Issues in Language Studies

Volume 12 Number 2 (2023)

Faculty of Education, Language and Communication
Universiti Malaysia Sarawak
94300 Kota Samarahan, Sarawak.
www.ils.unimas.my

e-ISSN 2180 -2726

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ISSUES IN LANGUAGE STUDIES

Issues in Language Studies is a publication of the Faculty of Education, Language and Communication (formerly known as Centre for Language Studies), Universiti Malaysia Sarawak. The journal publishes articles on teaching, learning and the study of languages two times a year in June and December. It offers a forum for the discussion of local issues that are of global concern. It is a double-blind refereed online journal published bi-annually. Currently it is indexed by SCOPUS, Cabells, Google Scholar, the Malaysian Citation Index, Directory of Open Access Journals (DOAJ), Index, Copernicus, Ulrich's Periodicals Directory, and Directory of Abstract Indexing for Journals.

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e-ISSN 2180 -2726
9 772180 272003

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Types of Communication Strategies Used Across Age Groups

Figure 1
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Contents

COMPARISON OF THE STRUCTURE OF WORDS IN PATANI MALAY AND THAI

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Manuscript received 22 March 2023
Manuscript accepted 7 December 2023
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https://doi.org/10.33736/ils.5552.2023

ABSTRACT

This study investigates the structure of words in Patani Malay and Thai to determine the similarities and differences in the marker of the two languages through contrastive analysis studies. The data used in this study were collected from Patani Malay speakers who are able to speak the language well. They can tell stories or explain something with their language and still use it in daily life. The informants are students, teachers, merchants, fishermen, farmers, and retirees. This study indicates that the structure of words in Patani Malay and Thai has similarities and differences in rules. The equation includes the addition of affixes, compounding, and reduplication. The differences in the rule of the word in Patani Malay and Thai include the position of affixation, reduplication of the root and assigning an "emphatic high tone", and semantic reduplication.

Keywords: contrastive analysis; Patani Malay; affixation; compounding; reduplication

Introduction

Language has a very important role in human life, including social life, government, work, and home (Miller, 2002). In the southern border provinces of Thailand, which consist of Pattani, Yala, Narathiwat, and four districts in Songkla (Chana, Thepa, Nathawi, and Sabayoi), 83% of the people speak local Malay (Premsrirat et al., 2004). Nowadays, although Patani Malay is the main language used in the daily life of the local people in southern border provinces, it acts as a spoken local language that is distinguished from

Thailand's official language. In 1992, the central government enacted compulsory education legislation, forcing all youth to attend ordinary schools certified by the Ministry of Education in which Thai, the official language, is used as the medium of information. As a result, more and more local people learnt Thai. Some people have become bilingual in both Patani Malay and Thai.

A language situation survey was carried out in 2007 (Premsrirat et al., 2008) among 1,255 Patani Malay speakers in Pattani, Yala, and Narathiwat provinces to provide a clearer understanding of the language use, language ability, and language attitudes of the speakers in the area. Patani Malay is the most commonly used language in daily life, while a mixed language incorporating elements of Patani Malay and Standard Thai is second, followed by Standard Thai as the third.

Even though some Patani Malay speakers use Thai in daily life, they face the influential language of Patani Malay in some ways. Difficulties of learning a language are the many differences in the linguistic system of the first language (L1) to the second language (L2). The influence of Patani Malay is very strong in learning Thai. The primary approach used to study L1 interference was developed and practised by Lado (1957). He states that the same element in the mother tongue and a second language will greatly support second language learning. Conversely, different elements will certainly make it difficult for students. Furthermore, Cummins (1980) believes that in the course of learning one language, a child acquires a set of skills and implicit metalinguistic knowledge that can be drawn upon when working in another language. Therefore, the comparison of Patani Malay and Thai becomes important to find out the similarities and differences in the elements of the two languages. This comparison is known as a contrastive analysis effort.

Contrastive analysis is the comparison of the linguistic system of two or more languages and is based on the main difficulties in learning a new language caused by interference from the first language. Contrastive analysis is based on the following assumptions: (1) the main difficulties in learning a new language are caused by interference from the first language or "language transfer"; (2) such difficulties can be identified by the contrastive analysis; and (3) teaching materials can make use of contrastive analysis to eliminate the interference effects (Richards & Schmidt, 2010).

