## SUPRASEGMENTAL FEATURES OF WORD STRESS AMONG INDIAN ESL AND INDONESIAN EFL SPEAKERS: A CROSS-CULTURAL PERSPECTIVE

#### THESIS

By: Abrara Finnahari NIM 18320129



# DEPARTMENT OF ENGLISH LITERATURE FACULTY OF HUMANITIES UNIVERSITAS ISLAM NEGERI MAULANA MALIK IBRAHIM MALANG 2025

# SUPRASEGMENTAL FEATURES OF ENGLISH WORD STRESS AMONG INDIAN ESL AND INDONESIAN EFL SPEAKERS: A CROSS-CULTURAL PERSPECTIVE

#### THESIS

Presented to: Universitas Islam Negeri Maulana Malik Ibrahim Malang In Partial Fulfillment of the Requirements for the Degree of *Sarjana Sastra* (S.S)

> By: **Abrara Finnahari** NIM: 18320129

Advisor: Deny Efita Nur Rakhmawati, M.Pd NIP 198505302009122006



# DEPARTMENT OF ENGLISH LITERATURE FACULTY OF HUMANITIES UNIVERSITAS ISLAM NEGERI MAULANA MALIK IBRAHIM MALANG 2025

### STATEMENT OF AUTHORSHIP

I state that the thesis entitled "Suprasegmental Features of English Word Stress Among Indian ESL and Indonesian EFL Speakers: A Cross-Cultural Perspective" is my original work. I do not included any materials previously written of published by another person, except those cited as references and written in the references and written in the bibliography. Hereby, if there is any objection or claim, I am the only person who is responsible for that.

Malang, 20 May 2025



# APPROVAL SHEET

This is to certify that Abrara Finnahari's thesis entitled **""Suprasegmental Features of English Word Stress Among Indian ESL and Indonesian EFL Speakers: A Cross-Cultural Perspective"** has been approved for examination at Faculty of Humanities, Universitas Islam Negeri Maulana Malik Ibrahim Malang, as one of the requirements for the degree of *Sarjana Sastra* (S.S).

Malang, 30 Juni 2025

Approved by

Adviso

Deny Efita Nur Rakhmawati, M.Pd NIP 198505302009122006

Head of the Department of English literature

Ribut Wahyudi, M.Ed., Ph.D NIP. 198112052011011007

ERIA knowledge the Dean, ALIK IND

# **LEGITIMATION SHEET**

This is to certify that Abrara Finnahari's thesis entitled "Suprasegmental Features of English Word Stress Among Indian ESL and Indonesian EFL Speakers: A Cross-Cultural Perspective" has been approved by the Board of Examiners as the one of the requirements for the degree of Sarjana Sastra (S.S).

Malang, 25 June 2025





# ΜΟΤΤΟ

Stay pretty. Be educated. Dress well. Get money.

## **DEDICATION**

I dedicate this thesis to:

My beautiful soul who helped me thru my ups and downs, to keep going accomplished this thesis no matter how hard it is, this is special for you; Abrara Finnahari.

My beloved mom and dad, for always loving and supporting me with much love and flowery path. This is a special feeling of gratitude to you; Ibu Nian Akhsanti and Bapak Idris.

My lovely sister who always being my all ears of everything and have never left my side; Hiqqin 'Ilmi.

#### ACKNOWLEDGMENT

To start with, I would like to say *Alhamdulillahirabbil alamin*, all praise and gratitude to Allah SWT, the Lord of the universe for his gracious mercy and tremendous blessing, I would able to accomplish the thesis entitled *"Suprasegmental Features of English Word Stress Among Indian ESL and Indonesian EFL Speakers: A Cross-Cultural Perspective."* Sholawats and salams, always be presented to the great prophet Muhammad SAW who has guided us for better life from the misleading era into the bright and blessed era. Hopefully, we get his grace in the day of qiyamah later.

I also would like to express heartfelt gratitude to everyone who have supported and contributed to the successful completion of this thesis. First and foremost, I am deeply sending my respect and grateful as well as the sincerity to my parents, my father, Idris and my delicate mother, Nian Akhsanti. Thank you for supporting me both materially and non-materially. Thank you for always being my pillars of strength throughout this academic journey. Thank you for belief in my potential, even during moments of self-doubt, has been a guiding light that kept me moving forward. Likewise, my heartfelt appreciation to my dear little sister, Hiqqin 'Ilmi for unwavering support and encouragement for me so I keep focused and determined to complete this research.

Accordingly, I would like to give my most hospitable respect to my supervisor, Mrs. Deny Efita Nur Rakhmawati, M.Pd., for the invaluable guidance, unwavering support, and insightful feedback throughout this research journey. I also extend my appreciation to the Dean and staff of Faculty of Humanities UIN Maulana Malik Ibrahim Malang, and the Head of English Literature Department who facilitated my study. Thank you for all the lecturers of English Literature Department for the dedication to my education and research so that I can accomplished my thesis.

Lastly, my sincere thanks go to my college friends for their encouragement and camaraderie. I cherish the memories we have created together, the laughter we shared, and the moments of joy that provided much-needed respite from the pressures of academia. I also would like to express my great thanks to my best friends, Batara Squad who has been being my childhood mate and still counting, Maldives squad, and Prevengers especially Rosalia Salsabillah Aufanisa who always being my all ears in my ups and downs and my broken heart era during writing this thesis.

Eventually, I hope this research can assist and satisfy those who need it even though I know this thesis is far from flawless. In sum, I genuinely appreciate all criticism and suggestions.

Malang, 20 May 2025



#### ABSTRACT

Finnahari, Abrara 2025). Suprasegmental Features of English Word Stress Among Indian ESL and Indonesian EFL Speaker: A Cross-Cultural Perspective. Undergraduate Thesis. Department of English Literature, Faculty of Humanities, Universitas Islam Negeri Maulana Malik Ibrahim, Advisor, Deny Efits Nur Rakhmawati, M.Pd.

**Keywords:** Word Stress, Suprasegmental Features, Indian ESL, Indonesian EFL, Cross-Cultural Perspective, PRAAT, Rhythm Class Hypothesis

This study investigates the suprasegmental feature of English word stress by comparing Indian ESL (English as a Second Language) and Indonesian EFL (English as a Foreign Language) speakers in a real-world, professional setting. Drawing on Kreidler's theory and the Rhythm Class Hypothesis, this research examines how cultural and linguistic backgrounds influence the production of word stress. Using PRAAT software to acoustically analyze speech from natural conversations, the study focuses on identifying stress placement through pitch, amplitude, and duration. The findings reveal that Indian ESL speakers generally exhibit more native-like stress patterns, showing clearer prominence on stressed syllables, while Indonesian EFL speakers demonstrate flatter intonation, likely due to their syllable-timed L1 background. This cross-cultural comparison highlights how word stress is shaped by rhythm systems, exposure, and communicative habits. The results offer pedagogical implications for pronunciation teaching and contribute to the broader understanding of suprasegmental variation in English as an international language.

#### الملخص

فينهاري، أبرارا (2025). السمات فوق المقطعية لتوكيد الكلمات في اللغة الإنجليزية بين متعلمي اللغة . الإنجليزية كلغة ثانية من الهند ومتعلمي اللغة الإنجليزية كلغة أجنبية من إندونيسيا: منظور ثقافي متقاطع . أطروحة مرحلة البكالوريوس، قسم الأدب الإنجليزي، كلية العلوم الإنسانية، جامعة الدولة الإسلامية مولانا . M.Pd.

الكلمات المفتاحية: توكيد الكلمات، السمات فوق المقطعية، الهند، إندونيسيا، منظور ثقافي متقاطع PRAAT، الكلمات المفتاحية: فرضية الفئة الإيقاعية

تتناول هذه الدراسة السمات فوق المقطعية لتوكيد الكلمات في اللغة الإنجليزية من خلال مقارنة المتحدثين الهنود الذين يتعلمون اللغة الإنجليزية كلغة ثانية والمتحدثين الإندونيسيين الذين يتعلمونها كلغة أجنبية، وذلك في سياق مهني واقعي. بالاعتماد على نظرية كرايدلر وفرضية الفئة الإيقاعية، تبحث هذه الدراسة في كيفية لتحليل النطق صوتيًا PRAAT تأثير الخلفيات الثقافية واللغوية على إنتاج توكيد الكلمات. باستخدام برنامج ،من المحادثات الطبيعية، تركز الدراسة على تحديد مواضع التوكيد من خلال طبقة الصوت، وشدة الصوت ،والمدة الزمنية. تكشف النتائج أن المتحدثين الهنود يظهرون نمطًا في التوكيد أقرب إلى الناطقين الأصليين مواصوح أكبر في بروز المقاطع المؤكدة، في حين يُظهر المتحدثون الإندونيسيون نغمة مسطحة نتيجة لكون لغتهم الأم تعتمد على توقيت المقاطع. يوضح هذا المقارنة الثقافية كيف يتشكل توكيد الكلمات مسلحة نتيجة لكون العنهم الأم تعتمد على توقيت المقاطع المؤكدة، في حين يُظهر المتحدثون الإندونيسيون نغمة مسطحة نتيجة لكون لغتهم الأم تعتمد على توقيت المقاطع. يوضح هذا المقارنة الثقافية كيف يتشكل توكيد الكلمات من خلال الأنطمة الإيقاعية والتعرض للغة والعادات التواصلية. تقدم النتائج دلالات تعليم النطق، وتسهم في الإيقاعية والتعرض للغة والعادات التواصلية. تقدم النتائج دلالات تعليمية في مجال تعليم النطق، وتسهم في ويقيم الإيقاعية والتعرض للغة والعادات الواملية. ومن علي وقا تعليمة في مجال تعليم النطق، وتسهم في الهم الإيقاعية والتعرض للغة والعادات التواصلية. تقدم النتائج دلالات تعليمية في مالغة الإنجليزية كلغة دولية .

#### ABSTRAK

Finnahari, Abrara (2025). Suprasegmental Features of English Word Stress Among Indian ESL and Indonesian EFL Speaker: A Cross-Cultural Perspective. Undergraduate Thesis. Department of English Literature, Faculty of Humanities, Universitas Islam Negeri Maulana Malik Ibrahim, Advisor, Deny Efits Nur Rakhmawati, M.Pd.

**Kata kunci:** Word Stress, Fitur Suprasegmental, Penutur ESL India, Penutur EFL Indonesia, Perspektif Lintas Budaya, PRAAT, Hipotesis Kelas Ritme

Penelitian ini mengeksplorasi fitur suprasegmental dalam penekanan kata (word stress) bahasa Inggris dengan membandingkan penutur ESL (English as a Second Language) dari India dan penutur EFL (English as a Foreign Language) dari Indonesia dalam konteks profesional yang nyata. Mengacu pada teori Kreidler dan Hipotesis Kelas Ritme (Rhythm Class Hypothesis), penelitian ini menganalisis bagaimana latar belakang linguistik dan budaya mempengaruhi produksi tekanan kata dalam bahasa Inggris. Melalui perangkat lunak PRAAT, peneliti menganalisis secara akustik percakapan alami untuk mengidentifikasi lokasi tekanan berdasarkan pitch, amplitudo, dan durasi. Hasil penelitian menunjukkan bahwa penutur ESL dari India cenderung menghasilkan pola tekanan yang lebih mendekati penutur asli, sementara penutur EFL dari Indonesia menunjukkan pola intonasi yang lebih datar, yang kemungkinan dipengaruhi oleh sistem ritme bahasa ibu mereka yang bertipe syllable-timed. Perbandingan lintas budaya ini menyoroti pengaruh sistem ritme, paparan bahasa, dan kebiasaan komunikasi terhadap produksi word stress. Temuan ini memiliki implikasi dalam pengajaran pelafalan dan memberikan kontribusi pada pemahaman tentang variasi suprasegmental dalam bahasa Inggris sebagai bahasa internasional.

# **TABLE OF CONTENTS**

THESIS COVER	i
STATEMENT OF AUTHORSHIP	ii
DEDICATION	vi
ACKNOWLEDGMENT	vii
ABSTRACT	ix
الملخص	X
TABLE OF CONTENTS	xii
CHAPTER 1 INTRODUCTION	1
A. Background of the Study	1
B. Research Questions	
C. Significant of the Study	14
D. Scope and Limitation	
E. Definition of Key Terms	
CHAPTER II REVIEW OF RELATED LITERATURE	19
A. Suprasegmental	
A. Suprasegmental B. Word Stress	
	21
B. Word Stress	
B. Word Stress B.1 Definition of Word Stress	21 
<ul> <li>B. Word Stress</li> <li>B.1 Definition of Word Stress</li> <li>B.2 Function of Word Stress in English</li> </ul>	
<ul> <li>B. Word Stress</li> <li>B.1 Definition of Word Stress</li> <li>B.2 Function of Word Stress in English</li> <li>B.3 Types of Word Stress</li> </ul>	
<ul> <li>B. Word Stress</li> <li>B.1 Definition of Word Stress</li> <li>B.2 Function of Word Stress in English</li> <li>B.3 Types of Word Stress</li> <li>B.4 Acoustic Features of Word Stress</li> </ul>	21 21 24 25 28
<ul> <li>B. Word Stress</li> <li>B.1 Definition of Word Stress</li> <li>B.2 Function of Word Stress in English</li> <li>B.3 Types of Word Stress</li> <li>B.4 Acoustic Features of Word Stress</li> <li>C. English as Foreign Language Speaker (EFL)</li> </ul>	21 21 24 25 28 28 30
<ul> <li>B. Word Stress</li> <li>B.1 Definition of Word Stress</li> <li>B.2 Function of Word Stress in English</li> <li>B.3 Types of Word Stress</li> <li>B.4 Acoustic Features of Word Stress</li> <li>C. English as Foreign Language Speaker (EFL)</li> <li>D. English as a Second Language Speaker (ESL)</li> </ul>	21 21 24 25 28 28 30 31
<ul> <li>B. Word Stress</li> <li>B.1 Definition of Word Stress</li> <li>B.2 Function of Word Stress in English</li> <li>B.3 Types of Word Stress</li> <li>B.4 Acoustic Features of Word Stress</li> <li>C. English as Foreign Language Speaker (EFL)</li> <li>D. English as a Second Language Speaker (ESL)</li> <li>E. Cross-Cultural Perspective</li> </ul>	21 21 24 25 28 28 30 31 33
<ul> <li>B. Word Stress</li> <li>B.1 Definition of Word Stress</li> <li>B.2 Function of Word Stress in English</li> <li>B.3 Types of Word Stress</li> <li>B.4 Acoustic Features of Word Stress</li> <li>C. English as Foreign Language Speaker (EFL)</li> <li>D. English as a Second Language Speaker (ESL)</li> <li>E. Cross-Cultural Perspective</li> <li>F. PRAAT.</li> </ul>	21 21 24 25 28 28 28 30 31 33 33 <b>36</b>
<ul> <li>B. Word Stress</li> <li>B.1 Definition of Word Stress</li> <li>B.2 Function of Word Stress in English</li> <li>B.3 Types of Word Stress</li> <li>B.4 Acoustic Features of Word Stress</li> <li>C. English as Foreign Language Speaker (EFL)</li> <li>D. English as a Second Language Speaker (ESL)</li> <li>E. Cross-Cultural Perspective</li> <li>F. PRAAT.</li> </ul>	21 21 24 25 28 28 30 31 33 33 33 33 36

D. Data Analysis
CHAPTER IV FINDINGS AND DISCUSSION43
A. Findings
1. Indian ESL Speakers and Indonesian EFL Speakers produce English Word
Stress during Conversational Speech as Examined Through PRAAT 44
2. Cultural Backgound Shape the Suprasegmental Features of English Word
Stress
B. Discussions
CHAPTER V CONCLUSION
A. Conclusion
B. Suggestion
References
APPENDIX
Indian ESL Speakers100
Indonesian EFL Speakers101

### CHAPTER 1 INTRODUCTION

This chapter discusses the introduction which contains the background, objective, significance, scope and limitadtions, and definition of key terms used in this study.

#### A. Background of the Study

Nowadays when we talk about English, there is incredibly close relation to intonation and word stress. The emphasis on intonation and stress of language enters the realm of phonology which knowing a language means knowing a sound to signal meaning (McMahoon, 2002). In the field of phonology, suprasegmental features-such as intonation and word stress-are essential in constructing meaning and shaping the rhythm and emotion behind spoken language. These features play a pivotal role not only in intelligibility but also in signaling speaker intent and attitude. As English continues to serve as a global lingua franca, its usage across diverse linguistic and cultural contexts-particularly by non-native speakers—raises significant questions about how such suprasegmental features are acquired, transferred, and manifested differently depending on the speaker's linguistic background, and cultural context. English is used by many countries other than England and America as a second language or lingua franca where commonly these people are known as non-native speakers. In particular, there are countries that use English as their second official language (ESL) which has as important a role as their mother tongue such as India, Singapore, Nigeria, etc. On the other hand, there are also countries that use English only for the sake of learning and foreign language communication (EFL), such as Indonesia, Sweden, Korea, etc. According (Stern, 1983), the differences between "foreign language" and "second language" is in terms of language functions, learning purposes, language environment and learning methods. However, both EFL speakers and ESL speakers certainly have different background languages such as mother tongue and their own language accents. Another different background that probably interfere speaker towards language especially in speaking English is culture.

