sound accuracy, (2) word stress, (3) lexical accuracy, and (4) grammatical accuracy. In the second round, the assessors were required to evaluate (5) adjustments in connected speech, (6) sentence stress, (7) intonation, and (8) rhythm. In the third round, the assessors were required to evaluate (9) fluency and (10) intelligibility, and to provide free comments of the whole assessment scheme. The assessors were required to evaluate the EFL learners' utterances through a five-point Likert scale (1 refers to 'the least native-like utterance' while 5 refers to 'the most native-like utterance'). The EFL speakers' utterances in the research were randomly sequenced for the assessors although each assessor assessed the utterances in a fixed order for all the three rounds. The ENL speakers and the ESL speakers individually assessed the recorded EFL learners' utterances. Each assessor listened to each of the EFL learners' utterances three times.

### 2.3 Data Analysis

The data collected from the assessment and the questionnaire were quantitatively analyzed. The Pearson's correlation coefficients were calculated for nine contributing factors of intelligibility in order to find out which factors were eligible for multiple regression analysis which would in turn show the relationship between intelligibility and its contributing factors. As the criteria for further analysis, the contributing factors should have at least a modest correlation to intelligibility ( $r \geq .40$ ). All the statistical analyses were performed using SPSS 19.0 for Windows.

## 3. Findings and Discussion

### 3.1 Descriptive Statistics and Correlations of EFL Learners

Table 1 presents the mean scores (M) and standard deviations (SD) of the Japanese and Indonesian EFL learners' oral performance assessed by the ENL speakers (J-ENL vs. I-ENL) and the ESL speakers (J-ESL vs. I-ESL), and their mean differences between the scores of the Japanese and Indonesian EFL learners' oral performance (DJ-I).

Table 1. Descriptive statistics of intelligibility and its contributing factors

Assessment Items	J-ENL <sup>a</sup>		I-ENL <sup>b</sup>		D <sub>J-I</sub>	J-ESL <sup>a</sup>		I-ESL <sup>b</sup>		D <sub>J-I</sub>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Overall Intelligibility	3.12	0.78	3.06	.75	0.06	3.16	0.85	3.00	0.79	0.16
Intelligibility Factors:										
1) Sound accuracy	2.96	0.74	2.75	0.69	0.21	3.08	0.81	3.61	0.60	0.53
2) Word stress	3.36	0.70	3.19	0.86	0.17	3.20	0.65	3.56	0.65	0.36
3) Sentence stress	3.04	0.89	3.47	0.65	0.43	3.04	0.79	3.28	0.85	0.24
4) Adjustments in connected speech	2.76	0.78	3.72	0.57	0.04	2.60	0.65	2.94	0.86	0.34
5) Intonation	3.08	0.81	3.14	0.83	0.04	2.96	0.94	3.17	0.78	0.21
6) Rhythm	2.88	0.93	3.25	0.81	0.37	2.64	0.86	3.31	0.79	0.67
7) Fluency	3.04	0.84	3.50	0.78	0.46	3.12	0.78	3.39	0.80	0.27
8) Lexical accuracy	3.20	0.71	3.03	0.85	0.17	3.48	0.92	2.75	0.69	0.73
9) Grammatical accuracy	2.52	0.71	3.19	0.74	0.67	3.00	0.91	3.14	0.76	0.14

Note: Maximum score = 5.00; <sup>a</sup>*n* = 25; <sup>b</sup>*n* = 30.

Table 2 shows the summary of the correlation coefficients of the factors determining intelligibility of EFL learners' speech. As for the ENL speakers, five of the nine contributing factors of Japanese EFL learners had a modest correlation to intelligibility: sound accuracy, word stress, lexical accuracy, adjustments in connected speech, and sentence stress; and three of the nine contributing factors of Indonesian EFL learners had a modest correlation to intelligibility: adjustments in connected speech, fluency, and lexical accuracy. Interestingly, the ENL speakers shared the same idea for adjustments in connected speech and lexical accuracy.