In the 1950s and 1960s, contrastive analysis underwent a period of rapid development and expansion, particularly in the United States where the first systematic and extensive formulation of the contrastive analysis was proposed by Lado's (1957) *Linguistics Across Cultures*. In this book, Lado (1957) claimed that "those elements which are similar to [the learner's] native language will be simple for him, and those elements that are different will be difficult" (p. 2).

Furthermore, Firbas (1992) asserts that the contrastive method is a useful heuristic tool capable of throwing valuable light on the characteristic features of the contrasted languages. According to Richards and Schmidt (2002), contrastive analysis focuses on the comparison of the linguistic systems of the two languages, especially the sound and grammar systems of L1 and L2, to find solutions to second language instruction

problems. In addition, Jie (2008) states “contrastive analysis stresses the influence of the mother tongue in learning a second language in phonological, morphological, lexical, and syntactic levels. It holds that the second language would be affected by the first language” (p. 36). Moreover, contrastive analysis is a method to distinguish between what is needed and not needed to learn by the target language (TL) learner through evaluating languages (Gass & Selinker, 2008).

Aarts (1982) distinguishes 10 assumptions underlying the contrastive analysis hypothesis held until the middle of the 1960s. Details about these assumptions are as follows:

1. Language learning is a habit formation issue.
2. Students of a foreign language transfer the items, categories, and structures of their native language to the target language. This means that their old habits may interfere with their learning task.
3. Interference occurs at each aspect of linguistic structure (phonological, syntactic, and semantic) and influences both language production and perception.
4. Both similarities and dissimilarities between the target language and the native language of the learner can be pinpointed by comparison.
5. A systematic comparison could not be reached unless the target language and the native language of the learner are scientifically described within the same theoretical framework.
6. Only equivalent sub-systems can be compared.
7. Dissimilarities between the native language and the target language cause difficulty in L2 learning, while similarities do not. The difficulty is the sum of the dissimilarities.
8. With the result of CA, L2 learning difficulties can be predicted.
9. Difficulties could be positioned in hierarchies according to how divergent the two languages are.
10. To discover dissimilarities is the task of linguists while to develop efficient teaching materials is the task of textbook writers.

Contrastive research in Thai was previously conducted by Thep-Ackrapong (2005), who studies the influence of Thai language lexicons in writing English. The findings of the study show that Thai students violate some collocation restrictions when writing in English such as “My hair is busy” (My hair is messy), “I play a computer” (I work on a computer). Such violation is caused by the direct translation of Thai words into English. In addition, Pongpairoj (2002) investigates lexical errors in paragraphs written by students. The findings of the study show that the Thai preposition “on” is used in English sentences such as “there are birds on the sky.” (There are birds in the sky). The Thai number in a plural form is used in English sentences such as “The room was full of furnitures.” The word “furniture” in Thai is a countable noun while in English, it is a mass noun. These violations show that the students fail to acquire competence in the English lexicon.

Furthermore, Likitrattanaporn (2002) discusses grammatical errors in writing English paragraphs and essays by third-year students majoring in accounting and marketing. The findings of the study show that a majority of written work is full of direct translation from Thai into English sentences, such as “I made the English homework.” The other grammar points are using Thai nouns, for example, “We ate chicken fried.” and the ellipsis of English articles, which are not found in Thai such as “I want to buy car.” For Patani Malay and Thai contrastive research, Wacharasukhum (2012) investigates the issue of Thai language use among Malay ethnic students in the southern border provinces of Thailand, which builds on earlier Patani Malay and Thai studies. The findings indicate that intonation and spelling tones provide the biggest challenges for Patani Malay speakers. However, no previous research comparing Thai and Patani Malay word structures has been conducted.

According to the background explanation, contrastive analysis is a comparison of the linguistic systems of the two languages and finding solutions to second language instruction problems. The difficulties in learning a language are connected to the significant differences between first and second-language linguistic systems. The Patani Malay language has a significant impact on Thai learning. Furthermore, none of the research conducted in contrastive analysis has revealed the similarities and differences in the word structure of Patani Malay and Thai. Thus, through contrastive analysis studies, this study investigates the structure of words in Patani Malay and Thai to determine the similarities and differences in the markers of the two languages.