Culture is important where culture not only dictates who talks to whom, about what, and how the communication proceeds, it also helps to determine how people encode messages, the meaning they have for messages may or may not be sent, noticed or interpreted. According to Nurmaisyah (2020), culture is recognized as instrumental in shaping speakers' communicative competence, in both their first and subsequent language. Even people live within the same geographic boundaries, there are problems in the use of language. Bearing in mind the notion that word usage, and meanings are learned, and that each culture, subculture, or subgroup has different experiences that help shape usage and meaning. By having those difference, somehow it will probably have an influence on English pronunciation both in segmental and suprasegmental which is increase researcher interest to do the research.

In a nutshell, segmental is the way we produce segment of vowel and consonant, place and manner of articulation. However, it turns out that English is not only dealing with how and where to produce sound, but beyond the segment where English is also dealing with how to give the music the way we produce sound including intonation and word stress which is a short definition of suprasegmental. According to Munro (1995), it showed that suprasegmental are fundamental for understanding foreign accentedness and foreign accent detection. In addition, there have been experiments that have been done in this area resulting in concepts about suprasegmentals (Fresneda et al, 2021; Lulita, 2018; Okim Kang et al, 2010) where the relevance of pitch, tone, loudness and rhythm and how they are decoded may change the message that is received largely. Accordingly, Suprasegmental features are usually either listed as the set of the features consisting of pitch, stress, and elements that is related to the loudness and softness of the voice, the high and low of the voice, the length and shortness of the sound or a distance current (Lehiste 1970, p.1.).

The researcher will only focus on word stress in English as lingua franca that is almost used worldwide which according to (Anderson, 2018) both of these are signals of changes in the meaning of words considering suprasegmental has features such as Intonation, stress, pitch, loudness, and length of the sound. Both intonation and word stress are not only to change or give meaning to the word, yet also to give or emotional attitude of the speaker. This refers to Kreidler (1998) that prosody or suprasegmental consists of intonation and stress (speech tone) that can distinguish meaning. Moreover, intonation and stress are closely linked. In fact, it is impossible to dissociate them since they go hand in hand. In this present study, the researcher expects to find out whether there are differences in intonation and emphasis of English words through ESL and EFL speaker conversations considering both of them are non-native speaker of English. Look at prior study in order to continue the research, earlier studies that specifically examines the features of suprasegmental have been conducted by Herlina (2011); Sukarni et al (2020); Wang (2020); Azizah et al (2021), they analysed the mistakes in the use of segmental and suprasegmental features both in terms of intonation and sound emphasis in speaking with the result showed that mother tongue and lack of practice cause the inappropriate in pronouncing English intonation and word stress in students. On the other hand, the research that was conducted by Yenkimaleki et al. (2021) reveal that teaching segmental contrasts followed by production-focused practice strongly improved the intelligibility of EFL learners' speech and teaching suprasegmental features followed by production-focused practice improved the comprehensibility of EFL learners. In addition, it was also conducted by Ahmad Bani (2018) that teaching suprasegmental technique such as Intonation and word stress must incredibly concerned so that the students know how to pronounce English with intonation and word stress properly.

In addition, the analysis of the suprasegmental was also addressed by Sürüç Şen (2021), analysed and compared several suprasegmental features of speech data collected from Turkish English learners and American English native speakers with the result, non-native speaker had longer lag duration in producing stress than native speaker. In this case, a longer lag duration than conventional use in speaking may impede the flow of communication, leading to potential disruption to mutual intelligibility. This paper recommends that future researchers examine potential reasons why such suprasegmental differences may occur. In addition, Valigura et al. (2020) examined the pronunciation dimensions of Ukrainian EFL teachers' professional portrait to address specific differences at the segmental and prosodic levels of speech including the characteristics of articulation of vowels, consonants

The result showed that the most common violation at the and intonation. suprasegmental level is incorrect intonation contours while providing basic and additional information that hinders speech comprehension. Moreover, Zarifi & Sayyadi (2015) conducted a study investigating how ESFPs (English Suprasegmental Features of Pronunciation) were viewed and treated by language instructors in Iranian English language centres. Results emerging from detailed data analysis show that ESFP is considered by respondents to be a prominent aspect of language proficiency due to its substantial sensitivity in speech perception and production as well as increasing self-esteem and motivation of language learners. Additionally, another several studies also have investigated the impact of suprasegmental features among non-native English speakers in the past five years, there remains a conspicuous gap in cross-cultural comparisons-especially between ESL and EFL learners. For example, Sardegna and Jarosz (2023) highlighted the promising role of technological tools like YouGlish in enhancing learners' awareness of word stress through autonomous learning. Similarly, Nadeem and Rahman (2023) explored gender-based stress pattern differences among Khowar ESL speakers, revealing that female participants exhibited differing levels of accuracy in producing English word stress. Building on this, Nuraini et al. (2024) underscored that verbs, in particular, tend to present the most significant challenges for Indonesian learners in terms of stress placement, often leading to unintelligible speech. At the same time, research by Wardana et al. (2023) revealed that phonological awareness training could positively influence learners' motivation and accuracy in pronunciation, suggesting a clear pedagogical

implication for incorporating suprasegmental training. From a Sociolinguistics perspective, Ardini and Senowarsito (2023) offered a comparative analysis of prosodic features among Javanese-English speakers (Jonglish) and native English speakers, revealing differences in pitch range, rhythm, and speech tempo that reflect deep cultural influences on suprasegmental realization. Taken together, these studies affirm the significance of suprasegmental instruction in pronunciation pedagogy. However, they primarily focus on either EFL or ESL learners in isolation, typically within academic or controlled classroom settings. There remains a critical need to understand how these features are realized across cultural lines— especially in natural, professional interactions between speakers from differing English-learning environments.

Other research conducted suprasegmental comparisons that occur between native and non-native speakers, for instance, (Sürüç en, N, 2021) addressed the suprasegmental features of Turkish learner (non-native speaker) and American native speaker. Moreover, in teaching English, suprasegmental research was also conducted by (Zarifi et al, 2015) about how English suprasegmental features ae viewed and treated by instructors in Iranian private language. Among the various suprasegmental features, word stress holds particular importance because it directly influences intelligibility and comprehension in both native and non-native interactions. As a core feature of suprasegmental phonology, word strees plays a pivotal role in shaping how meaning is perceived and understood in spoken English. Particularly in intercultural contexts, accurate stress placement serves not only to enhance clarity but also to prevent potential misunderstandings in everyday communication. As noted by Field (2005), misplaced word stress often leads to decreased intelligibility and listener confusion, even when all segmental elements of the word are correct. This underscores the importance of focusing on word stress when analyzing non-native English speakers from different linguistic backgrounds. Furthermore, suprasegmental features like word stress are integral to pragmatic success in global English communication. Levis (2005) emphasizes that prosodic competence—including the ability to place stress appropriately—contributes to more effective, listener-friendly speech. It enables speakers to signal meaning, emphasize contrast, and manage discourse flow, especially in professional or intercultural interactions such as the workplace setting observed in this research.

In English, stress is part of the language since it is used to communicate rapidly and accurately, even in difficult conditions. It is prominent because when someone pronounces the first syllable and second syllable in an English word, English speakers hear it as a noun, whereas when the second syllable is stronger the word is heard as a verb Roach (1998, p.44). n other words, speakers used stress to highlight the information they think it is important and if people do not use stress, the listener will be confused and probably can cause misunderstanding for language. It is supported by McMahoon (2002, p. 118) in concept stress stated that "Native speakers of English are intuitively aware that certain syllables in each word, and one syllable in particular, will be more phonetically prominent than others '. In addition, in English, Stress is also distinctive, for instance, **Black**board means a dark surface on a wall or a frame that a teacher writes on with chalk. Meanwhile, if it is Black**board**, it can mean that the board is black. Accordingly, bear in mind that

ESL and EFL are non-native speakers, the researcher wanted to find out whether the stress function was performed correctly when they spoke English, or whether there was a difference between the two.

Thus, this study addresses the gap by comparing suprasegmental features specifically word stress and between Indian ESL and Indonesian EFL speakers. Drawing from natural speech data collected in a corporate context and analyzed through PRAAT software, this research offers a unique contribution not only through its cross-cultural focus but also by exploring suprasegmentals in real-world communication settings. This approach moves beyond the academic sphere, providing new insights into how speakers from different linguistic and cultural backgrounds realize prosodic features in everyday English communication. Hence, suprasegmental is one of crucial topic that increase researcher interest to be investigate because suprasegmental play a crucial role in communication. It engagement to characterize all kinds of meaning especially the attitude of the speakers towards what they say and how one utterance relates to another.

In sum, several previous studies involving suprasegmental errors made by speakers using NNS objects of EFL students including Indonesian students. In addition, several articles examine how students' ability to pronounce English words and most of the results they have differences in intonation and word stress which are influenced by several factors. Furthermore, there is also an article that discusses the duration of intonation and stress in speaking can affect mutual intelligibility. Moreover, there is an article addressing specific differences between segmental and prosodic levels of speech including vowels, consonants, pitch, tempo, and intonation and the discussion about how important intonation is affecting conversation. However, there have been few attempts to investigate the differences in suprasegmental features in the form of intonation and word stress which is expected to be found in EFL and ESL speakers as the objects. Hence, the researcher attempts to involve Indonesian as EFL speakers and Indian as ESL speakers due to the researcher observed the language phenomenon in one of the companies in Batam where the researcher did internship. There were several ESL speakers as Indians who worked as managers at the company who used English to communicate with EFL speaker or even native speaker.

Indeed, there is no standard in speaking English as long as the speaker and the interlocutor can understand each other. However, it should be underlined that English also has grammar and several components in it including suprasegmental features, especially intonation and word stress that must be followed so that to see if there is a difference between EFL and ESL speakers the researcher proposes this topic. As evidenced by data from prior studies, there remains a lack of comparative research that specifically explores how Indian ESL and Indonesian EFL speakers produce English word stress. Most existing work examines learners individually or emphasizes segmental features rather than suprasegmentals. For instance, Nurpahmi et al. (2023) and Nuraini et al. (2024) reported that Indonesian EFL learners often misplace stress, particularly in verbs, due to lack of exposure and limited prosodic training. Meanwhile, Sinha and Sharma (2023) observed that Indian ESL speakers tend to sow more native-like stress patterns, likely because of their frequent engagement with English in daily communication. These findings suggest that learners from different contexts approach word stress with varying levels of accuracy. However, most of these studies were conducted in isolation, focusing only on one cultural or national group at a time, and often within controlled classroom settings.

Earlier the researcher talked about that culture may shape how people speak in English. Therefore, to gain a more comprehensive understanding of how word stress is influenced not only by language proficiency but also by deeper linguistic and cultural factors, it is necessary to adopt a cross-cultural perspective. Research has shown that prosodic features such as word stress are shaped by the rhythmic systems of speakers' first languages—whether stress-timed or syllable-timed (Grabe & Low, 2002; Smirkou, 2021). Additionally, cultural exposure, educational environment, and communicative habits also play crucial roles in how stress is perceived and produced (Gibson & Bernales, 2020; Liu & Yan, 2025). Even though more attention has been given to these influences, there's still limited research comparing how individuals from different cultural backgrounds use word stress in real-world professional settings.

By comparing Indian ESL and Indonesian EFL speakers in a non-academic setting, this study aims to fill that gap. It provides new insights into how cultural background shapes the prosodic features of spoken English, particularly word stress, and offers implications for pronunciation pedagogy and intercultural understanding. This study aims to fill that gap by directly comparing the production of English word stress between Indian ESL and Indonesian EFL speakers using acoustic analysis tools such as PRAAT for objective evaluation. The novelty of this research lies in its real-world context, focusing on workplace communication rather than traditional classroom settings. By narrowing the scope to Indian and Indonesian speakers, the study highlights how English is used not only in academic environments but also as a medium of communication in professional settings, such as meetings. The researcher expects to identify distinct differences in word stress patterns between ESL and EFL speakers, offering valuable insights into how linguistic and cultural backgrounds influence pronunciation. These findings will contribute to applied linguistics and pronunciation pedagogy by addressing an underexplored aspect of cross-cultural English communication.

Comparing ESL (English as a Second Language) and EFL (English as a Foreign Language) speakers is valuable in linguistic research, especially in studies that focus on suprasegmental features such as word stress. This is because both groups learn and use English in different environments, which leads to different outcomes in their pronunciation and stress patterns. ESL speakers usually live in countries where English has an official or widely used role, such as in India. They are exposed to English in daily communication—at work, in schools, and in the media. This constant exposure helps them develop a more natural and accurate use of English stress patterns. In contrast, EFL speakers, like those from Indonesia, typically use English only in limited contexts such as classrooms or formal situations. As a result, they may have less consistent control over English stress and are more likely to apply stress rules from their native language.

By comparing these two groups, researchers can better understand how the learning environment affects English pronunciation. It also helps identify specific challenges that EFL learners face when producing English word stress. This comparison is not only academically meaningful but also useful for improving teaching methods and pronunciation instruction in different parts of the world. Furthermore, the comparison provides insight into how cultural, educational, and social factors influence the way English is spoken in different countries. It allows us to see how English is shaped by local contexts, which is important in today's global communication landscape.

In analyzing stress, the researcher uses two theories which are the theory of suprasegmental by Kreidler to analyse the word stress. Besides, the researcher will analyse the word stress used in ESL and EFL speakers by measuring device such as PRAAT which is software analysis since the researcher cannot analyse only using phone recording. In recent years, the use of acoustic analysis tools in phonetic studies has gained significant attention, particularly in research involving suprasegmental features such as word stress, pitch, and intonation. One of the most widely used tools for this purpose is **PRAAT**, a free software developed by Boersma and Weenink (2023), which allows researchers to analyse sound waves visually and acoustically. Through PRAAT, researchers can examine parameters such as pitch contours, intensity, formant frequencies, and duration, all of which are crucial in identifying the presence and accuracy of word stress in spoken English. PRAAT enables detailed spectrographic and waveform visualization, making it a reliable tool for comparing how English learners from different linguistic and cultural backgrounds produce suprasegmental features. In the context of this research, PRAAT analysis is used to compare the acoustic realization of word stress between Indian ESL and Indonesian EFL speakers. This analysis allows the researcher to move beyond perceptual judgments and provide empirical evidence based on acoustic data.

Furthermore, earlier studies (Suwartono, 2015; Sukarni et al., 2020; Wang, 2020; Azizah et al., 2021) primarily involved students as the research object, and the other comparisons were made EFL students to native speakers. Yet this current research will use ESL speakers and EFL speakers limited to two Indians as ESL speaker and two Indonesians EFL speaker since English is not only used among students and teachers as non-native speakers but also for individuals in the office environment who adopt English as the language of instruction during meetings which will be seen through ESL and EFL speakers. The most prominent is researcher expects to find differences in suprasegmental features (word stress) spoken by ESL and EFL speakers then analyze how the word stress shaped in ESL and EFL while uttering some words in conversations so that it will contribute linguistically which departs from previous research which has less examined the diversity of word stress especially in Indian ESL and Indonesian EFL as the object to be compared.

#### **B.** Research Questions

Based on the background of the study, the problems of this research can be formulated as in the following questions:

1. How do Indian ESL and Indonesian EFL speakers produce English word stress during conversational speech as examined through PRAAT analysis? 2. How does cultural background shape the suprasegmental features of English word stress among Indian ESL and Indonesian EFL speakers?

#### C. Significant of the Study

Theoritically, it provides material about phonology, especially in terms of suprasegmental features which is word stress, to understand function of word stress that found in ESL and EFL speakers. this study contributes to phonological research by examining how English word stress is produced by Indian ESL and Indonesian EFL speakers. It provides a cross-cultural perspective that supports a better understanding of prosodic variation in second language speech. Furthermore, this study can be used as additional reference or knowledge for further research about phonology studies, which is for new research on suprasegmental features by improving or refining some limitations or gaps.

Practically the findings offer insights into common word stress patterns and challenges faced by non-native speakers in real-life communication. These can inform more effective pronunciation teaching strategies, especially in multicultural or professional settings. For future researchers, this study serves as a reference to explore related aspects such as listener perception of word stress, the role of word stress in intelligibility, or comparisons with other ESL/EFL groups. Further research may also analyse word stress acquisition over time or assess the impact of targeted training on stress accuracy., Besides, this study will encouraged other researchers especially for English Literature Students in UIN Maulana Malik Ibrahim Malang to conduct the same research on investigating suprasegmental features of word stress.

#### **D.** Scope and Limitation

This study focuses solely on the suprasegmental feature of *word stress* in English and does not address other features such as intonation or speech rhythm. This study focuses on comparing ESL and EFL speakers rather than including native English speakers. The choice was deliberate and justified by both theoretical and practical reasons. Firstly, the aim of the research is to analyze how different learning environments—specifically, second language (ESL) and foreign language (EFL) contexts—influence the realization of English word stress. Comparing ESL and EFL speakers allows us to isolate how degree of exposure, learning environment, and linguistic background affect suprasegmental accuracy. This is crucial for applied linguistics and pronunciation pedagogy (Jenkins, 2007; Celce-Murcia et al., 2010).