As for the ESL speakers, there were two factors of Japanese EFL learners which had a high correlation to intelligibility (i.e., sound accuracy and rhythm) and three factors which had a modest correlation (i.e., word stress, sentence stress, and intonation); and, there were three factors of Indonesian EFL learners which had a moderate correlation to intelligibility: sound accuracy, adjustments in connected speech, and fluency. Similar to the ENL speakers' assessment, the ESL speakers also shared the similar idea in their adjustment of sound accuracy.

Although these correlation coefficients show the relationship of each factor to intelligibility, they cannot tell us much about the predictive power of the independent variables. In order to show the relationship between intelligibility and its contributing factors, the enter-method regression analyses were subsequently performed to each set of data of the ENL speakers and the ESL speakers which had at least a moderate correlation to intelligibility ( $r \geq .40$ ).

Table 2. Correlations of factors determining intelligibility

Assessment Items	J-ENL <sup>a</sup>		I-ENL <sup>b</sup>		J-ESL <sup>a</sup>		I-ESL <sup>b</sup>	
	<i>r</i>	<i>Rank</i>	<i>r</i>	<i>Rank</i>	<i>r</i>	<i>Rank</i>	<i>r</i>	<i>Rank</i>
1) Sound accuracy	.44*	4	.08	6	.76**	1	.66**	1
2) Word stress	.68**	1	-.06	7	.62**	4	-.11	6
3) Sentence stress	.53**	2	.01	9	.67**	3	-.17	4
4) Adjustments in connected speech	.46*	3	.51**	1	.35	7	.55**	2
5) Intonation	.31	7	.17	4	.59**	5	.14	5
6) Rhythm	.25	9	.12	5	.71**	2	.05	7
7) Fluency	.37	6	.39*	3	.22	9	.45**	3
8) Lexical accuracy	.41*	5	.49**	2	.38	6	.05	8
9) Grammatical accuracy	.26	8	-.02	8	.32	8	.05	9

Note: \**p* < .05; \*\**p* < .01; <sup>a</sup>*n* = 25; <sup>b</sup>*n* = 30.

### 3.2 Factors Determining Intelligibility of EFL Learners' Utterances

The summary of the modified reader-friendly representation of the results of the multiple regression analyses is presented in Table 3.

As for the ENL-speaker assessors, the value of the multiple coefficient of determination of the Japanese EFL learners was  $R^2 = .48$ ,  $p < .05$ . This means that the five investigated contributing factors (i.e., sound accuracy, word stress, sentences stress, adjustments in connected speech, and lexical accuracy) might account significantly for 48% of the variation in intelligibility of EFL learners' utterances and 52% can be explained by other than the investigated factors. However, a closer examination of the result has revealed that only the standardized coefficient ( $\beta$ ) of word stress was statistically significant,  $\beta = .60$ ,  $p < .05$ . This implies that only word stress might have a positive effect on the intelligibility of EFL learners' speech. The value of the multiple coefficient of determination of the Indonesian EFL learners was  $R^2 = .37$ ,  $p < .01$ . This means that the investigated contributing factors (i.e., adjustments in connected speech, fluency, and accuracy) might account significantly for 37% of the variation in intelligibility of EFL learners' utterances and 63% can be explained by other than the investigated factors. However, a closer examination of the result has revealed that only the standardized coefficient ( $\beta$ ) of adjustments in connected speech was statistically significant,  $\beta = .51$ ,  $p < .01$ , implying that only adjustments in connected speech might have a positive effect on the intelligibility of EFL learners' speech.