Literature Review

Patani Malay

Previous research on Patani Malay phonemes includes the works of Chotikakamthorn (1981), Intrachat (1984), and Krisnapan (1985). They discovered outcomes in consonant and vowel phonemes. There are 30 consonant phonemes of Patani Malay /p/ /t/, /c/, /k/, /ʔ/, /pʰ/, /tʰ/, /cʰ/, /kʰ/, /b/, /d/, /ɟ/, /ɡ/, /f/, /s/, /h/, /z/, / ɣ/, /m/, /n/, /ɲ/, / ŋ /, mᵇ/, /nᵈ/, /ɲʲ/, / ŋᵍ/, /l/, /r/, /y/, /w/ in which all of them can occur as initial consonants and only 3 of them /h/, / ŋ/, /ʔ/ can occur as final consonants. There are 18 vowel phonemes: /i, ī, e, ɛ, ɛ̃, ɯ, a, ã, u, ũ, o, ɔ, ɔ̃, a̤ ,a̰, a̯, a̯, a$^{\tilde{ɛ}}$/ . Long consonants in Patani Malay that occur at the word-initial position as a result of word and phrase shortening at the phonological, morphological, and syntactical levels are presented by Paramal (1991). Patani Malay words and phrases create both shortened words with long consonants and shortened words without long consonants. Wonggositkul (1985) describes the fundamental word classes of the Patani Malay dialect spoken in the Yamu sub-district, Yaring district, Pattani province. The word classes are nominals, verbals, adverbials, and particles. Word formation is also involved in reduplication and affixation.

Ninlapan (1993) describes the features of expressive words in Patani Malay as spoken in Muang District, Pattani province. The expressive words occur after verbs or adjectives to modify them. The mentioned studies focused on Patani Malay phonemes,

words, and phrases. Furthermore, Wacharasukhum (2012) expands on previous Patani Malay and Thai research to study the issue of Thai language use among Malay ethnic students on Thailand's southern border. The major challenge for Patani Malay speakers, Wacharasukhum (2012), is intonation and spelling tones in Thai. Thai language inflection is quite complex, including conditions relating to alphabet groups, long-short vowels, and final consonant sounds. These are not available in Patani Malay. Students who use Patani Malay as their first language have a poor capacity to analyse high-low tones.

Contrastive Analysis

Contrastive analysis is the systematic study of a pair language with a view to identifying their structural differences and similarities. Contrastive analysis, the primary approach used to study L1 interference, underwent a period of rapid development and expansion in the 1950s and 1960s, particularly in the United States where the first systematic and extensive formulation of the contrastive analysis hypothesis was proposed by Lado (1957) in linguistics across cultures. This article is regarded as having launched the contrastive analysis movement in language teaching. Lado (1957) believes that the degree of difference between the two languages also correlated with the degree of difficulty. Throughout the 1970s and 1980s, however, contrastive analysis was extensively practised in various European countries, particularly in Eastern European countries, and in the early 1990s, there were clear signs of renewed interest. Since then, the rapid development of automatic data processing and information technology has opened up new prospects for contrastive approaches through the potential of large corpora.

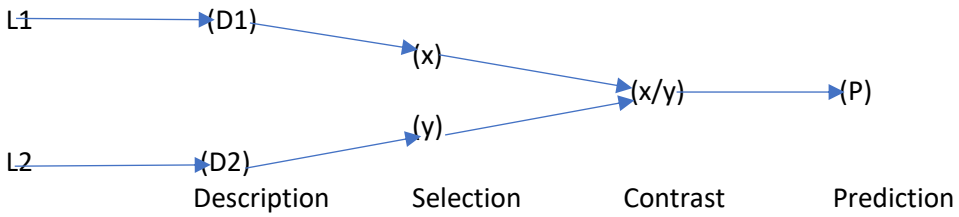
> CAH [contrastive analysis hypothesis] claimed that the principal barrier to second language acquisition is the interference of first language system with the second language system, that a scientific, structural analysis of the two languages in question would yield a taxonomy of linguistic contrasts between them, which in turn would enable the linguist to predict the difficulties a learner would encounter. (Brown, 2000, p. 248)

The contrastive analysis is a linguistic approach that contrasts two or more languages in order to identify similarities and differences between them. The purpose is not only to better understand the languages but also to understand characteristics that might make language learning easier or more challenging for speakers of those languages. The contrastive analysis method involves comparing the phonology, morphology, syntax, and semantics of two languages (James, 1998). By identifying the similarities and differences between these language systems, linguists can make predictions about which aspects of the target language will be easy or difficult for learners to acquire. One of the key assumptions of contrastive analysis is that language transfer occurs when a learner applies knowledge from their first language to their second language. Language transfer is generally divided into two main categories: positive and negative. According to Gass

and Selinker (2008), positive transfer results in correct utterances and facilitates language learning. Basically, the learner's L1 might facilitate L2 learning. Lado (1957) asserts, "The basic premise of CA [contrastive analysis] hypothesis is that language learning can be more successful when the two languages – the native and the foreign – are similar" (p. 158). Nevertheless, negative transfer results in incorrect outcomes. It results in deviations from the target language. Whitman (1970) breaks down contrastive analysis processes into a series of component procedures. The procedure for this approach is shown in Figure 1.