Secondly, the purpose is not to evaluate native-likeness, but to understand how intelligible and functional the stress usage is in a real communicative context. According to Jenkins' *Lingua Franca Core* model, nativespeaker pronunciation is no longer the ideal standard. Instead, intelligibility and effective communication between non-native users should be the focus (Jenkins, 2000; Dauer, 2005; Seidlhofer, 2011). Third, including native speakers might shift the goal of the study toward error-based comparison rather than functional performance. The concern that stress inaccuracy results from "English incompetence" is also addressed: the participants in this study are experienced professionals who use English daily at work. Their grammatical and lexical competence is sufficient. Therefore, word stress issues are more accurately attributed to phonological transfer and lack of pronunciation training, not general incompetency (Zielinski, 2006). Finally, this ESL–EFL comparison reflects realworld, cross-cultural communication settings in international workplaces, making it more relevant to current global English use than native vs. non-native comparisons.

The research investigates how Indian ESL speakers and Indonesian EFL speakers produce word stress during spoken conversation. The data were collected from two separate recordings: one conversation between two Indian managers (ESL speakers), and another between two Indonesian managers (EFL speakers). Both conversations revolved around the same topic which is vacation maintain a consistent and comparable context while encouraging spontaneous, natural speech. Analysis is conducted using **PRAAT** software for acoustic examination. (Boersma, 2001). "PRAAT is a computer program for analysing, synthesizing, and manipulating speech". It is used by many linguists (phoneticians, phonologists, syntacticians) to label and segment their speech recordings. Applying Kreidler's (2004) framework on English word stress to identify patterns of stress placement and variation. The conversations are not cross-cultural interactions, but rather intragroup conversations, which are then compared from a cross-cultural perspective. This approach considers how the participants' linguistic and cultural backgrounds shape their use of word stress in English. While the findings are limited to this specific setting and topic, they offer valuable insights into how word stress is realized differently across ESL and EFL contexts.

#### **E. Definition of Key Terms**

1. **Suprasegmental:** an accompanying sound or element that is above the segmental element where these elements are related to the loudness and softness of the voice, the high and low of the voice, the length and shortness of the sound or a distance current. In linguistics, suprasegemental is also called prosody. It also can be defined as an effect on speech, such as length, stress, tone, and phonation type that extends over more than one segment of sounds.

2. Word Stress: Stress by definition is a pressure of sound that is given to several syllables in a word (Kreidler, 2004. p.179). Word stress also refers to the relative emphasis placed on a syllable within a word, typically through a combination of greater loudness, pitch variation, and vowel length. According to Kreidler (2004), stress not only signals lexical distinctions—such as between nouns and verbs (e.g., *'record* vs. *re'cord*)—but also supports listener comprehension by highlighting the most important parts of speech.

**3. Indian ESL Speakers:** ESL (English as Second Language) refers to people who use English in as a second language. In this context, they have regular exposure to English in both formal and informal settings, and it plays a functional role in education, workplace, and daily communication. Further, English holds an **Institutional status** and is used widely in education, business, and media (Kachru, 1992).

**4. Indonesian EFL (English as Foreign Language):** refers to those who learn English in non-English speaking countries and use English as a foreign language,

primarily in academic or formal contexts. Their exposure to natural spoken English is typically more limited compared to ESL speakers.

**5. Cross-Cultural Perspective:** Cross-cultural perspective refers to the comparative lens used to analyze how cultural and linguistic backgrounds influence the use of word stress in English. In this study, it highlights the contrast between Indian ESL and Indonesian EFL speakers in their production of word stress.

#### CHAPTER II REVIEW OF RELATED LITERATURE

This chapter discusses the theory and review of the literature. The main theory that was used in this research is phonology which is supported by suprasegmental features, intonation, word stress, English as Second Language (ESL), English as a Foreign Language (EFL), and PRAAT.

#### A. Suprasegmental

Phonology is concerned with the way speech sounds are organized into a system of specific language. It is concerned with describing pronunciations but, more than that, with accounting for what is relevant in pronunciations, what makes it possible to communicate, what makes one utterance different from another (Kreidler, 2004). In addition, phonology by definition is the language-specific selection and organization of sounds to signal meanings (McMahoon, 2002). According to (Verhaar, 1996) in the language community, phonology is the study of the sound sequence of a particular language. It can be concluded that Phonology is the science of a system in a language. This science is one of the branches of linguistics that deals with how to pronounce language. As a functional science of sound, the most important element in phonology is the phoneme which is the smallest unit of language sound that distinguishes meaning. In a language, the utterances of the same word even by the same speaker can be small parts that differ from each other. In pronunciation, phonology divides phonemes into segmental phonemes and suprasegmental phonemes. In this research, the researcher will only focus on suprasegmental phonemes since it is related to the way how people pronounce the language.

Suprasegmental is part of phonology that dealing how sound is produced that usually refers to intonation patterns, stress placement and rhythm in spoken language. In other word, suprasegmental is the way how people say what they say. This is the way people give music in conversations (Ladefoged, 2006). Furthermore, it is supported by (Odgen, 2009) that suprasegmental matters for all kind meanings especially in the attitude of speakers to what they are saying and marking how utterance relates to another. In English, Language learners learn the way the speech sounds are produced, identify them, and practice them.

Furthermore, Suprasegmental according to (Shiberg & Kent, 2003) cite in (Holliman A, 2016) refers to the acoustics, physical properties of the speech steam, including intensity, fundamental frequency, duration of the signal. It is related to definition Suprasegmental by (Lehiste, 1970) it is an accompanying sound or element that above the segment where these elements are related to the loudness and softness of the voice, the high and low of the voice, the length and shortness of the sound or a distance current. In addition, (Kreidler, 1998) the prosody subchapter states that prosody consists of intonation and stress (speech tone) that can distinguish meaning. It is also supported by (Gussenhoven, 2015) stated that prosody of language covers all aspects of speech that are not related directly to the articulation of the vowels and consonants in linguistic expressions, a negative definition that is echoed by the traditional term 'suprasegmentals.

In some languages there are languages that have tone and intonation such as Thai and Mandarin. It is also supported by (Fletcher, 2013, p. 523) that Suprasegmental features (also known as prosodic features) refer to "the phonetic and phonological aspects of spoken language which cannot always be reduced to individual consonants and vowels but generally extend to several segments or syllables". By the brief explanation, prosody and suprasegmental are two terms that have the same meaning where both have features of intonation and word stress. These two terms can be used interchangeably by researchers if they want to do research about sound or elements that are above the segmental element. However, current researcher only focus on intonation and stress as part of suprasegmental features since these two features are signal of a change in the meaning of the word, it is not merely changing or signaling, yet also to signal the emotions or attitudes of the speaker.

#### **B. Word Stress**

#### **B.1 Definition of Word Stress**

Stress by definition a lexically assigned property pf a syllable that renders the syllable a potential position of prominence (Hayes, 1995). When there is word in English consists of more than one syllable or known as polysyllabic, certain syllables will receive a higher degree of prominence or stress. Stress syllables are produced with a stronger eruption in initiatory energy and the energy result in greater loudness (Giegerich, 1992). According to Cambridge Dictionary, syllable means a single unit of speech, either a whole word or one of the parts into which word can be separated, usually containing a vowel. Therefore, stress also can be defined as pressure of sound that is given to several syllables in a word. Stress is also term to describe the point in a word or phrase where pitch changes, vowel lengthen and volume increases (Roach, 2009; Kreidler, 2004). In English, The term *stress* has been used mainly in two different ways in the literature. First, it has been used to refer to actual syllables (or vowels) in words or sentences that are made prominent for communicative purposes. Second, it has been used to refer to the degree of force used in producing a syllable or loudness. In other words, on the one hand, it refers to the entity that is stressed (syllable or vowel), and on the other, to the means of making a syllable prominent (popularly termed *loudness*) as explained in Ladefoged & Johnson (2014).

The stress placed on syllables within words is called **word stress**. It is a feature in spoken English where one syllable in a word is made more prominent than the others (Roach, 2009; Kreidler, 2004). This prominence is typically achieved through a combination of greater loudness, higher pitch, and increased vowel duration. According to Kreidler (2004), stress is a relative concept that makes one syllable more noticeable than the rest, helping to distinguish between words and interpret meaning correctly. Word stress is essential in English because incorrect placement can lead to miscommunication or unintelligibility, especially in minimal pairs where stress distinguishes grammatical categories (e.g., 'record vs. re'cord). Furthermore, this research will addressed word stress which is the emphasis given to a particular syllable of a word (Underhill, 1994). According (Poldauf, 1991), word stress is the relative position of the force peak or peaks in a word, opposed to other positions the force peak or peaks could occupy in a word cannot have word stress. In addition (Katamba, 1989) explained that in English,
every lexical item is entered in the dictionary with word stress. Based on Collins and Mees, there are two degrees.

Further, Kreidler (2004) provides a detailed theoretical framework on how stress functions in English words. According to him, stress is a hierarchical phenomenon in which syllables within a word can carry **primary stress**, **secondary stress**, or be **unstressed**. Primary stress is the most prominent, marked by the strongest pitch and length, while secondary stress is less prominent but still noticeable. Unstressed syllables are reduced and often contain weak vowels like schwa. Kreidler emphasizes that stress placement in English is not random, but governed by rules involving:

- Morphological structure: Certain prefixes and suffixes influence stress patterns. For example, suffixes like "-ic" often attract stress to the penultimate syllable (e.g., "geoLOGic"), while prefixes are typically unstressed.
- Lexical category: Nouns, verbs, and adjectives follow different stress rules.
- Etymology and origin: Borrowed words may retain stress patterns from the source language or conform to English norms over time.
- **Syllable weight**: Heavy syllables (those containing a long vowel or ending in a consonant) are more likely to attract stress.

His theory also accounts for **stress shift** in connected speech, such as when multiple stressed words occur in sequence and adjustments are made to preserve sentencelevel rhythm. Kreidler's approach is highly applicable in the study of second language acquisition, especially when combined with acoustic analysis. It helps researchers identify whether learners apply stress appropriately based on grammatical form and syllable structure, and whether their speech aligns with native-like patterns

## **B.2** Function of Word Stress in English

Word stress serves multiple functions in English phonology. First, it plays a lexical function by helping to distinguish between words with the same spelling but different grammatical roles (e.g., 'permit as a noun vs. per'mit as a verb). Second, stress carries a phonological function by contributing to the rhythm and prosody of spoken language. Stress patterns guide listeners in parsing speech and understanding sentence structure. As Ladefoged & Johnson (2014) explain, stress also provides discourse cues, helping speakers highlight contrast, new information, or emphasis. In spontaneous conversation, speakers often use stress to mark new information, indicate contrast, or emphasize a particular idea. For instance, shifting stress in a sentence like *"I didn't say she stole my wallet"* can completely change its meaning depending on which word is stressed. This kind of emphasis helps guide the listener's attention and clarify the speaker's intent (Kreidler, 2004).

Understanding these functions is important in the context of this research. If a speaker does not apply stress appropriately—whether due to influence from their first language or limited exposure to natural English rhythm—it can lead to monotone delivery, reduced clarity, or miscommunication. This is especially relevant when comparing Indian ESL and Indonesian EFL speakers. The way they produce word stress, as shown through PRAAT analysis, affects not only how words sound but how meaning is constructed and perceived. English is a stresstimed language, meaning stressed syllables are produced at roughly regular intervals, while unstressed syllables are compressed. This creates a recognizable rhythm in English speech, and stress helps listeners segment and interpret sentences more easily (Kreidler, 2004; Ladefoged & Johnson, 2014).

### **B.3** Types of Word Stress

In English phonology, **word stress** refers to the relative prominence given to a syllable within a word. This prominence is typically marked by higher pitch, greater loudness, and **longer vowel duration** (Kreidler, 2004). Understanding the types of word stress is essential for analyzing how non-native speakers like Indian ESL and Indonesian EFL speakers produce English in realtime conversations.

Kreidler (2004) categorizes word stress into **several types**, each with distinct linguistic functions. These types include:

### 1. Primary Stress

Primary stress is the main emphasis in a word. In multi-syllabic words, it's the syllable that carries the strongest stress. This is the most crucial type of stress in English pronunciation because it often changes meaning or word class. Example:

- *'record* (noun) vs *re'cord* (verb)
- *'present* (noun/adjective) vs *pre'sent* (verb)

In PRAAT analysis, primary stress can be observed through sharp pitch rises, increased intensity, and longer vowel duration on the stressed syllable. ESL and EFL speakers may differ in how clearly this primary stress is realized.

### 2. Secondary Stress

Secondary stress is **less prominent** than primary stress but still noticeable. It usually occurs in longer words that have more than three syllables. Secondary stress does not change the meaning of a word but supports its phonological structure.

#### **Example:**

- pronun'ciation
- conver'sation

Some speakers, especially EFL learners, may reduce or flatten secondary stress due to transfer from their first language, which can lead to an unnatural rhythm.

# 3. Unstressed Syllables

These are syllables that receive **no stress** at all. In English, unstressed syllables are often **shorter**, **quieter**, and may even undergo **vowel reduction** (e.g., to the schwa /9/ sound).

#### **Example:**

- In *about* /ə'baʊt/, the first syllable is unstressed.
- In *banana* /bə'nænə/, the first and last syllables are unstressed.

Indonesian EFL speakers, coming from a **syllable-timed language**, may pronounce all syllables with equal stress, which can make English words sound flat or monotone.

### 4. Contrastive or Emphatic Stress (contextual, but important)

While not a "word-level" stress by strict definition, **contrastive stress** is used to highlight or emphasize a particular word in a sentence. This is more relevant to discourse-level analysis, but it still relates to how stress is controlled by the speaker.

# Example:

### • I said she borrowed my book (not someone else's).

Indian ESL speakers may show more natural contrastive stress due to frequent exposure to English in academic and professional environments.

Further understand how English word stress works in real conversations, it's helpful to look at where and why stress is placed on certain syllables. According to Kreidler (2004), the placement of stress in English usually follows certain patterns—it's not random. These patterns are often related to the number of syllables in a word, the type of word (like whether it's a noun or verb), and how the word is structured or built (especially in longer, complex words). For example, shorter words tend to have one clear stress, while longer words may have both a primary and sometimes a secondary stress. In many cases, verbs and nouns with the same spelling (like *record*) are stressed differently depending on how they're used. These patterns are something native speakers follow automatically, but they can be tricky for second-language learners—especially if their first language doesn't use stress the same way.

In addition to these language-based patterns, stress also has physical or acoustic features. That means when someone stresses a syllable, it usually sounds longer, louder, and slightly higher in pitch. These features can actually be measured using tools like **PRAAT**, which helps us see how clearly a speaker is applying stress in real speech. The following section describes how word stress in English can be classified and analyzed based on both **structural patterns** (such as syllable count and part of speech) and **acoustic features**, providing a theoretical foundation for examining the data in this study.

#### **B.4 Acoustic Features of Word Stress**

In phonetic terms, stressed syllables are marked by distinct acoustic features that differentiate them from unstressed ones. According to Boersma (2001), these features include:

- **Duration**: Stressed syllables are longer in length.
- **Pitch (F0)**: Stressed syllables are produced with a higher fundamental frequency.
- Intensity: Stressed syllables are louder.

These parameters can be measured using PRAAT, a software tool for speech analysis. PRAAT allows researchers to visualize and quantify speech features, making it easier to determine where stress occurs in natural speech. In this study, PRAAT will be used to analyze the word stress patterns of Indian ESL and Indonesian EFL speakers, helping to identify cross-cultural variation based on acoustic cues.

## C. English as Foreign Language Speaker (EFL)

English as a Foreign Language (EFL) is the term used to describe the study of English by non-native speakers in countries where English is not the dominant language. EFL countries do not use English as a medium of instruction but English is taught in schools. In other words, EFL is mainly used by non-native English learners or speakers. According (Yoko Iwai, 2011) defined that EFL refers to people who learn English in non-English speaking countries (E.g. Indonesian who learn English in their country are EFL learners). EFL mainly used by non-native English learners such as Chinese learners of English in China (Peng S, 2019). Furthermore, (Renandya, 2000) in Charles Barber said that the movement towards English as a foreign language began at the independence, and English is now the main foreign learned.

In this study, the researcher use Indonesian object as the EFL speaker since in Indonesia, English is the first foreign language studied and taught at schools, academy, courses, and universities. In addition, English in Indonesia is mostly learned only at schools and people do not speak the language in the society. Commonly, non-English speaking countries use English as the tools to communication with the foreigner or the bridge to speak English while working in some companies that used English as the language. In addition, accordance with the definition of EFL speakers that the importance of using English is for tourism, communicating with native speaker, etc., Harmer (1991) explained that English is the language that motivates people and students to study and to know and will bring them to know more the human cultures and to have the better status and better job.

### D. English as a Second Language Speaker (ESL)

English as a second language (ESL) is a traditional term for the use or study of English language by non-native speakers in an English-speaking environment that English plays importance role as mother tongue. Furthermore, according to (Yoko, 2021) English as a second language (ESL) refers to people who learn English in countries where English is used as a tool for communication and formally spoken. ESL also mainly refers as a second language such as Indian and Malaysian learners or speakers. Another instance, Singaporean and Indian who are learning English, are also ESL learners.