As for the ESL-speaker assessors, the value of the multiple coefficient of determination of the Japanese EFL learners was  $R^2 = .66$ ,  $p < .01$ . This means that the five investigated contributing factors (i.e., sound accuracy, word stress, sentence stress, intonation, and rhythm) might account significantly for 66% of the variation in intelligibility of EFL learners' utterances and 34% can be explained by other than the five investigated factors. However, a careful consideration of the result has disclosed that only the standardized coefficient ( $\beta$ ) of sound accuracy was statistically significant,  $\beta = .48$ ,  $p < .05$ . This implies that only sound accuracy might have a positive effect on the intelligibility of EFL learners' speech. The value of the multiple coefficient of determination of the Indonesian EFL learners was  $R^2 = .53$ ,  $p < .05$ . This means that the investigated contributing factors (i.e., sound accuracy, adjustments in connected speech, and fluency) might account significantly for 53% of the variation in intelligibility of EFL learners' utterances and 47% can be explained by other than the investigated factors. However, a careful consideration of the result has disclosed that only the standardized coefficient ( $\beta$ ) of word stress was statistically significant,  $\beta = .38$ ,  $p < .05$ . This implies that only sound accuracy might have a positive effect on the intelligibility of EFL learners' speech.

Table 3. Summary of multiple regression analyses of contributing factors for intelligibility

Assessors	EFL Learners	Contributing Factors	B	SE B	$\beta$	$R^2$
ENL-speaker Assessors	Japanese EFL Learners	Sound Accuracy	0.09	0.25	.01	.48*
		Word Stress	0.66	0.30	.60*	
		Sentence Stress	-0.03	0.31	-.04	
		Adjustments in Connected Speech	0.11	0.31	.18	
		Lexical Accuracy	0.13	0.27	.11	
	Indonesian EFL Learners	Adjustments in Connected Speech	0.67	0.20	.51**	.37**
		Lexical Accuracy	0.30	0.15	.34	
		Fluency	0.24	0.16	.25	
	ESL-speaker Assessors	Japanese EFL Learners	Sound Accuracy	0.51	0.21	.48*
Word Stress			-0.07	0.32	-.06	
Sentence Stress			0.22	0.24	.21	
Intonation			0.08	0.26	-.09	
Rhythm			0.33	0.37	.33	
Indonesian EFL Learners		Sound Accuracy	0.51	0.22	.38*	.53*
		Adjustments in Connected Speech	0.28	0.14	.30	
		Fluency	0.24	0.14	.25	

Note: \*\*  $p < .01$ ; \*  $p < .05$



As proposed at the beginning of this paper, the current study attempts to explore a three-fold research question focusing on the factors of intelligibility which are important for ENL speakers, the factors of intelligibility which are important for ESL speakers, and the common primary factors of global intelligibility. For Japanese EFL learners, in the case of the ENL speakers, the results of the study have revealed that there are five factors which may have substantial relationship to intelligibility: sound accuracy, word stress, lexical accuracy, adjustments in connected speech, and sentence stress. Among these factors, word stress has turned out to be the most significant factor for intelligibility. As far as the ESL speakers are concerned, there are also five factors which may predict intelligibility: sound accuracy, word stress, sentence stress, intonation, and rhythm. Of these five factors, sound accuracy has turned out to be the most significant factor determining intelligibility. Interestingly, although the most significant factor for the ENL speakers is different from that for the ESL speakers, the study has also revealed that three contributing factors (i.e., sound accuracy, word stress, and sentence stress) have been evaluated as significant factors equally by the ENL speakers and the ESL speakers. Despite of the shared factors determining intelligibility, the ENL speakers assessed adjustments in connected speech and lexical accuracy to be possible contributors to intelligibility while the ESL speakers estimated intonation and rhythm as potential predictors for intelligibility.

For Indonesian EFL learners, in the case of the native English speakers, the result of the study has revealed that there are three factors which may have substantial relationship to intelligibility: adjustments in connected speech, fluency, and lexical accuracy. Among these factors, the component of adjustments in connected speech has shown to be the most significant factor for intelligibility. As far as the ESL speakers are concerned, there are also three factors which may predict intelligibility: sound accuracy, adjustments in connected speech, and fluency. Of these three factors, sound accuracy appears to be the most significant factor determining intelligibility.