Figure 1

The Four Procedures of Contrastive Analysis



The four steps are: 1) taking the two languages, L1 and L2, and writing formal descriptions of them; 2) picking forms from descriptions for the contrast; 3) making a contrast of forms chosen; and 4) making a prediction of difficulty through the contrast. To describe the prediction stage, Stockwell et al. (1965) propose a hierarchy of difficulty based on the notion of transfer (negative, positive, and zero). When the structures of the given two languages are similar, a positive transfer will occur, while with those that are different, a negative transfer will take place. When there is no relation between those structures of the two languages, zero transfer will occur.

Methodology

Data on Patani Malay Language were collected from the Patani Malay speakers who are fluent in Patani Malay. Their age range is from 18 to 70 years old because young and older people are able to provide enough data on language. They are able to remember most Patani Malay vocabulary and communicate with others on various topics. They are also able to tell stories or explain using their language and still speak it in daily life. The 15 informants were divided into three groups of five people each as following: (1) students are studying at Prince of Songkla, Pattani campus; (2) workers who routinely work as merchants, fishermen, and farmers and never move else to spend time in their lives; and (3) retirees who are over the age of 60. They are Pattani people who have been living in

the area since they were young, and fluently speak Pattani Malay as their daily language, and they speak it well.

This study was conducted according to the guidelines as approved by the Research Ethics Committee of Mahidol University (13 September 2020). Aside from that, during the interviews, the guidelines approved by the supervisor and the Mahidol University Research Ethics Committee are followed. The interviews were conducted at a date and time, and also a place comfortable to the interviewees. Before starting the interview, the researcher explained the objective of the study and asked for permission to record the interview and take notes. For recording, the researcher used SONY ICD SX45 digital recording, and subsequently transferred the audio data to a notebook computer for checking and transcription. During the interview, the researcher gave freedom to the interviewees to answer questions and express their ideas. The time for each interview was around 40-50 minutes. The conversation and talk were recorded without the awareness of the sample groups, which were commonly used in their everyday life.

For the interview content, there are three domains of question. The students were asked to talk about their family and the subject they were studying. The working group was asked to talk about their family, their products for their business, fishing methods for fishermen, and how to grow crops for farmers. The retired group was asked them to talk about their family and life when they were young.

Data Analysis

The audio-recorded data were transcribed using the international phonetic alphabet with their meaning in English. In Microsoft Excel, the data are presented in a three-line format in this research as shown in Table 1.

Table 1

Data Presentation and English Translation of the Patani Malay Language

Line 1	Phonetic transcription	*dijɔ*	*cɔmɛ*
Line 2	Gloss	she	beautiful
Line 3	Free English translation	'She is beautiful.'	

For data presentation, first, the researcher represented a word, phrase, clause, and sentence in Patani Malay in IPA phonetic transcription on line 1. Second, the researcher gave glosses, or the literal meaning, of each word that appears on line 2. Lastly, the researcher provided a relatively free English translation of the Patani Malay Language.

Findings and Discussion

This study examines how words are structured in Patani Malay and Thai. The most fundamental concept in the study of word structure is the "morpheme". Nida (1949) defines morphemes as the minimal meaningful units that may constitute words or part of words. There are two types of morphemes which are free morphemes that can be pronounced by themselves. By contrast to a free morpheme, a bound morpheme can only be pronounced if it is tied to another morpheme (Nida, 1949; Thomas, 1993). A morpheme of Patani Malay and Thai is a free and bound morpheme. However, the basic unit of language is a word, which the Patani Malay and Thai words may be simple and complex.