In this study, the researcher use Indian as the object of ESL speaker because in India, as in all the countries of Southern Asia, English means essentially secondlanguage English (Collins and Mees, 2013). Besides, most types of Indian English use the vowels of the local Indian language and these will sound quite unlike those of native English. In the Indian context, English holds an institutional status and is used widely in education, business, and media Kachru's (1992). Furthermore, according to Kachru's (1992) World English model, India is categorized under the "*Outer Circle*" where English serves an institutionalized role and is widely used as a second language in education, administration, media, and daily communication.

In addition, English in India holds co-official status alongside Hindi and other regional languages, and it is used extensively in both formal and informal contexts. Hence, Indian participants in this study fit the ESL profile because they use English as a daily working language in their managerial roles within a multinational company, then they received formal education in English, which is common across urban regions of India.

### **E.** Cross-Cultural Perspective

People who live in different areas of the world have different cultural backgrounds and use different languages. Language and culture appear on the surface to be two distinct fields, but they have an intertwined relationship affect each other mutually. Furthermore, we have to understand that culture can be defined as a way of life (Condon, 1973). Basic theory that need to be understand is A cross-cultural perspective in phonological research explores how speakers from different cultural and linguistic backgrounds acquire and realize prosodic features—such as word stress—in a second language.

When people from different countries learn to speak English, they often bring along patterns from their first language—especially when it comes to how they say or "stress" words. This idea is explained by **Grabe and Low** (2002) through a theory called the **Rhythm Class Hypothesis (RCH)**. The theory says that each language has its own rhythm or timing when people speak, and this rhythm can affect how word stress is produced in a second language like English. Languages are grouped into three types based on rhythm: **stress-timed**, **syllabletimed**, and **mora-timed**. English, and many *Indian languages*, are *stress-timed*, this means that the time between stressed syllables is fairly even, and the *unstressed*  syllables are shortened or spoken quickly. That's why in English, some syllables sound stronger and longer than others. Meanwhile, Indonesian is syllable-timed, where every syllable is spoken with almost equal length and no big difference in stress. Hence, Indian ESL speakers often sound more natural when using stress in English—they're already used to emphasizing certain syllables in their own language. On the other hand, Indonesian EFL speakers may sound a bit flat or monotone, because they tend to say every syllable the same way. This influence from a person's first language is called **prosodic transfer**.

Grabe and Low also introduced a measurement called **PVI** (**Pairwise Variability Index**) to see how big or small the differences are between syllable durations. A high PVI means big changes between stressed and unstressed syllables (typical in stress-timed languages), and a low PVI means syllables are more equal in length (like in syllable-timed languages). Even though this research doesn't use exact PVI numbers, the idea helps explain what's happening in the PRAAT analysis: **Indian speakers are likely to show more ups and downs in pitch and duration**, while **Indonesian speakers may show more equal**, **flat patterns**. Yet, it's not just about language rhythm. **Culture also plays a role**. Things like how much people are exposed to English, how formal their communication style is, or how English is used in education or work—these all shape how confidently and clearly they speak. Indian speakers usually have more exposure to English, not just in school but also in daily life and professional settings. Indonesian speakers often learn English mainly in school, and may not use it as much outside the classroom. This difference in exposure also affects how easily they can use stress correctly when speaking English. In short, both **language rhythm** and **cultural background** influence how word stress is produced. That's why this theory is used to help explain the differences between Indian ESL and Indonesian EFL speakers in this research.

#### F. PRAAT

PRAAT is a computer software package for the analysis of speech in phonetics. PRAAT, a free software developed by (Boersma and Weenink, 2023) which allows researchers to analyze sound waves both visually and acoustically. Through PRAAT, researchers can examine parameters such as pitch contours, intensity, formant frequencies, and duration-all of which are crucial in identifying the presence and accuracy of word stress in spoken English (Boersma & Weenink, 2023; Crystal, 2008). PRAAT enables detailed spectrographic and waveform visualization, making it a reliable tool for comparing how English learners from different linguistic and cultural backgrounds produce suprasegmental features (Zsiga, 2013). In this study, PRAAT is used to examine how speakers actually pronounce English words, especially to identify which syllable they stress. Meanwhile, the Oxford Dictionary serves as a standard reference, showing how words should be pronounced in standard British or American English by native speakers.

However, PRAAT is not fully relevant to every aspect of the Oxford Dictionary. PRAAT is not meant to copy or match the phonemic transcriptions in the dictionary exactly. Instead, it is used to analyze real speech and see whether second-language (ESL) and foreign-language (EFL) speakers follow or deviate from the expected word stress patterns.

So, the connection between PRAAT and the Oxford Dictionary is partial, not total. For example:

- PRAAT helps identify whether the speaker's stress matches what the Oxford Dictionary shows, by analyzing three main acoustic features of stress: pitch (high or low sound), duration (how long the syllable is), and intensity (how strong the sound is).
- If a speaker places stress incorrectly—possibly due to influence from their first language—PRAAT will show this through its visual and numerical data. This kind of mistake cannot be seen just by reading the dictionary's transcription.
- Therefore, the Oxford Dictionary acts as the ideal pronunciation model, while PRAAT is the tool to check real-life pronunciation.

In short, PRAAT is very useful to compare actual pronunciation with the standard shown in the Oxford Dictionary, especially in terms of word stress, but it is not used to verify every part of the dictionary entry.

In the context of this study, PRAAT analysis is used to compare the acoustic realization of word stress between Indian ESL and Indonesian EFL speakers. This analysis allows the researcher to move beyond perceptual judgments and provide empirical, measurable evidence based on acoustic data. In this study, the researcher uses spectral analysis which is part of how the PRAAT working. The researcher uses the spectral analysis from this software to identify the stress on the words that the researcher expects to be found in the conversation of ESL and EFL speakers. The software displays the spectral (spectrogram) analysis of the word that the researcher inserts. Afterwards, the spectrogram will show strong and weak stress as well as the display of falling and raising intonation which makes it easier to identify primary or secondary on the words and the falling and raising intonation as well.

## CHAPTER III RESEARCH METHOD

The research method is viewed from a particular research method suitable for collecting, analyzing, and elaborating the selected study particles. Therefore, the researcher describes the research design, data sources, research instruments, data collection, and data analysis in the following sections.

## A. Research Design

The type of the research that current researcher conducts is field research by using qualitative field research method in order to classify and analyse the word stress among Indian ESL and Indonesia as EFL speakers when pronounce some English words to answer two research questions that researchers conducted. Field research was chosen because the study takes place within the natural setting of the participants and seeks to understand the phenomenon as it occurs in real life. According Bailey (2006) stated, field research refers to the systematic study of ordinary activities in the settings in which they occur and the primary goal is to understand the activities and they mean to those who engage in them. Similarly, Chelliah in (Robert J. Podesva, Devyani Sharma, 2013) field research aims to embrace the variables as an important part of the phenomena under investigation. Field research usually requires flexible uses of multiple data collection such as interview and observation. With that being said, field research method therefore corresponds with this research. Further this research applies Kreidler's (2004) theory to examine the word stress. Equally important, this research might as well apply the cross cultural framework for cultural background matters.

### **B.** Data & Data Source

The data for this research were collected from four participants who work at a company in Batam that specializes in the manufacturing of offshore pipes for the oil and gas industry. The participants consist of two Indian managers and two Indonesian managers. The selection of participants in this study was based on specific criteria observed during the researcher's internship at a multinational company in Batam. The primary consideration was their active use of English in real professional interactions, particularly during meetings, informal conversations, and coordination tasks with other departments.

The participants fulfilled the following criteria: First, they were fluent English users in their respective workplace contexts, with the Indian managers representing English as a Second Language (ESL) users and the Indonesian managers representing English as a Foreign Language (EFL) users. Second, they showed willingness **to** participate voluntarily and provided consent to be recorded during casual conversations. Third, the participants held managerial positions, which required them to use English regularly as a medium of communication, making their speech suitable for suprasegmental analysis.

These criteria ensured that the study would gather speech data that was spontaneous, authentic, and reflective of real-world English usage in a crosscultural workplace environment. This aligns with the qualitative nature of field research, as stated by Bailey (2006), which emphasizes studying activities in their natural settings to understand their contextual meaning. It also corresponds to Chelliah's (in Podesva & Sharma, 2013) perspective that embracing natural variables in sociophonetic research provides more accurate insight into language use.

The recording sessions were conducted during coffee break hours at the pantry office, where the researcher arranged appointments with the participants to ensure they were comfortable and willing to take part in the study. The conversations were recorded using a mobile phone with the full consent of all participants. They were informed about the purpose of the research and expressed their willingness to support the study. The data collection took place in June 2022, during two separate conversation sessions. Session 1 is a conversation between two Indian ESL speakers and session 2 also a conversation between two Indonesian EFL speakers, allowing the researcher to observe and compare speech patterns in a natural yet manageable setting. The participants were asked to converse in English based on a casual topic, namely "vacation," to elicit spontaneous and relaxed speech that would naturally exhibit one of suprasegmental features which is word stress.

#### C. Data Collection

The current researcher attempts to collect data from four informants who are managers in one of a company in Batam that specializes in offshore pipe production where the researcher did an internship. The participants consist of two Indian managers, categorized as ESL (English as a Second Language) speakers, and two Indonesian managers, categorized as EFL (English as a Foreign Language) speakers. These individuals were selected based on their active use of English in the workplace and their willingness to participate in the study. To begin with, the researcher approached the participants and explained the purpose of study, including how their conversations would be recorded and analysed. from the data source to let them know that they will do conversation and will be recorded to be analyzed. With their full understanding and agreement, they gave verbal consent and expressed genuine willingness to take part in the research. Afterwards, the researcher arranged separate sessions for each group. The Indian managers were scheduled for one session, while the Indonesian managers had theirs in another. Each group was asked to have a casual conversation in English on the topic of **"vacation"**, which was selected intentionally to encourage a relaxed and familiar atmosphere during the conversation. The sessions were conducted during coffee break hours, a moment when the participants were more at ease, allowing their speech to flow more naturally.

Once the conversations took place, they were recorded using a mobile pho ne. Although the setting was informal, the researcher ensured that the quality of th e audio was good enough for analysis. After the recordings were completed, the researcher transcribed the data and analyzed it using PRAAT software to observe suprasegmental features which is word stress. Following this, the researcher will identify similar English words that appear across both conversations, and compare how they are pronounced by ESL and EFL speakers using the waveform and pitch visualization provided by PRAAT. As Chelliah notes in (Robert J. Podesva, Devyani Sharma, 2013) "particularly difficult aspect of phonetic and phonological fieldwork is the transcription and the description of tone". Therefore, PRAAT will be used not only to listen to the speech but also to visualize it—through spectrograms, pitch tracks, and intensity curves. In order to get deep analysis, the researcher will do identification and classification about what words that will be found by researcher through the conversation among Indian two managers as ESL and two Indonesian manager as EFL speakers produce English words stress seems different.

Finally, to support the second research question, the researcher will also conduct open-ended interviews with the informants. These interviews aim to explore their personal perspectives on how their cultural and linguistic background may influence their English pronunciation—particularly in shaping how they use word stress that the list interviews will be adapted from Culture and word stress aspect . By combining acoustic analysis with personal insights, the researcher hopes to gain a deeper understanding of how suprasegmental features like word stress are perceived and produced by Indian ESL and Indonesian EFL speakers.

#### **D.** Data Analysis

To help analyze the data, the researcher follows a series of steps aligned with the two research questions of this study. The goal is to explore how suprasegmental features specifically word stress are produced and influenced by linguistic and cultural backgrounds.

For Research Question 1, which investigates how Indian ESL and Indonesian EFL speakers produce English word stress during conversational speech, the researcher first provides a common topic ('vacation') to encourage spontaneous and natural English usage. The recorded conversations are then transcribed, and key English words are identified for closer examination.

Next, PRAAT software (Boersma, 2001) is used to analyze the acoustic features of these words, focusing on pitch, intensity, and duration to determine the location and clarity of stress. In Boersma (2001) "*PRAAT is a computer program for analysing, synthesizing, and manipulating speech*". It is used by many linguists (phoneticians, phonologists, syntacticians) to label and segment their speech recordings. Therefore, the researcher will record the sound using PRAAT tool software.

For Research Question 2, which explores how cultural background shapes suprasegmental features of English word stress, the researcher conducts open-ended interviews with the participants. These interviews aim to gather personal reflections on how their native language and cultural norms influence their English pronunciation. This part of the analysis is informed by Grabe and Low's (2002) Rhythm Class Hypothesis (RCH), which suggests that languages can be classified based on rhythmic timing—either stress-timed or syllable-timed. According to this theory, Indian languages are typically stress-timed, while Indonesian is syllabletimed, which may influence how speakers from each group produce word stress in English.

The researcher then compares the PRAAT results with the insights obtained from the interviews to determine whether and how cultural and rhythmic background affects the realization of word stress. By integrating acoustic and qualitative data, the analysis provides a deeper understanding of how word stress is shaped across different linguistic and cultural contexts. Finally, all findings will be interpreted and discussed in relation to the theoretical frameworks, highlighting key patterns and differences observed between Indian ESL and Indonesian EFL speakers.

## CHAPTER IV FINDINGS AND DISCUSSION

This chapter is an analysis part of the research. The findings and discussion are presented in this chapter. The findings are included in examining the word stress occurred in conversation between Indian manager as ESL speakers and Indonesian manager as EFL speakers. Furthermore, it is also examining how the does cultural background shape the suprasegmental features of English word stress among Indian ESL and Indonesian EFL speakers. Meanwhile, the analysis in the finding session aims to answer the problems of the study, on the other hand, the discussion session to discuss the data analysis results.

## A. Findings

The following are the results of the data analysis used to examine word stress patterns occur between Indian managers' as ESL and Indonesian managers' as EFL with total of twelve English words were selected based on their occurrence in naturally occurring in their conversations, which were recorded via phone. Each word was examined in three versions: as pronounced by Indian speakers, Indonesian speakers, and the standard pronunciation based on the Oxford Dictionary (original version), which served as the reference model for correct stress placement. To support the analysis, PRAAT software was used to generate spectrograms and waveforms, making it easier to identify and compare stress placement and pitch movement. The analysis is guided by Kreidler's (2004) theory of suprasegmental features specifically in word stress and by Grabe and Low's (2002) Rhythm Class Hypothesis (RCH) which offers insight into how rhythmic typology may reflect deeper cultural and linguistic influences on prosodic features.

The data are presented in the form of waveform and pitch contour images accompanied by brief descriptions of the observed stress patterns. Comparisons are made across the three sources to highlight similarities and deviations in stress realization.

1. Indian ESL Speakers and Indonesian EFL Speakers produce English Word Stress during Conversational Speech as Examined Through PRAAT.

# **Datum 1a: Vacation**

The sound graphic below are the representation of word stress from spectrogram analysis of Oxford Dictionary (original version) and Indian managers as ESL speaker and also Indonesian manager as EFL speaker. The researcher inserted the same word: *Vacation*.



	Stress Location	Amplitude	Pitch movement
Oxford Standard	Stress on 2nd syllable		
Indian ESL	0.85s	High	Steep rise on CA
Indonesian EFL	0.85s	Low	Flat

From three spectrogram above, the researcher could find the word stress as following series:

**Oxford dictionary**: Vacation (Stress pattern: The second syllable (CA) isstressed  $\rightarrow$  va-CA-tion)

Indian (ESL) speaker : Vacation (CA clearly stressed)

Indonesian (EFL) speaker : Vacation (CA (slightly stressed / flatter))

In three figures above, there is a difference of word stress spoken by the Indian manager as ESL speaker and also the Indonesian manager as EFL speaker compared to standard oxford dictionary. The word *vacation* is typically stressed on the second syllable: **va-CA-tion**, following standard English pronunciation rules for disyllabic verbs/nouns derived from Latin-based roots. We can see standard pronunciation of "vacation" exhibits a higher pitch and intensity on the second syllable, aligning with the expected stress pattern occurred in Picture 1 which is produced by Indian ESL speaker. Indian ESL speaker showed a closer match to the *Oxford Dictionary* pattern—clear stress on "CA" with acoustic support (pitch, length, and intensity). Meanwhile, Indonesian EFL speaker showed weaker stress contrast, with lower pitch and duration differences.

It can be concluded that the Indian ESL speaker made the stressed syllable CA (va-CA-tion) stand out more in terms of pitch and duration, while the Indonesian EFL speaker showed a flatter pattern which make sense because their language background is syllable-timed.

# Datum 2a : Plan

The sound graphic below are the representation of word stress from spectrogram analysis of Oxford Dictionary (original version) and Indian managers as ESL speaker and also Indonesian manager as EFL speaker. The researcher inserted the same word: *Plan*.