Based on the findings, we come to a general conclusion that sound accuracy emerged as the most significant factor determining global intelligibility (ESL speakers for Japanese EFL learners and ESL speakers for Indonesian EFL learners), word stress (ENL speakers for Japanese EFL learners), and adjustments in connected speech (ENL speakers for Indonesian EFL learners).

Regarding the most significant factors for intelligibility, it may be summarized that there is significant difference in the assessment of the contributing factors between the ENL speakers and the ESL speakers, either for Japanese EFL learners or for Indonesian EFL learners. For Japanese EFL learners, the ENL speakers judged word stress as the most important factor for intelligibility while the ESL speakers ascertained that sound accuracy was the most crucial. For Indonesian EFL learners, the ENL speakers assessed adjustments in connected speech as the most important factor for intelligibility while the ESL speakers found out that sound accuracy was the most important. Interestingly, the findings of both studies have shown that the ESL speakers have posted sound accuracy as the paramount factor determining intelligibility for both Japanese and Indonesian EFL learners.

A closer examination of the difference in the assessment of EFL learners' intelligibility has discovered that there are at least three reasons for the different assessments between the ENL speakers and the ESL speakers. The first prominent reason for these differences is the assessors' familiarity with EFL speakers' utterances (Jenkins, 2000). As a matter of fact, four out of the five ENL-speaker assessors involved in the study are those who have lived in Japan more than five years, and therefore they are very knowledgeable of Japanese learners' English pronunciation, while all the ESL speakers have lived in Japan for less than two years. This factor may be responsible for the difference in the assessment of the EFL speakers' utterances between the ENL speakers and the ESL speakers. The ENL-speaker assessors seem to concentrate their assessments not only on the EFL speakers' sound accuracy but also on other suprasegmental features or language components which they think are more important, such as word stress, adjustments in connected speech, and lexical accuracy. In contrast, the ESL speakers find it more difficult to understand the utterance of Japanese secondary school students because the way Japanese learners pronounce English words is often different from the way they do. Unlike the ENL-speaker assessors, their experience of living in Japan for a relatively short time with less exposure to Japanese speakers' English pronunciation may have hampered their understanding of messages being conveyed. The fact that the assessment of intelligibility is substantially influenced by the familiarity with EFL speakers' pronunciation is also supported by the ENL-speaker assessors who claim that the relative ease with which they understand the utterance of Japanese secondary school students is due to their experience of living in Japan for a long time, as expressed in the following comments by the ENL speakers on the EFL speakers' utterances:

Excerpt 1 (NE-2)

“[English spoken by Japanese EFL learners is] easy to understand for people who are accustomed to

Japanese pronunciation or vocabulary choice.”

Excerpt 2 (NE-3)

“I would imagine it (English spoken by Japanese EFL learners) very difficult for people without experience [of living in Japan] to understand.”

The second reason for the difference in the assessment of the contributing factors between the ENL speakers and the ESL speakers concerns the assessors' profession. All the ENL-speaker assessors are involved in academic life at Japanese universities as lecturers. This makes them more alert to linguistic aspects of pronunciation and intelligibility. Compared with the ENL-speaker assessors, all the ESL-speaker assessors are postgraduate students who have few chances to interact in English with Japanese students although they are also involved in academic life at Japanese universities. The ESL speakers in the study communicate mostly with their group members alone, namely, other English-speaking foreign students. When talking to each other, they may pay more attention to messages being communicated than the linguistic aspects of language, more specifically suprasegmental features such as word stress.

As a cumulative point of the first and second reasons, the assessors' tolerance may become the third rationale behind the difference. Being ENL speakers who are more familiar with the EFL speakers' utterances and have language teaching experience for such a long time makes them more tolerant towards EFL speakers' word pronunciation accuracy than the ESL-speaker assessors are. At the same time the ENL speakers assessed more deeply the EFL speakers' utterances, especially those which hinder oral communication such as word stress.