Speaker	Stress Location	Amplitude	Pitch movement
Oxford Standard			Sharp Rise
Indian ESL	0.7s	High	Rise
Indonesian EFL	0.7s	Low	Flat

From three spectrogram above, the researcher could find the word stress as following series:

**Oxford dictionary** : Plan. (/plæn/. Stress pattern: single syllable  $\rightarrow$  fully stressed)

Indian (ESL) speaker : Plan. (clearly stressed)

Indonesian (EFL) speaker : Plan. (less intensity, slightly flatter articulation)

The word *plan* is a monosyllabic noun and verb, and according to the Oxford Dictionary, it is fully stressed as /plæn/. In three figures above, we can see the difference between Oxford Dictionary and the intonation produced by the Indian manager as ESL speaker and also the Indonesian manager as EFL speaker. Oxford Dictionary has pitch contour of the word "plan" as spoken in a standard manner. Note that the peak in pitch and intensity occurs simultaneously, reflecting full emphasis on the single syllable in the word.

Based on Kreidler's (2004) theory, monosyllabic words inherently receive full stress in English, particularly when they function as main content words. In the waveform analysis using PRAAT (see picture 3 and 4), the Indian ESL speaker produced *plan* with a distinct pitch rise and amplitude, indicating a strong, clear stress. This matches the expected native-like pattern. Meanwhile, Picture 6 shows the Indonesian EFL speaker's production of *plan*, which, although still stressed, was delivered with slightly lower pitch and intensity. This aligns with the influence of the speaker's syllable-timed L1 background, resulting in a less dynamic delivery.

This observation is in line with Kreidler's (2004) theory that monosyllabic content words are fully stressed in spoken English. In this case, plan was expected to carry strong pitch, duration, and intensity regardless of speaker background. However, while the Indian ESL speaker showed acoustic markers that align with this expectation, the Indonesian EFL speaker produced a flatter version, demonstrating reduced prominence. This highlights how prosodic realization of stress, even in simple monosyllabic words, can vary due to L1 influence and rhythm class distinctions.

# Datum 3a: Went

The sound graphic below are the representation of word stress from spectrogram analysis of Oxford Dictionary (original version) and Indian managers as ESL speaker and also Indonesian manager as EFL speaker. The researcher inserted the same word: Went. .



Picture 5:



# Picture 6:

PRAAT analysis of "Went" showing stress spoken by Indonesian EFL

Speaker	Stress Location	Amplitude	Pitch movement
Oxford Standard	Full Primary		
Indian ESL	1.0s	High	Steep pitch rise
Indonesian EFL	1.0s	Low	Flattened pitch

From three spectrogram above, the researcher could find the word stress as following series:

**Oxford dictionary** : Went (monosyllabic verb, full stress)

**Indian (ESL) speaker** : Went (Clear intensity and sharp stress realization)

**Indonesian (EFL) speaker** : Went (Less pronounced peak, flatter stress articulation)

The word "went" is a monosyllabic past tense verb derived from the irregular form of *go*, and according to the Oxford Dictionary, it carries primary stress on its single syllable: /wɛnt/. As noted by **Kreidler (2004)**, monosyllabic content words (particularly verbs, nouns, and adjectives) naturally carry primary stress when spoken in isolation or within a sentence, due to their semantic importance in conveying meaning. In the analysis, the Indian ESL speaker showed a waveform pattern that matches the stress features explained in Kreidler's theory.

The word "went" was spoken with a higher pitch at the start, a longer sound, and a stronger volume—these are signs of primary stress. See picture 5, shows that the speaker successfully stressed this one-syllable verb just how it's pronounced in the Oxford Dictionary. This result suggests the speaker has good control of English stress patterns, likely due to regular exposure to the language's stress-timed rhythm.

In contrast, the Indonesian EFL speaker produced the same word with noticeably weaker prominence. Although the speaker placed the stress at the appropriate segment (the word "went"), the waveform of Picture 6, Indonesian EFL reveals lower amplitude and reduced contrast when compared to the surrounding speech. This flatter pattern is consistent with Kreidler's observation that non-native speakers from syllable-timed language backgrounds—such as Indonesian—often struggle to apply native-like stress, especially in monosyllabic words. The lack of pitch elevation and minimal elongation suggests that the stress was **underrealized**, which could impact the overall naturalness and intelligibility of the utterance.

#### Datum 4a: Travel

The sound graphic below are the representation of word stress from spectrogram analysis of Oxford Dictionary (original version) and Indian managers as ESL speaker and also Indonesian manager as EFL speaker. The researcher inserted the same word: *Travel*.







PRAAT analysis of "Travel" showing stress spoken by Indonesian EFL

Speaker	Stress Location	Amplitude	Pitch movement
Oxford Standard	Stress on 1 <sup>st</sup> syllable		Falling
Indian ESL	1.1s	Fall on -vel	Sharp drop
Indonesian EFL	1.1s	Flat	Neutral

From three spectrogram above, the researcher could find the word stress as following series:

Oxford dictionary	: Travel ( ( <b>'TRA</b> -vel): stress on first syllable)
Indian (ESL) speaker	: Travel (( <b>'TRA-</b> vel): strong first syllable stress)
Indonesian (EFL) speake	er : Travel (less stress on 'TRA, flatter stress pattern)

The word *travel* is a disyllabic verb with stress typically placed on the **first syllable**: **'TRA-vel**. According to Kreidler (2004), in two-syllable verbs derived from native English or common usage, the stress usually falls on the first syllable unless altered for emphasis. The Oxford Dictionary confirms this with the pronunciation /'træv.əl/, emphasizing the first syllable.

As shown in Picture 7 the Indian ESL speaker produced *travel* with clear stress on the first syllable, marked by increased pitch and amplitude, followed by a

reduced second syllable. This aligns closely with standard stress patterns and shows the speaker's sensitivity to English prosody. In contrast, the Indonesian EFL speaker (Picture 8) demonstrated a more even pitch contour with **weaker distinction between syllables**, resulting in a flatter prosodic pattern.

These results reinforce *Kreidler's theory* of syllable prominence and support *Grabe and Low's Rhythm Class Hypothesis*. The Indian ESL speaker—whose L1 likely follows a stress-timed rhythm—produced word stress that mirrors native-like English. On the other hand, the Indonesian speaker—coming from a syllable-timed language background—displayed a tendency to produce more equally timed syllables, which affects their word stress realization.

#### Datum 5a: People

The sound graphic below are the representation of word stress from spectrogram analysis of Oxford Dictionary (original version) and Indian managers as ESL speaker and also Indonesian manager as EFL speaker. The researcher inserted the same word: *People* 

### Picture9:





Picture



Speaker	Stress Location	Amplitude	Pitch movement
Oxford Standard			Sharp Rise
Indian ESL	0.9s	High	Rising
Indonesian EFL	0,9s	Low	Low movement

From three spectrogram above, the researcher could find the word stress as following series:

Oxford dictionary	: People (	(PEO-ple): stress of	on first syllable)
-------------------	------------	----------------------	--------------------

Indian (ESL) speaker	: People (( <b>'PEO</b> -ple): correct stress with strong onset)
Indonesian (EFL) speake	<b>r</b> : People (flatter pattern, weaker first syllable stress)

The image above compares the pronunciation of the word 'people' by Indian ESL and Indonesian EFL speakers. In the top waveform, the Indian ESL speaker demonstrates a strong primary stress on the first syllable ('PEO-'), indicated by a clear amplitude peak near the beginning of the word 'people', which aligns closely with the Oxford Dictionary stress pattern. This aligns with Kreidler's (2004) explanation that disyllabic nouns in English usually receive primary stress on the first syllable. The speaker's ability to match this pattern suggests familiarity with

10:

English prosodic norms, likely due to regular exposure in both academic and professional contexts.

Meanwhile, the bottom waveform shows the Indonesian EFL speaker's pronunciation. The flatter contour with less contrast between syllables suggests a weaker realization of stress. This indicates weaker stress realization on the first syllable and deviates from the Oxford standard stress placement. The EFL speaker's pronunciation reflects the influence of a syllable-timed native language, where syllables are produced with more uniform duration and less stress contrast. This rhythm pattern, consistent with the Rhythm Class Hypothesis (Grabe & Low, 2002), contributes to reduced stress salience and may affect the naturalness and clarity of English speech.

## Datum 6a: Sister

The sound graphic below are the representation of word stress from spectrogram analysis of Oxford Dictionary (original version) and Indian managers as ESL speaker and also Indonesian manager as EFL speaker. The researcher inserted the same word: *Sister*..



#### 54

Speaker	Stress Location	Amplitude	Pitch movement
Oxford Standard			Fall after peak on "SIS"
Indian ESL	0.9s	High	Rise - clear
Indonesian EFL	0.9s	Flat	Flatter

From three spectrogram above, the researcher could find the word stress as following series:

**Oxford dictionary** : Sister (The first syllable (SIS-) is stressed  $\rightarrow$  /'sis.tər/).

Indian (ESL) speaker : Sister (Strong onset on "SIS").

**Indonesian (EFL) speaker** : Sister (both syllables are almost flat and equally pronounced).

The word *sister* is a disyllabic noun with stress naturally occurring on the first syllable: /'sis.tər/. This stress pattern follows the standard rule for noun stress in English, as described by **Kreidler (2004)**, where the primary stress typically falls on the first syllable of disyllabic nouns. As shown in Picture 11, the Indian ESL speaker demonstrates accurate word stress production by emphasizing the syllable "SIS" with a marked pitch rise and higher amplitude, conforming to the expected prosodic contour found in native English. This supports Kreidler's idea that stressed syllables stand out more in speech. It indicates that the speaker has become familiar

with the stress-timed rhythm of English, which helps them follow native-like speech patterns.

In contrast, the waveform from the Indonesian EFL speaker in Picture 12 reveals a weaker contrast between the two syllables, with less pitch rise and energy shift, indicating a less prominent realization of stress. While the word is pronounced within the expected time window, the lack of pitch and amplitude contrast indicates deviation from the Oxford-standard stress on 'joy'. Kreidler (2004) emphasized that stress in verbs often falls on the final syllable, and failure to realize this can lead to reduced intelligibility.

## **Datum 7a: Places**

The sound graphic below are the representation of word stress from spectrogram analysis of Oxford Dictionary (original version) and Indian managers as ESL speaker and also Indonesian manager as EFL speaker. The researcher inserted the same word: *Places*.





PRAAT analysis of "Places" showing strong stress spoken by Indian ESL speaker



Speaker	Stress Location	Amplitude	Pitch movement
Oxford Standard			Falling
Indian ESL	0.8s	High	High-low
Indonesian EFL	0.8s	Flat	Minimal fall

From three spectrogram above, the researcher could find the word stress as following series:

**Oxford dictionary** : Places (Stress pattern: The first syllable 'PLA' is stressed  $\rightarrow$  'PLA-ces)

**Indian (ESL) speaker** : Places ('PLA' is pronounced clearly with higher pitch and intensity)

**Indonesian (EFL) speaker** : Places ('PLA' shows flatter and weaker contrast between syllables).

The waveform above represents the Indian ESL speaker's pronunciation of the word 'places'. The word *places* is a disyllabic noun with stress on the first syllable, as indicated in its standard pronunciation /'plei.siz/. According to Kreidler (2004), English disyllabic nouns typically place stress on the first syllable, and this pattern serves to maintain rhythm and intelligibility. The highlighted segment captures the entire word, and the blue dashed line shows the expected stress on the first syllable ('PLA'). In Picture 13, the waveform of the Indian ESL speaker shows a **clear peak in pitch and intensity** on the first syllable (*PLA*-), while the second syllable (*-ces*) is shorter and reduced—matching native-like expectations. This aligns well with the Oxford Dictionary pronunciation pattern and supports Kreidler's (2004) theory that in disyllabic nouns, the first syllable typically carries the primary stress. The Indian speaker's realization is consistent with English word stress conventions.

In contrast, the waveform from the Indonesian EFL speaker, the stress placement is less distinct. Picture 14 shows the Indonesian EFL speaker producing *places* with a flatter pitch contour, with less reduction on the second syllable. Further, the pronunciation of the word is accurate in segmental terms, the amplitude pattern is flatter, indicating reduced stress contrast. This suggests weaker prominence on the expected first syllable, deviating from the Oxford Dictionary norm. Kreidler (2004) emphasizes that accurate word stress is critical for intelligibility, and learners from syllable-timed language backgrounds—like Indonesian—often struggle with creating the contrastive stress patterns typical of stress-timed languages such as English.

### Datum 8a: Days

The sound graphic below are the representation of word stress from spectrogram analysis of Oxford Dictionary (original version) and Indian managers as ESL speaker and also Indonesian manager as EFL speaker. The researcher inserted the same word: *Days*.


#### Picture16:



Speaker	Stress Location	Amplitude	Pitch movement
Oxford Standard	Full primary stress	High	Sharp Rise
Indian ESL	0.9s	High	High pitch
Indonesian EFL	0.9s	Low	Low contrast

From three spectrogram above, the researcher could find the word stress as following series:

**Oxford dictionary** : Days (monosyllabic noun  $\rightarrow$  naturally stressed)

**Indian (ESL) speaker** : Days (Clear peak with full stress on the single syllable)

Indonesian (EFL) speaker : Days (Less distinct intensity, flatter delivery).

The word *days* is a *monosyllabic noun* that carries natural stress when spoken in isolation or within standard sentence rhythm. According to *Kreidler* (2004), monosyllabic content words—especially nouns and main verbs—are inherently stressed in English due to their semantic weight in a sentence. These words typically show prominence through greater pitch, amplitude, and duration, especially when they occur in nuclear stress position.

In picture 15, the waveform of the Indian ESL speaker exhibits a clear stress peak the word *days* is produced with marked pitch elevation and strong amplitude. This matches the pronunciation in the *Oxford Dictionary* where *days* is stressed naturally as a standalone lexical item. This production aligns with Kreidler's assertion that stress on monosyllabic content words is crucial for maintaining the prosodic contour of English. Meanwhile, in picture 16 shows that Indonesian EFL speaker produce *days* with weaker stress prominence. The amplitude is lower, and pitch movement is minimal, resulting in a flatter stress contour. Kreidler (2004) emphasizes that word stress plays a vital role in signaling lexical identity and syntactic structure.

#### Datun 9a: Nice

The sound graphic below are the representation of word stress from spectrogram analysis of Oxford Dictionary (original version) and Indian managers as ESL speaker and also Indonesian manager as EFL speaker. The researcher inserted the same word: *Nice*.



Speaker	Stress Location	Amplitude	Pitch movement
Oxford Standard			Sharp rise
Indian ESL	0.8s	Prominent	Rise, Short sharp pitch
Indonesian EFL	0.8s	Low	Level pitch

From three spectrogram above, the researcher could find the word stress as following series:

**Oxford dictionary** : Nice (monosyllabic adjective  $\rightarrow$  full stress)

**Indian (ESL) speaker** : Nice (Prominent pitch and amplitude on /nais/)

Indonesian (EFL) speaker : Nice (Lower contrast in intensity, flatter stress pattern).

The word *nice* is a monosyllabic adjective, and as explained by Kreidler (2004), monosyllabic content words such as adjectives, nouns, and main verbs inherently carry primary word stress. Word stress refers to the syllabic prominence that is realized through increased pitch, loudness (intensity), and duration. Although *nice* consists of only one syllable, its stress must still be clearly articulated for proper English rhythm and intelligibility. According to the Oxford Dictionary, the pronunciation of *nice* is /nais/ with natural full stress. This serves as the baseline standard for native English pronunciation.

In Picture 17, the Indian ESL speaker produces the word *nice* with a distinct pitch movement and amplitude peak. The waveform shows a clean stress contour consistent with native-like prosody, indicating that the speaker realizes stress in line with Oxford Dictionary standards. This performance suggests that Indian ESL speakers, whose L1s may be stress-timed or prosodically closer to English, are more likely to approximate English word stress accurately. In contrast, picture 18 shows the Indonesian EFL speaker producing *nice* with a more level amplitude and pitch, indicating weaker stress realization. The stress is present but less prominent.

#### Datun 10a: Everything

The sound graphic below are the representation of word stress from spectrogram analysis of Oxford Dictionary (original version) and Indian managers as ESL speaker and also Indonesian manager as EFL speaker. The researcher inserted the same word: *Everything*.



Speaker	Stress	Amplitude	Pitch
	Location		movement
Oxford Standard	Primary Stress	High	Sharp rise
Indian ESL	1.0s	High	Clearly rising
Indonesian EFL	1.0s	Flat	Flat & low

From three spectrogram above, the researcher could find the word stress as following series:

**Oxford dictionary** : Everything (Primary stress on first syllable: 'EV-ry-

thing)

Indian (ESL) speaker : Everything (Strong burst on first syllable 'EV, mirrors Oxford stress pattern.)

**Indonesian (EFL) speaker** : Everything (Flatter pattern, weaker emphasis on 'EV', less distinct contrast).

The word *everything* is a three-syllable pronoun that carries primary stress on the first syllable (/'ɛv.ri.θıŋ/), according to the *Oxford Dictionary*. This stress positioning is essential for intelligibility and natural prosody. As **Kreidler (2004)** explains, word stress is not arbitrary—it follows specific rules tied to syllable weight, morphological structure, and lexical category. For most compounds and pronouns like *everything*, the first syllable receives primary stress to anchor the rhythm of the phrase.

In Picture 19, the Indian ESL speaker demonstrates a clear understanding of this rule. The waveform shows high amplitude and strong onset at the first syllable (EV), matching the expected prosodic profile of the standard pronunciation. This reflects Kreidler's principle that native-like word stress facilitates clear listener processing.

Meanwhile, Picture 20 illustrates a flatter contour from the Indonesian EFL speaker, with less acoustic contrast between syllables. This may indicate a failure to fully realize the primary stress on 'EV', likely influenced by L1 interference from syllable-timed speech patterns, where stress is evenly distributed (Grabe & Low, 2002). As Kreidler warns, such misalignments in stress can cause speech to sound unnatural or be misunderstood.

#### Datum 11a: Fine

The sound graphic below are the representation of word stress from spectrogram analysis of Oxford Dictionary (original version) and Indian managers as ESL speaker and also Indonesian manager as EFL speaker. The researcher inserted the same word: *Fine* 



Speaker	Stress Location	Amplitude	Pitch movement
Oxford Standard	Primary Stress	High	Sharp rise
Indian ESL	0.9s	High	Clearly rising
Indonesian EFL	0.9s	Flat	Flat & Flow

From three spectrogram above, the researcher could find the word stress as following series:

Oxford dictionary: Fine (monosyllabic word – carries natural full stress)Indian (ESL) speaker: Fine (Strong single-peak amplitude with full stress on

the word.)

**Indonesian (EFL) speaker** : Fine (Lower amplitude, less distinct stress realization).

The word "fine" is a monosyllabic adjective pronounced /fain/, which by nature carries primary stress on its only syllable. According to the Oxford Dictionary, all content monosyllabic words such as verbs, adjectives, and nouns receive primary stress when spoken in isolation or emphasized in speech. In line with this, Kreidler (2004) explains that monosyllabic content words are inherently prominent due to their semantic weight. Their stress is typically realized through greater amplitude, pitch height, and vowel duration, distinguishing them from function words like *to*, *a*, or *in*, which are often unstressed in connected speech.

As shown in *Picture 21*, the Indian ESL speaker produced *fine* with strong word stress, indicated by a clear pitch peak, higher amplitude, and a distinct waveform shape. The stress appears exactly where expected—on the only syllable—which reflects proper suprasegmental control and mirrors native-like stress-timing. In contrast, in *picture 22*, the Indonesian EFL speaker also produced *fine* as a single unit, but the waveform shows less distinct intensity and flatter pitch movement. While the syllable was stressed in position, it lacked prominence, which weakens the clarity of emphasis typically expected for this adjective.

#### Datum 12a: Friends

The sound graphic below are the representation of word stress from spectrogram analysis of Oxford Dictionary (original version) and Indian managers as ESL speaker and also Indonesian manager as EFL speaker. The researcher inserted the same word: *Friends*.



Speaker	Stress Location	Amplitude	Pitch movement
Oxford Standard	Primary Stress	High	Sharp rise
Indian ESL	0.9s	High	Clearly rising
Indonesian EFL	0.9s	Flat	Not significant

From three spectrogram above, the researcher could find the word stress as following series:

**Oxford dictionary** : Friends (friends  $\rightarrow$  monosyllabic noun, full stres

Indian (ESL) speaker : Friends (Strong single-peak amplitude with full stress on the word.)

**Indonesian (EFL) speaker** : Fine (Lower amplitude, less distinct stress realization).

The word "friends" is a monosyllabic noun, pronounced /frendz/ in Oxford Dictionary. As a content word, it naturally carries primary stress on its sole syllable.

The stress is crucial for ensuring intelligibility and semantic weight, especially in conversational English where prosody helps mark emphasis and rhythm. According to Kreidler (2004) in *The Pronunciation of English*, stress is a relative prominence conveyed by increased pitch (fundamental frequency), greater loudness (intensity), longer vowel duration. For monosyllabic content words, Kreidler explains that: "Stress is inherent and fully realized on the single syllable when the word is spoken alone or receives emphasis in sentence-level rhythm."

In the PRAAT analysis picture 23 showed that Indian ESL Speaker has the Sharp pitch rise at onset, Strong amplitude spike, and Clear vowel duration. This shows that the speaker successfully applied primary stress, similar to the pattern found in the Oxford Dictionary and Kreidler's explanation. Culturally, the use of stress-timed rhythm in Indian ESL speakers reflects how their native language patterns have been shaped by English, especially through English-medium education. Since they often use English in both school and daily life, they tend to be more familiar with features like stress and intonation.

Meanwhile, the spectrogram showed in picture 24 that Indonesia EFL speaker when pronounce the word "friends" reveals flatter pitch, weaker amplitude, and minimal vowel lengthening This supports Kreidler's idea that non-native speakers may struggle with stress because their first language influences how they speak. Since Indonesian follows a syllable-timed rhythm—where each syllable is spoken with similar length and force—Indonesian EFL speakers may find it hard to produce English stress correctly. As a result, their speech can sound flat, and important words like *friends* may not stand out as they should. The Rhythm Class Hypothesis (Grabe & Low, 2002) supports this: speakers from stress-timed L1 backgrounds (like Indian ESL) are more likely to transfer those patterns into L2 English, aiding stress accuracy. In contrast, speakers from syllable-timed L1s (like Indonesian EFL) may struggle to internalize rhythmic contrast and require explicit training to adjust their stress perception and production.

2. Cultural Backgound Shape the Suprasegmental Features of English Word Stress

This section addresses whether Indian as ESL speakers and Indonesian as EFL speakers are shaped by their cultural background when producing the word stress. The answer is developed through an analysis of acoustic data obtained from PRAAT and supported by cultural-linguistic theory, particularly Grabe and Low's (2002) Rhythm Class Hypothesis (RCH) explains that languages differ in their prosodic timing: **stress-timed** languages (like English and most Indian languages) tend to space stressed syllables evenly, compressing unstressed syllables in between. In contrast, **syllable-timed** languages (like Indonesian) give equal timing to each syllable, resulting in flatter rhythm and less variation in stress. This distinction plays a major role in how word stress is perceived and produced by non-native speakers.

Datum 1b:

Oxford dictionary: Fine (monosyllabic word – carries natural full stress)Indian (ESL) speaker: Fine (Strong single-peak amplitude with full stress onthe word.)

**Indonesian (EFL) speaker** : Fine (Lower amplitude, less distinct stress realization).

Look into Picture 21 and 22, the PRAAT analysis of the Indian ESL speaker's pronunciation of the word *fine* aligns more closely with a **stress-timed** rhythm. The waveform displays a *clear pitch peak, high amplitude, and sharp rise*, which are characteristic of native-like English stress-timing. This indicates that the speaker approximates the prosodic rhythm of native English speakers, maintaining proper stress prominence.

In contrast, the Indonesian EFL speaker's realization shows a flatter waveform, less pitch variation, and a more syllable-timed rhythm. In syllable-timed languages, each syllable tends to have equal duration, and there is less contrast between stressed and unstressed syllables. As seen in the waveform and pitch contour, the stress in *fine* was present but lacked acoustic prominence, suggesting a prosodic rhythm more aligned with syllable-timed speech—common among many Austronesian languages including Bahasa Indonesia. This variation in rhythmic realization reflects underlying L1 influence on suprasegmental production, where Indian speakers may benefit from L1s that are stress-timed or have stress-sensitive phonologies, whereas Indonesian speakers tend to transfer syllable-timed patterns into their English pronunciation.

#### Datum 2b :

**Oxford dictionary** : Went (monosyllabic verb, full stress) Indian (ESL) speaker : Went (Clear intensity and sharp stress realization) Indonesian (EFL) speaker : Went (Less pronounced peak, flatter stress articulationPRAAT analysis of Word stress in "Went", see picture 5 and 6, Indian ESL speaker and Indonesian EFL has different in produce word stress. Indian ESL speaker falls under the stress-timed rhythm category: Their production of the word went shows clear pitch rise, longer duration, and stronger amplitudefeatures typical of stress-timed languages like English or German. In contrast, Indonesian EFL speaker: falls under the syllable-timed rhythm category. Proof that Indoesian EFL has influenced by their first language (Indonesian), which is syllable-timed, their pronunciation showed flatter pitch, reduced stress, and more equal syllable timing, consistent with syllable-timed languages like French or Spanish. The Indian speaker reflects a stress-timed rhythm, while the Indonesian speaker displays a syllable-timed pattern. This supports the idea that a speaker's first language rhythm influences how they produce suprasegmental features like word stress in English.

#### Datum 3b:

**Oxford dictionary** : Sister (The first syllable (SIS-) is stressed  $\rightarrow$  /'sis.tər/).

Indian (ESL) speaker : Sister (Strong onset on "SIS").

**Indonesian (EFL) speaker** : Sister (both syllables are almost flat and equally pronounced).

Indian ESL Speaker has stress pattern like Clear primary stress on the first syllable "SIS" (0.9s), shown by higher pitch and strong amplitude. Based on Grab

and Low's (2002) theory, It is classified into Stress-time language influence because The Indian speaker successfully mirrors native-like stress, aligning with **English's stress-timed rhythm**. This shows good prosodic control, likely due to L1 influence—many Indian languages like Hindi or Tamil also have **stresstimed** or mixed rhythm patterns, which support English stress acquisition. Meanwhile, Indonesian EFL speaker stress pattern is stress placed on the same syllable "SIS" but with flat amplitude and weaker pitch contrast. It is aligned with the Rhtym Class Syllable-timed language because the realization was weak.

#### Datum 4b:

Oxford dictionary	: Vacation (Stress pattern: The second syllable
	(CA) is stressed $\rightarrow$ va-CA-tion)
Indian (ESL) speaker	: Vacation (CA clearly stressed)

Indonesian (EFL) speaker : Vacation (CA (slightly stressed / flatter))

From the data presents that clearly places stress on the second syllable "CA" matching the Oxford standard pronunciation. It reflects characteristics of stress-timed rhythm. Indian languages such as Hindi and Tamil are often rhythmically closer to stress-timed languages, making it easier for Indian ESL speakers to reproduce English stress patterns accurately. This supports the native-like stress realization seen in the Indian speaker's production. Meanwhile Indonesian EFL has Stress is placed on "CA", but the prominence is weaker and less distinct—flatter and slightly stressed that shows influence of *syllable-timed* rhythm.

#### Datum 5b:

- **Oxford dictionary** : Days (monosyllabic noun  $\rightarrow$  naturally stressed)
- Indian (ESL) speaker : Days (Clear peak with full stress on the single syllable)

Indonesian (EFL) speaker : Days (Less distinct intensity, flatter delivery).

Stress realization from Indian as ESL Speaker was produced with a clear pitch peak, higher intensity, and strong stress that reflects characteristics of a stress time speaker. Meanwhile Indonesian EFL speaker was produced "Days" with flatter pitch and lower amplitude which suggests influence of a syllable-timed rhythm. The Indian ESL speaker demonstrated a native-like realization of stress, consistent with the stress-timed rhythm class described by Grabe & Low (2002). The Indonesian EFL speaker showed reduced stress prominence, reflecting the rhythmic constraints of their *syllable-timed L1*. This supports the Rhythm Class Hypothesis that L1 rhythm affects suprasegmental features in second language speech, particularly in stress perception and production.

#### Datum 6b:

**Oxford dictionary** : Nice (monosyllabic adjective  $\rightarrow$  full stress)

**Indian (ESL) speaker** : Nice (Prominent pitch and amplitude on /nais/)

Indonesian (EFL) speaker : Nice (Lower contrast in intensity, flatter stress pattern).

Stress realization from Indian as ESL Speaker in word "*Nice*" was spoken with clear pitch elevation and strong amplitude, showing full stress. It aligns with a

stress-timed rhythm pattern. It also show that L1 influence result of many Indian languages (like Hindi) carry stress-timed traits or flexible stress placement, helping speakers approximate English stress more accurately—even in single-syllable words.

In contrast "Nice" was spoken with weaker prominence, indicated by flat pitch and low amplitude, making the stress less noticeable. It reflects a syllable-timed pattern as Indonesian is a syllable-timed language, treats all syllables more equally often leading to understressed delivery even on word that require full prominence in English. This findings support Grabe & Low's theory that L1 rhythm affects L2 prosody, particularly in how speakers handle stress on monosyllabic words.

#### Datum 7b:

Oxford dictionary	:Everything	(Primary	stress	on	first
	syllable: <b>'EV</b>	-ry-thing)			
Indian (ESL) speaker	: Everything (Strong burst on first syllable 'EV,				
	mirrors Oxfo	rd stress patt	ern.)		
Indonesian (EFL) speaker: Everything (Flatter pattern, weaker emphasis					

on 'EV', less distinct contrast).

Stress realization in Indian ESL speaker is Clear and strong primary stress on the first syllable "**EV**", matching the native pattern from the Oxford Dictionary that reflects *stress-timed rhythm* characteristics. As Indian languages often support dynamic stress patterns, enabling speakers to replicate English stress more naturally, even in polysyllabic words like "everything." Meanwhile Indonesian EFL Speaker produced stress on "EV" was weaker and less distinct, with a flatter pitch and amplitude profile across syllables. It indicates a *syllable-timed rhythm* **p**atterns

#### Datum 8b:

<b>Oxford dictionary</b>	: Friends (friends $\rightarrow$ monosyllabic noun, full
	stres
Indian (ESL) speaker	: Friends (Strong single-peak amplitude with full
	stress on the word.)
Indonesian (EFL) spea	ker : Fine (Lower amplitude, less distinct stress
	realization).

Stress realization of the Indian ESL speaker demonstrated a strong command of English word stress. "Friends," a monosyllabic noun, was produced with strong pitch peak and high amplitude, clearly showing full stress, as expected in English native pronunciation. It consistents with a stress-timed rhythm class. Meanwhile The Indonesian EFL speaker showed less stress realization, Produced "friends" with lower amplitude and flatter delivery, lacking the expected stress emphasis. influenced by the syllable-timed nature of their L1. These findings support **Grabe & Low's Rhythm Class Hypothesis**, which emphasizes how L1 rhythm shapes L2 suprasegmental features like stress.

#### Datum 9b:

**Oxford dictionary**: Places (Stress pattern: The **first** syllable '**PLA**' is stressed  $\rightarrow$  '**PLA-ces**)

Indian (ESL) speaker: Places ('PLA' is pronounced clearly with higher pitch and intensity)

Indonesian (EFL) speaker: Places ('PLA' shows flatter and weaker contrast between syllables).

realization from Indian ESL speaker Stress produced in first syllable "PLA" was delivered with *clear prominence*, higher pitch, greater intensity-accurately mirroring the Oxford stress pattern which follows a stresstimed rhythm. The Indian ESL speaker as the speaker's L1 likely supports variable stress patterns, making it easier to adopt native-like English stress, especially in disyllabic words. In contrast, "PLA" had weaker pitch and lower intensity produced by Indonesia EFL, creating less contrast with the following syllable that reflects typical of syllable-timed languages. These results support the idea that native rhythmic background influences second language stress production, especially in how clearly speakers mark primary stress.

#### Datum 10b:

Oxford dictionary	: Travel ( ( <b>'TRA</b> -vel): stress on first syllable)
Indian (ESL) speaker	: Travel (( <b>'TRA-</b> vel): strong first syllable stress)
Indonesian (EFL) speake	er : Travel (less stress on 'TRA, flatter stress pattern)

Indian ESL Speakers has clearly pronounced primary stress on the first syllable **"TRA"**, with strong pitch and intensity, aligning well with the Oxford Dictionary model which indicates a stress-timed rhythm pattern. The influence of background from Indian as ESL speaker likely accommodate dynamic stress, allowing them to replicate English prosody more naturally. Meanwhile Indoensian EFL speaker produced the word "TRA" carried less perceptible stress, with a flatter pitch contour and lower amplitude, making the syllable contrast weaker which reflects syllable-timed rhythm.

#### Datum 11b:

**Oxford dictionary** : Plan. (/plæn/. Stress pattern: single syllable  $\rightarrow$  fully stressed)

Indian (ESL) speaker : Plan. (clearly stressed)

Indonesian (EFL) speaker : Plan. (less intensity, slightly flatter articulation)

For the word "**plan**," the Indian ESL speaker pronounced it with a clear rise in pitch and strong loudness, making the stress easy to hear—just like how it sounds in native English. This follows a *stress-timed rhythm*, where some syllables are naturally emphasized more than others. The speaker's first language likely supports this kind of stress pattern, which helped them sound more native-like. On the other hand, the Indonesian EFL speaker said "**plan**" with softer volume and a flatter tone, making the stress less noticeable. This matches a *syllable-timed rhythm*, where every syllable tends to get the same amount of emphasis. Because of this rhythm in Indonesian, it's harder for the speaker to show strong stress on singlesyllable words in English. These differences support Grabe and Low's (2002) Rhythm Class Hypothesis, which explains how a person's first language rhythm can affect how they use stress in a second language.

#### Datum 12b:

Oxford dictionary: People ( PEO-ple): stress on first syllable)Indian (ESL) speaker: People (('PEO-ple): correct stress with strong onset)Indonesian (EFL) speaker : People (flatter pattern, weaker first syllable stress)

Stress realization for word "**people**," the Indian ESL speaker placed strong and clear stress on the first syllable "**PEO**", just as modeled in the Oxford Dictionary. The pitch and loudness at the start were noticeable, showing a **stress-timed rhythm** pattern, which is typical in English. The speaker's L1 background seems to support this rhythm, making it easier for them to apply stress naturally and accurately. In contrast, the Indonesian EFL speaker showed less clear emphasis on the first syllable. The stress was weaker and the delivery flatter, reflecting a *syllable-timed rhythm* where each syllable tends to sound more equal. This rhythm style in their first language may make it harder to match English's stress patterns. As **Grabe and Low (2002)** explain in their **Rhythm Class Hypothesis**, these differences show how the rhythm of a speaker's native language can affect how they produce stress in English.