The findings of the study, particularly that sound accuracy is regarded as the priority for determining intelligibility, is partly consistent with the findings contributed by a number of studies on the relative importance of segmental features to intelligibility (Jenkins, 1998, 2000, 2002; Moedjito, 2006b, 2006c; Rajadurai, 2001; Suenobu, Kanzaki, & Yamane, 1992; Zielinski, 2003). For example, Jenkins (2000) proposes *Lingua Franca Core (LFC)* as a crucial safeguard for intelligibility between NNSs (Jenkins, 1998; 2000). On the basis of her empirical research, Jenkins suggests that LFC should cover all consonant sounds (except the pair of inter-dental fricatives /θ/ and /ð/, and the dark /l/ or [ɫ]), vowel sounds, and nuclear stresses.

When NSs and NNSs communicate with each other, word stress or adjustments in connected speech may be more crucial as a factor determining intelligibility than sound accuracy, depending on the EFL learners' mother tongue. As for Japanese EFL learners, attention should be placed more on word stress, which in turn is reflected by the inclusion of primary word stress recognition in the paper-and-pencil test of pronunciation in the nationwide English tests by the National Centre for University Entrance Examinations. For Indonesian EFL learners, however, the component of adjustments in connected speech needs more attention. This may happen because in the phonological system of either the Indonesian language—the national language of Indonesia—and the Sasak language—the native language of the participants of the present study (Lombok island in the province of Nusa Tenggara Barat)—there is no properties of adjustments in connected speech. The fact that word stress is a prominent factor determining intelligibility in native and non-native interaction is also consonant with a number of studies which explored the impact of suprasegmental features on intelligibility by contrasting it with the impact of other factors such as phoneme accuracy and accentedness (e.g., Anderson-Hsieh & Koehler, 1988; Anderson-Hsieh, Johnson, & Koehler, 1992; Derwing, Munro, & Wiebe, 1998). A recent study on the role of lexical stress (Field, 2005) also discovered that the extent to which intelligibility was compromised depended greatly on the direction in which lexical stress was shifted and the changes in the vowel quality. Moreover, the findings of the study has discovered that sound accuracy become the most significant factor determining successful communication among NNSs (ESL speakers and EFL speakers—in this case Japanese and Indonesian EFL speakers). This finding is really supports Jenkins' *Lingua Franca Core* (Jenkins, 2000).

However, as the main goal of pronunciation teaching should be to help learners attain global intelligibility, identifying the primary contributing factors of intelligibility required of NNSs in their attempts to communicate either with NSs or with other NNSs separately is not sufficient. With regard to the issue of global intelligibility, researchers and educators need to accommodate all the factors determining intelligibility of both types of interaction, not only between NSs and NNSs interaction but also between NNSs. Concerning the results of the study, both of segmental features (i.e., sound accuracy) and suprasegmental features (i.e., word stress and adjustments in connected speech) should be considered as the common primary factors contributing to global intelligibility.

#### 4. Conclusion

Although the present study has revealed several interesting facts about factors determining intelligibility of EFL learners' oral communication, this author must admit that the study has also several limitations. First, the data analysis was based on EFL speakers' utterances on a single topic which lasted only one minute. Secondly, the participants of the study were limited in age; only senior high school students participated in the study (as the providers of the EFL learners' utterances). In spite of these shortcomings, several interesting facts are disclosed. The main findings of the study indicate that for comfortable intelligibility—intelligibility required for the interaction between NSs and NNSs—word stress or adjustments in connected speech may be the most essential while for mutual intelligibility—intelligibility required for the interaction between NNSs—sound accuracy is crucial.

As the pedagogical implication of the study, the three potential factors determining global intelligibility (sound accuracy, word stress, and adjustments in connected speech) should be recognized as the crucial elements in pronunciation teaching. However, some aspects related to the potential factors are still necessary to scrutinize, such as which consonants and vowels are important in pronunciation instruction, which types of word stress and adjustments in connected speech should be part of pronunciation teaching.

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