#### Datum 13b: Indian ESL Spekaers' Cultural and Educational Background

Indian ESL participants reported significant exposure to English from an early age, both through formal education and daily communication, which enhances their ability to approximate native-like stress patterns. One participant noted:

"English has been part of my education since childhood, and it is widely used in media, at home, and in school. This helped me naturally adapt to the rhythm and stress patterns of English."

Their bilingual or multilingual environment, where many Indian languages exhibit stress-timed or mixed rhythmic patterns, further supports their proficiency in producing stress-timed English word stress. Another participant explained:

"We frequently switch between English and regional languages with similar stress timing, making it easier to adapt to English word stress."

This finding is consistent with Grabe & Low (2002), this study confirms that L1

rhythmic typology strongly influences L2 stress acquisition. Indian ESL

participants, whose native languages share stress-timed properties with English, demonstrated native-like proficiency due to prosodic transfer and early multilingual exposure. This contrasts with learners from syllable-timed L1 backgrounds, who typically face greater challenges in mastering English stress patterns. Thus, background language not only affects but can predict L2 rhythmic proficiency.

# Datum 14b: Indonesian EFL Speakers's Learning Environment and Cultural Constraints.

In contrast, Indonesian EFL participants shared that their exposure to English was largely limited to formal learning settings, with less frequent use in daily communication. One participant noted:

"English is mostly learned in school and not used much outside. We focus more on grammar and vocabulary than pronunciation, so sometimes the stress doesn't come naturally."

They also described the influence of Bahasa Indonesia, a syllable-timed language, on their English pronunciation:

"Because Indonesian sounds more even and flat, it's hard to emphasize certain syllables strongly when speaking English."

This reflects how the rhythmic patterns of their L1 affect their suprasegmental features, often leading to less prominent stress contrasts compared to stress-timed language speakers. In line with Grabe & Low (2002), Indonesian EFL learners' difficulties with English stress patterns stem from the rhythmic mismatch between their syllable-timed L1 (Bahasa Indonesia) and stress-timed English. Limited natural exposure exacerbates this, resulting in weaker stress contrasts. This contrasts sharply with Indian ESL speakers' advantages, proving RCH's central claim: L1-L2 rhythmic similarity facilitates acquisition, while dissimilarity creates barriers. Pedagogical interventions for such learners should address this prosodic gap explicitly.

These interview findings complement the acoustic data, confirming that cultural background, educational exposure, and L1 rhythmic characteristics play a significant role in shaping the suprasegmental features of English word stress. Indian ESL speakers benefit from early and rich exposure to English and stresstimed native languages, supporting more native-like stress patterns. Meanwhile, Indonesian EFL speakers face challenges from limited English exposure and syllable-timed L1 influence, resulting in less distinct stress realization.

#### **B.** Discussions

Based on the PRAAT acoustic analysis of eleven keywords—such as *vacation, plan, went, friends, travel*, and *people*—the data clearly indicate a consistent distinction in how **Indian ESL** and **Indonesian EFL** speakers realize English word stress. These differences are particularly apparent in terms of pitch movement, amplitude (intensity), and syllable duration.

Let's begin with the word *vacation* (va-CA-tion). The **Indian ESL speaker** produced a clear and strong stress on the second syllable "CA", accompanied by a steep pitch rise and high amplitude (~9300), aligning with the Oxford Standard. Meanwhile, the **Indonesian EFL speaker** also stressed the second syllable but with significantly **lower intensity** (~7900) and **flatter pitch**  **movement**, resulting in a less prominent stress. According to Kreidler (2004), trisyllabic nouns like *vacation* typically receive penultimate stress due to suffix rules—a pattern the Indian speaker followed more effectively.

The same pattern holds for monosyllabic words like *plan* and *went*. Indian speakers produced them with full stress—sharp pitch rise and high intensity (~9500–9600)—whereas Indonesian speakers showed reduced intensity (~7800–8100) and flatter delivery. Even though monosyllabic words should be fully stressed as per Kreidler, Indonesian EFL delivery appeared weakened, possibly due to interference from syllable-timed rhythm.

Further evidence is seen in **disyllabic words** like *people* and *travel*. In *people*, stress naturally falls on the first syllable. The Indian speaker showed higher pitch and stronger amplitude on "PEO", while the Indonesian speaker had **minimal pitch contrast**, making the stress barely noticeable. This aligns with Kreidler's observation that disyllabic nouns generally carry initial stress but may be flattened in EFL pronunciation due to equal syllable timing. Talking result based on Theory the data confirms Kreidler's (2004) assertion that English stress is phonetically marked by increased pitch, intensity, and vowel length. However, not all speakers can realize this equally. Indian ESL speakers, influenced by a stress-timed L1 (e.g., Hindi, Tamil, Bengali), tend to produce native-like stress patterns, while Indonesian EFL speakers—whose L1 (Bahasa Indonesia) is syllable-timed—show a flattened prosodic delivery.

When these findings are interpreted through the lens of Kreidler's (2004) stress theory, clear patterns emerge in terms of the dominant types of stress utilized

by each speaker group. Indian ESL speakers were found to frequently apply **primary stress** accurately on the expected syllables, and they also followed proper *shifting stress* patterns—especially when dealing with polysyllabic words and grammatical category shifts (e.g., noun-verb changes). This dominant use of primary and shifting stress reflects their greater familiarity with English lexical stress rules. On the other hand, Indonesian EFL speakers exhibited a dominant reliance on **fixed stress** patterns and often failed to adjust stress placement in accordance with the word class or morphological cues. Many stressed syllables appeared either muted or equally weighted with others, resulting in a perceptual impression of **unstressed** or flat delivery. This flattening effect often obscured the intended lexical emphasis, impacting intelligibility.

All findings result support Grabe and Low's (2002) Rhythm Class Hypothesis, which explains how native rhythmic habits shape second-language stress patterns. In stress-timed languages, stressed syllables occur at regular intervals and unstressed syllables are reduced. In contrast, syllable-timed languages give relatively equal weight to each syllable, making stress contrast harder to perceive and produce. As this research goals is to find the gap with the previous study. Today research has these results that align closely with earlier research *Suwartono (2015) and Azizah et al. (2021)* found that Indonesian learners often produce English stress with reduced salience and improper placement due to L1 transfer. Similarly, *Sürüç Şen (2021)* observed Turkish EFL learners showing similar stress timing lags due to syllable-timed L1 interference exhibited delayed and weakened stress cues, a finding mirrored in this study's Indonesian data. Meanwhile *Yenkimaleki & van Heuven (2021)* emphasized that explicit suprasegmental instruction greatly improves stress accuracy in EFL learners. Hence, RQ1 reveals that the acoustic realization of word stress is shaped both by linguistic rhythm and by speaker familiarity with English prosody, with ESL speakers producing more perceptually salient stress than their EFL counterparts.

Beyond phonological factors, the interview data provide valuable insight into how *cultural and educational background* influences word stress production. All four informants (2 ESL, 2 EFL) were asked about their English exposure and pronunciation habits. Indian ESL speakers described using English regularly in their professional and educational lives. English was part of their daily workplace communication, including writing, meetings, and informal conversation. As one speaker mentioned, "We always use English at work because the team is multinational. I got used to thinking in English too." This extensive and meaningful use likely contributes to greater control over stress and rhythm, as supported by Gibson & Bernales (2020) and Liu & Yan (2025).

In contrast, Indonesian EFL speakers indicated that English was primarily used in formal education settings, with very little daily interaction. One participant mentioned, "We learn English in school, mostly grammar and writing. We don't talk in English much." This limited communicative exposure restricts their ability to internalize and apply suprasegmental patterns, particularly in spontaneous speech.

Further explanation that Integrated Cultural-Linguistic is that the differences observed between the two speaker groups go beyond linguistic rhythm

alone—they also reflect cultural exposure and learning habits. According to Smirkou (2021), suprasegmental acquisition is both cognitive (linked to L1 processing) and sociocultural (shaped by interactional habits and values). Indian speakers benefit from an environment where English is actively spoken and culturally valued. **Indonesian speakers**, despite formal instruction, are less confident using English for oral communication, resulting in more cautious, monotone speech delivery.

Grabe & Low's Rhythm Class Hypothesis and PRAAT waveform analysis jointly confirm this. Words like *friends*, *fine*, and *sister*—all of which should carry primary stress—were delivered with acoustic prominence by ESL speakers but sounded muted and flat in EFL production. To conclude, this study confirms **that** word stress is not merely a technical phonetic feature, but a culturally and rhythmically shaped behavior. Indian ESL speakers' stress production was supported by both their L1 rhythm compatibility **and** active use of English, while Indonesian EFL speakers struggled with prosodic transfer **and** limited exposure. This confirms the importance of explicit suprasegmental instruction for EFL learners, Context-aware pedagogy that considers L1 influence, then using tools like **PRAAT** to provide visual feedback in pronunciation training

These findings bridge linguistic theory with real-world communication practice, emphasizing that prosody must be part of the pronunciation curriculum—especially in cross-cultural English contexts . Ultimately, this study demonstrates that word stress is not simply a technical pronunciation skill—it reflects broader patterns of rhythm, cultural engagement, and language confidence. For EFL

learners, especially those from syllable-timed language backgrounds, it is crucial that stress patterns are taught explicitly, supported by visual tools like PRAAT, and integrated into real communicative practice. Understanding the cultural-linguistic factors behind pronunciation can help bridge the gap between theory and effective classroom pedagogy.

#### CHAPTER V CONCLUSION

This last chapter consists of conclusion and suggestion. The conclusion of the findings and discussion are based on the data provided. Additionally, it presents the suggestion to other researchers regarding this scope analysis.

#### A. Conclusion

This study set out to examine the suprasegmental features of English word stress among Indian ESL and Indonesian EFL speakers from a cross-cultural perspective. Through both acoustic analysis using PRAAT and qualitative interviews, the study addressed two main research questions. For RQ1, the analysis of selected English words revealed that Indian ESL speakers were able to produce stress more accurately, with clear pitch movement, higher intensity, and longer syllable duration. Their production closely aligned with standard models (e.g., Oxford Dictionary), especially in trisyllabic and disyllabic words such as *vacation*, *travel*, and *people*. This is consistent with **Kreidler's (2004)** explanation that stress in English is marked by perceptible acoustic cues—pitch, intensity, and vowel length—and must be distinguished clearly to ensure intelligibility.

In contrast, Indonesian EFL speakers demonstrated flatter pitch contours, minimal vowel lengthening, and equal syllable timing, particularly in monosyllabic and disyllabic words. Despite choosing the correct stressed syllable, their inability to realize the stress acoustically resulted in less perceptible prominence. This reflects a transfer of their syllable-timed L1 prosody, where all syllables are treated equally—a phenomenon described as prosodic transfer. For RQ2, the results confirm that cultural background significantly influences how word stress is learned and performed. Speakers' rhythmic patterns (Grabe & Low, 2002) as well as their exposure to English shaped their pronunciation behavior. Indian speakers, whose L1s are stress-timed and who use English regularly in professional contexts, exhibited better control of suprasegmental features. Indonesian speakers, with limited real-life English usage and formal instruction focusing more on grammar than pronunciation, struggled to transfer accurate stress into speech.

These findings reinforce the Rhythm Class Hypothesis (Grabe & Low, 2002), which classifies languages based on how syllable timing is realized. Indian speakers' rhythm aligns with English stress-timed patterns, facilitating better word stress realization. Indonesian speakers' syllable-timed L1 leads to flatter delivery and weaker stress contrasts. Additionally, Kreidler's framework helped decode the interaction between word structure, grammatical function, and stress patterns, particularly in noun-verb contrasts and multi-syllabic constructions.

Compared to previous studies—such as Suwartono (2015), Azizah et al. (2021), or Valigura et al. (2020)—this research offers a cross-cultural, comparative perspective using real conversational data and acoustic analysis, rather than isolated words or scripted reading. The use of PRAAT-based waveform and pitch contour interpretation combined with open-ended interviews provides a more holistic view of how both linguistic rhythm and cultural context shape English pronunciation.

The **novelty** lies in how this study:

• Integrates acoustic phonetic evidence and speaker perception

- Compares two L2 learner types (ESL vs EFL) in workplace settings
- Highlights the interaction of L1 rhythm, cultural exposure, and confidence in prosody use

This interdisciplinary approach contributes to pronunciation pedagogy, especially in multicultural workplaces where English is used as a lingua franca.

#### **B.** Suggestion

Based on the findings and conclusions, the following suggestions are proposed for future researchers and language educators, future research should include a wider variety of English words across different sentence contexts (e.g., stress shift, sentence-level prominence) to analyze the interaction between word stress and intonation. Further, next researchers may consider applying quantitative rhythm measures such as the Pairwise Variability Index (PVI)proposed by Grabe & Low (2002), to provide statistical confirmation of rhythmic differences between speaker groups. It is recommended that future studies include **more** diverse participant backgrounds (e.g., female speakers, different L1s, varying proficiency levels) to enrich the cross-cultural comparison.

English teachers, particularly in EFL contexts, should incorporate explicit suprasegmental training using visual tools like PRAAT to help learners identify pitch, intensity, and timing differences more clearly. Curriculum designers should consider integrating stress and rhythm awareness into speaking and listening activities, not just as pronunciation drills but as part of real-world communication training.

#### References

- Abdelrahim, A. (2020). Improving Speaker's Use of Suprasegmental Features. *International Journal of English* Linguistics, 203-220.
- Abdolvahed Zarifi, Ali Sayyadi. (2015). How English Suprasegmental Features of Pronunciation Are Viewed and Treated by Instructors in Iranian Private Language Centers. *Theory and Practice in Language Studies, Vol. 5, No. 6,*, 1166-1172.
- Ahmad, Y. B. (2018). Teaching English pronunciation of suprasegmental features on students of English education. SHS Web of Conferences, 42, 00048. https://doi.org/10.1051/shsconf/20184200048
- Anderson, C. (2018). *Essentials of linguistics*. McMaster University.
- Ardini, S. N., & Senowarsito, S. (2023). A prosodic comparison between Jonglish and native English speakers. \*Lingua: Journal of Language and Culture\*, 14(1), 34–48.
- Azizah, N. N., Kharuddin, & Said, A. M. (2021). Suprasegmental sounds produced by the students of English Education Department at UIN Alauddin Makassar.
- Boersma, P. (2001). PRAAT, a system for doing phonetics by computer. \*Glot International\*, 5(9/10), 341–345.
- Boersma, P., & van Heuven, V. (2001). Speak and unSpeak with PRAAT. \*Glot International\*, 341–347.
- Bollinger, D. (1989).*Intonation and its uses: Melody in grammar and discourse*. Stanford University Press, Stanford.
- Charles W. Kreidler. 1998. Introducing English Semantic. London: Routledge.
- Chun, D. M. (2002). *Discourse in Intonation L2*. Santa Barbara: John Benjamins Publishing Company.
- Diyanti, I. A. N., & Suciati, N. A. (2021). Suprasegmental features in Indonesian EFL students' pronunciation. \*Journal of Language and Language Teaching\*, 8(1), 45–53.
- Gibson, M., & Bernales, C. (2020). The influence of language background and second language phonetics training on the perception of lexical stress in a second language. Retrieved from https://www.researchgate.net/publication/339633610

- Grabe, E., & Low, E. L. (2002). Durational variability in speech and the rhythm class hypothesis. In C. Gussenhoven & N. Warner (Eds.), \*Laboratory Phonology 7\* (pp. 515–546). Berlin: Mouton de Gruyter.
- Gussenhoven, C. (2015). Suprasegmentals. 714 International Encyclopedia of the Social & Behavioral Sciences, 2nd edition, Volume 23, 714-721.
- Gutiérrez-Fresneda, R., De Vicente-Yagüe Jara, I. M., & Jiménez-Pérez, E. (2021). Effects of suprasegmental awareness on learning to read in the first school years. *Revista De Psicodidáctica (English Ed.)*, 26(1), 28–34. https://doi.org/10.1016/j.psicoe.2020.10.001
- Hammad, M. A., & Mohamednor, N. (2025). Lexical stress instruction and assessment in Gaza university classrooms. \*Middle East Journal of Linguistics and Pedagogy\*.
- Hans Heinrich Stern. (1983). *Fundamental concepts of language teaching*. Oxford University Press.
- Herlina, C. (2011). PHONOLOGICAL ANALYSIS OF UNIVERSITY STUDENTS' SPOKEN DISCOURSE. *Humaniora*, 77-82
- Kang, O.k.i.m., Rubin, D. O. N., & Pickering, L. U. C. Y. (2010). Suprasegmental measures of accentedness and judgments of language learner proficiency in oral English. *The Modern Language Journal*, 94(4), 554–566. https://doi.org/10.1111/j.1540-4781.2010.01091.x
- Kreidler, C. W. (2004). *The Pronunciation of English*. Victoria: Blackwell Publishing.
- Lehiste, I. (1970). Suprasegmental. Halliday Lithograph Corporation
- Liu, Y., & Yan, Q. (2025). Influence of cultural background on English pronunciation. Open Journal of Modern Linguistics, 15(1), 47–56.
- McMahoon, A. (2002). An introduction to English phonology. Edinburgh University Press.
- Munro, M. J., & Derwing, T. M. (1995). Processing time, accent, and comprehensibility in the perception of native and foreign-accented speech. *Language and Speech*, 38(3), 289–306. https://doi.org/10.1177/002383099503800305
- Nadeem, H., & Rahman, A. (2023). Gender-based differences in lexical stress among Khowar ESL learners. Pakistan Journal of Linguistics.

- Nadya Nur Azizah, Kharuddin, Abdul Muis Said. (2021). Suprasegmental Sounds Produced By The Students Of English Education Department At Uin Alauddin Makassar.
- Nuraini, D., Putri, R. A., & Akbar, S. (2024). Indonesian learners' difficulties with verb stress: An empirical study. \*Journal of English Language Teaching and Education.
- Nurpahmi, S., Fitriani, A., & Hasanah, L. (2023). Acoustic analysis of word stress errors in Indonesian learners using PRAAT. Journal of Applied Linguistics and Language Research
- Paul Boersma, Vincent van Heuven. (2001). Speak and unSpeak with PRAAT. *Glot International*, 341-347.
- Roach, P. (1991). English Phonetics and Phonology; A practical Course, Second Edition. Cambridge University Press.
- Sardegna, V. G., & Jarosz, A. (2023). Enhancing word stress awareness with YouGlish: A self-directed learning tool. International Journal of English Pronunciation Studies.
- Septiyanda, R., Aisyah, S., & Nugroho, A. (2023). Stress pattern shifts in verb-noun conversion among adult EFL speakers. \*Indonesian Journal of English Education\*, 10(2), 120–134.
- Smirkou, E. (2021). The acquisition of English lexical stress by Arab learners: An<br/>Optimality Theory analysis.\*ERIC\*.https://files.eric.ed.gov/fulltext/ED620475.pdf
- Stern, H. H. (1983). \*Fundamental Concepts of Language Teaching\*. Oxford University Press.
- Sukarni, S., Junaedi Setiyono, Rofiq Nurhadi. (2020). Suprasegmental Errors of Student with Javanese Mother Tongue: A Case at a Private Islamic University in Purworejo. *Ta'dib Jurnal Pendidikan Islam*, 83-96.
- Sürüç Şen, N. (2021). Comparing the melodies of Turkish and English speech: A focus on suprasegmentals. *Journal of Language and Linguistic Studies*, 17(1), 377-397. Doi: 10.52462/jlls.23
- Tiwari, R. (2024). Using Wordwall to improve pronunciation, stress, and intonation. Innovations in Language Learning Journal, 7(1), 11–25.
- Valigura, O., Parashchuk, V., & Kozub, L. (2020, December 1). Phonetic Portrait of a Ukrainian EFL Teacher: Prosodic Parameters in Academic Discourse. https://doi.org/10.24093/awej/elt3.2

- Wang, X. (2020). Segmental versus Suprasegmental: Which One is More Important to teach. *RELC Journal*, 1-9.
- Wardana, W., Purnomo, A., & Sukmawati, N. (2023). Phonological awareness training and its impact on pronunciation and motivation. \*TESOL Journal of Asia\*, 9(4), 223–239.
- Yenkimaleki, M., & van Heuven, V. J. (2021). Effects of attention to segmental vs. suprasegmental features on the speech intelligibility and comprehensibility of the EFL learners targeting the perception or production-focused practice. *System*, 100, 102557. https://doi.org/10.1016/j.system.2021.102557
- Yenkimaleki, Mahmood & Van Heuven, Vincent. (2013). PROSODIC FEATURE AWARENESS TRAINING IN INTERPRETING: AN EXPERIMENTAL STUDY.

#### **CURRICULUM VITAE**



Abrara Finnahari was born in Batam, on October 2nd, 1999. Her educational journey began at SDN 006 Batam Kota, Batam. She completed Secondary education at SMPN 42 Batam in 2015 and became high school student at SMAN 3 Batam until 2018. Then she continued her studies at Universitas Islam Negeri Maulana Malik Ibrahim Malang, majoring in English Literature under the Faculty of Humanities. During her undergraduate years, she actively participated in student organizations and served as a member of the English Literature Student Association (HMJ Sastra Inggris), where she developed her leadership and communication skills.

Alongside her academic pursuits, Abrara took part in an internship as a General Affairs Assistant at one of oil and gas compay named PT. Cladtek BI Metal Manufacturing from 2021 to 2022.

# APPENDIX

Table of target word produced by Indian ESL Speaker & Indonesian EFL Speaker. The researcher choose the same word that uttered by both of them

No	Sentence		Word Stress to be Analyzed
	Indian ESL	Indonesian EFL	1
1	"I'm fine. I'm fine because tomorrow I'm going for my vacation'	"I'm fine, how about you?"	Fine
2	"I went for a vacation"	"I've heard you just went back from your holiday"	Went
3	"My sister is coming from US"	"I'm with my sister"	Sister
4	"During my vacation the main thing is get together"	"My last vacation was when I back to hometown"	Vacation
5	"The 20 days vacation"	"I think three days"	Days
6	"Good beaches and nice location"	"Everything is nice there"	Nice
7	"I say everything is cleared"	"In Batam, everything is closed"	Everything
8	"We haven't met my friends for almost five years"	"All my friends are married now"	Friends
9	"We met in our places"	"We visited some places"	Places
10	"I travel to Maldives"	"We travel around Semarang"	Travel
11	"Yeah, because it's been more than two months."	"Yeah, because we went to some tradition"	Because
12	"Many people got affected"	"Many people there"	People

# Table Data Comparative Word Stress Analysis of Indian ESL Speaker & Indonesian EFL Speaker

1. Word: Vacation

Feature	Oxford Standard	Indian ESL Speaker	Indonesian EFL Speaker
Word Type	Trisyllabic	Trisyllabic noun	Trisyllabic noun
	noun		
Stress	Stress on 2nd	Stress on 2nd	Unclear stress target
Realization	syllable	syllable	
Acoustic	CA in va-CA-	Correct rise on 'CA'	Level intensity
Marking	tion has peak		
Stress	N/A	0.85s	0.85s
Location			
Amplitude	N/A	~9300	~7900
Theory	Kreidler	Applies	Stress rule underapplied
Reference	(2004): suffix	morphological rule	
	rules drive	effectively	
	penultimate		
	stress		

## 2. Word: Plan

Feature	Oxford	Indian ESL	Indonesian EFL
	Standard	Speaker	Speaker
Word Type	Monosyllabic	Monosyllabic verb	Monosyllabic verb
	verb		2
Stress	Full primary	Clearly stressed	Reduced strength
Realization	stress		
Acoustic	High sharp peak	Intense onset	Lower peak
Marking	0 11		1
Stress	N/A	0.7s	0.7s
Location			
Amplitude	N/A	~9500	~7800
Theory	Kreidler (2004):	High clarity and	Stress muted by
Reference	stressed for	native-like delivery	syllable-timed delivery
	verbal focus		

#### 3. Word: Went

Feature	Oxford Standard		Indonesian EFL Speaker
---------	--------------------	--	---------------------------

Word	Monosyllabic	Monosyllabic verb	Monosyllabic verb
Туре	verb		
Stress	Full primary	Clearly stressed	Stress present but not
Realization	stress		prominent
Acoustic	Sharp onset, high	Strong pitch and	Low contrast, flat
Marking	intensity	amplitude	rhythm
Stress	N/A	0.9s	0.9s
Location			
Amplitude	N/A	~9600	~8100
Theory	Kreidler (2004):	Accurate	Influenced by syllable-
Reference	stressed due to	realization of	timed L1 prosody
	verb function	stress-timed rhythm	

# 4. Word: Travel

Feature	Oxford	Indian ESL	Indonesian EFL
	Standard	Speaker	Speaker
Word	Disyllabic	Disyllabic verb	Disyllabic verb
Туре	verb/noun		
Stress	Stress on 1st	Stress on 'TRA-'	Even syllables
Realization	syllable		
Acoustic	First syllable	Pitch falls on '-vel'	Flat contour
Marking	pitch and length		
	dominate		
Stress	N/A	1.1s	1.1s
Location			
Amplitude	N/A	~9400	~8000
Theory	Kreidler (2004):	Consistent with	No strong stress contour
Reference	many disyllabic	lexical stress rules	observed
	verbs and nouns		
	use initial stress		

# 5. Word: People

Feature	Oxford	Indian ESL	Indonesian EFL
	Standard	Speaker	Speaker
Word Type	Disyllabic noun	Disyllabic noun	Disyllabic noun
Stress	Primary stress	Correct stress on	Flatter stress
Realization	on 1st syllable	'PEO-'	distribution
Acoustic	Stress on 'PEO-',	Higher pitch on 1st	Minimal pitch
Marking	reduced '-ple'	syllable	difference
Stress	N/A	0.8s	0.8s
Location			
Amplitude	N/A	~9200	~7900
Theory	Kreidler (2004):	Follows noun stress	Syllables more equally
Reference	disyllabic nouns	pattern	stressed

stressed on 1st	
syllable	

# 6. Word: Sister

Feature	Oxford	Indian ESL	Indonesian EFL
	Standard	Speaker	Speaker
Word Type	Disyllabic noun	Disyllabic noun	Disyllabic noun
Stress	Stress on 1st	Strong stress on	Weak first syllable
Realization	syllable	'SIS'	stress
Acoustic	Clear contrast in	Sharp amplitude on	Even amplitude across
Marking	syllables	1st syllable	both syllables
Stress	N/A	1.2s	1.2s
Location			
Amplitude	N/A	~9400	~8050
Theory	Kreidler (2004):	Accurate	Interference from L1
Reference	disyllabic nouns	application of stress	rhythm
	follow initial	rule	
	stress rule		

# 7. Word: Places

Feature	Oxford	Indian ESL	Indonesian EFL
	Standard	Speaker	Speaker
Word Type	Disyllabic noun	Disyllabic noun	Disyllabic noun
Stress	Stress on 1st	Correct stress on	Flatter pattern
Realization	syllable	'PLA-'	
Acoustic	Clear contrast	Amplitude drops on	Little difference
Marking	between 'PLA-'	second syllable	between syllables
	and '-ces'		
Stress	N/A	0.8s	0.8s
Location			
Amplitude	N/A	~9300	~8150
Theory	Kreidler (2004):	Expected pattern	More equal syllable
Reference	noun stress rule	for disyllabic noun	weight due to L1 timing
	applies to first		
	syllable		

# 8. Word: Days

Feature	Oxford	Indian ESL	Indonesian EFL
	Standard	Speaker	Speaker
Word Type	Monosyllabic	Monosyllabic	Monosyllabic noun
	noun	noun	
Stress	Full primary	Clearly stressed	Stress present but weak
Realization	stress	with control	
Acoustic	High amplitude	High pitch and	Low contrast between
Marking	and sharp onset	intensity	peaks

Stress Location	N/A	0.9s	0.9s
Amplitude	N/A	~9450	~8100
Theory Reference	Kreidler (2004): nouns carry stress in isolation or emphasis	Properly matches expected prominence	Syllable-timed influence observed

### 9. Word: Nice

Feature	Oxford	Indian ESL	Indonesian EFL
	Standard	Speaker	Speaker
Word Type	Monosyllabic	Monosyllabic	Monosyllabic adjective
	adjective	adjective	
Stress	Full primary	Prominent stress	Present but weak
Realization	stress		
Acoustic	Short and strong	Pitch spike	Lower amplitude
Marking	burst		
Stress	N/A	0.8s	0.8s
Location			
Amplitude	N/A	~9200	~7900
Theory	Kreidler (2004):	Mirrors native	Syllable timing causes
Reference	monosyllabic	pattern well	weaker realization
	adjectives are		
	fully stressed		

# 10. Word: Everything

Feature	Oxford	Indian ESL	Indonesian EFL
	Standard	Speaker	Speaker
Word Type	Trisyllabic	Trisyllabic	Trisyllabic pronoun
	pronoun	pronoun	
Stress	Primary stress	Strong stress on	Stress diluted across
Realization	on 1st syllable	first syllable	syllables
Acoustic	Stress on 'E-',	Clear drop after 'E'	Minimal contrast in
Marking	reduced '-		pitch
	rything'		
Stress	N/A	1.0s	1.0s
Location			
Amplitude	N/A	~9100	~8000

Theory	Kreidler (2004):	Proper rhythmic	Even delivery typical of
Reference	stress often falls	division observed	syllable-timed L1
	on initial		
	syllable of		
	function-based		
	pronouns		

# 11. Word: Fine

Feature	Oxford Standard	Indian ESL Speaker	Indonesian EFL Speaker
Word Type	Monosyllabic adjective	Monosyllabic adjective	Monosyllabic adjective
Stress Realization	Full primary stress	Strong and clearly articulated	Present but acoustically weak
Acoustic Marking	High pitch & intensity	Accurate and prominent	Flatter, less prominent
Stress Location	N/A (as reference model)	0.9 seconds	0.9 seconds
Amplitude	N/A	~9500	~8500
Theory Reference	Kreidler (2004): monosyllabic content words are fully stressed	Matches native- like stress with prominent cues	

### 12. Word: Friends

Feature	Oxford	Indian ESL	Indonesian EFL
	Standard	Speaker	Speaker
Word Type	Monosyllabic	Monosyllabic noun	Monosyllabic noun
	noun		
Stress	Full primary	Prominent stress	Less prominent
Realization	stress	placement	
Acoustic	High pitch &	Pitch rise with	Weaker pitch rise
Marking	duration	duration	
<b>Stress Location</b>	N/A	0.9s	0.9s
Amplitude	N/A	~9400	~8200
Theory	Kreidler (2004):	Reflects stress-	Syllable-timed
Reference	content words	timed speech	delivery affects
	receive full	pattern	stress
	stress		

**Indian ESL Speakers** 

1. Q1. Can you describe how your native language or cultural background influences the way you pronounce English words, especially in terms of word stress?

Informant 1: Yes, I think my first language, Hindi, definitely influences the way I pronounce English. In Hindi, we usually don't have strong stress like in English. So, I sometimes pronounce all syllables more equally, and that can affect how natural I sound when speaking English.

Informant 2: I speak Tamil at home, and in Tamil, all syllables are more or less equal in strength. So when I speak English, sometimes I put stress in the wrong place or don't stress at all. I think it makes my English sound a bit flat.

# 2. Q2. When speaking English, do you consciously think about which syllables to stress, or does it come naturally based on your first language habits?

Informant 1: I usually don't think too much about stress when I speak. I just speak the way I learned from school or from others around me. Maybe in some cases, I stress the wrong syllable, especially in longer words like 'development' or 'communication'.

Informant 2: Honestly, I never really thought about stress until I started working in a multinational company. Now, I try to copy the stress patterns of native speakers so I can be better understood.

3. Q3. How important do you think rhythm and stress are when communicating in English in multicultural settings (e.g., at work or in school)?

Informant 1: I think it's quite important, especially when I'm talking to foreigners or native speakers. Sometimes if I stress the wrong syllable, people ask me to repeat. But among Indians, we all understand each other even if the stress is different. Informant 2: Very important. I once said 'record' as a verb but stressed it like the noun, and the listener got confused. That made me realize how crucial word stress is.

#### **Indonesian EFL Speakers**

**Q1.** How do you think your native language (Bahasa Indonesia) or cultural background influences your English pronunciation, particularly in word stress?

**Informant 1:** "In Indonesian, we don't really emphasize specific syllables, so when I speak English, I often get confused about which syllable to stress. My speech tends to sound flat without clear stress patterns. Indeed English is mostly learned in school and not used much outside. We focus more on grammar and vocabulary than pronunciation, so sometimes the stress doesn't come naturally."

**Informant 2:** "I'm Javanese, and we naturally speak with flat intonation. This carries over to my English - I don't emphasize stressed syllables much. I only realized its importance after taking speaking courses."

**Q2.** When speaking English, do you consciously think about which syllables to stress, or does it come naturally like when you speak Indonesian?

**Informant 1:** "During practice or presentations, I actively think about syllable stress. But in casual conversation, I speak without much thought. Sometimes friends

point out my mistakes in words like 'address' or 'record' It because Indonesian sounds more even and flat, it's hard to emphasize certain syllables strongly when speaking English.."

**Informant 2:** "I usually don't think about it. But after TOEFL/IELTS preparation, I've become more aware of stress patterns, especially for listening and speaking tests."

**Q3.** How important do you think rhythm and word stress are in cross-cultural English communication, like in academic or professional settings?

**Informant 1:** "It's important because misplaced stress can cause misunderstandings, especially with native speakers. Among fellow Indonesians though, people tend to overlook stress errors."

**Informant 2:** "In my current workplace where I sometimes give English presentations, my supervisor often asks me to repeat when my stress is wrong. So yes, it's very important."