For the concept of words, many scholars have assumed that "word" is a basic unit of language that has meaning (Lyons, 1968; Sapir, 1921; Thomas 1993). It is usually used for a unit that is written with space before and after it. They usually represent a useful compromise between phonetic and syntactic. Furthermore, Pike (1977) defines "word" as:

> The smallest unit arrived at for some particular language as the most convenient type of grammatical entity to separate by spaces; in general, it constitutes one of those units of a particular language which actually or potentially may be pronounced by itself. (p. 89)

The data of word formation in Patani Malay and Thai are identified. Subsequently, the analysis of similarities and differences in the process of its formation and the following results were obtained.

The Equality of the Structure of Words in Patani Malay and Thai

Patani Malay and Thai grammatical rules have many similarities both in sentence structure, word formation, and phonological process. One of them is the basic sentence structure model, both Patani Malay and Thai languages can be formed by the subject-verb-object (SVO) model, for example, in the following sentences.

(1)	*pɔʔ*	*gi*	*mmukaʔ*	(Patani Malay)
	father	go	fishing	
	"The father goes fishing."			
(2)	*kháw*	*kin*	*khâaw*	(Thai)
	he	eat	rice	
	"He eats rice."			

The words of Patani Malay and Thai are fairly similar. These equations include the addition of affixes, compounding, and reduplication. Each of these equation rules will be explained.

The Addition of Affixation

In both Patani Malay and Thai, the structure of words can be formed by adding affixation to create new lexical items and give the result in a change of the word class of root. Affixes of Patani Malay include prefixes that appear before the root *(e.g. /bɯ-/ in the word /ʔumɔh/ "house" becoming /* <u>*bɯɣ*</u>*umɔh/ "to marry")* and suffixes that appear after the root *(e.g. /-mɛ/ in the word /minuŋ/ "to drink" becoming /minuŋ*<u>*mɛ*</u>*/ "beverage")*, whereas in Thai, affixes can be also added to a root to create new lexical items and give the result in a change of the word class of root. Affixes of Thai include prefixes that appear before the root *(e.g. kaan-, khwaam-)* and suffixes that appear after the root to create abstract words. Suffixes in Thai are much rarer than prefixes as shown in the following detail.

When a noun is preceded by */bɯ-/* in Patani Malay, it changes from a noun to an intransitive verb (N→V_{itr}) as shown in the following examples.

(3)	*ʔaŋiŋ*	→	<u>*bɯ*</u>ɣaŋiŋ	(Patani Malay)
	"wind"		"to blow"	
(4)	*ʔapi*		<u>*bɯ*</u>ɣapi	(Patani Malay)
	"fire"		"angry"	

When a verb is preceded by */pɯ-/*, it will change from verb to noun and conveys the meaning as the actor of an action (V→N) as follows:

(5)	*ɲaŋiŋ*	→	<u>*pɯ*</u>*ɲaŋiŋ*	(Patani Malay)
	"to sing"		"singer"	
(6)	samuŋ		<u>pɯ</u>ɲamuŋ	(Patani Malay)
	"to rob"		"robber"	

When a verb has a suffix, it changes from a verb to an instrumental noun and abstract noun as follows:

instrumental nouns

(7)	*makɛ*	→	*makɛ*<u>*nɛ*</u>	(Patani Malay)
	"to eat"		"food"	
(8)	*minuŋ*		*minuŋ*<u>*mɛ*</u>	(Patani Malay)
	"to drink"		"beverage"	

abstract nouns

(9)	*pike*	→	*pike*<u>*ɣɛ*</u>	(Patani Malay)
	"to think"		"thought"	
(10)	*kɛcɛʔ*		*kɛcɛʔ*<u>*pɛ*</u>	(Patani Malay)
	"to say"		"speaking"	

The Thai prefix */kaan-/* is roughly equivalent to the gerund form of the verb in English as shown in the following examples.

(11)	*wîŋ*	→	*<u>kaan</u>wîŋ*	(Thai)
	"run"		"running"	
(12)	*phûut*		*<u>kaan</u>phûut*	(Thai)
	"speak"		"speaking"	

The Thai suffix */-sàat/* is placed after the root to create abstract words as shown in the following examples.

(13)	*phaasăa*	→	*phaasăa<u>sàat</u>*	(Thai)
	"language"		"linguistics"	
(14)	*prawàt*		*prawàt<u>sàa</u>t*	(Thai)
	"story"		"history"	

Compounding

One of the similarities in the structure of the words of Patani Malay and Thai is compounding, taking two or more free morphemes to create a new word. The meaning of the new free morpheme can be perceived from the sense of each morpheme. The rest of this section explains how a noun and verb are most commonly compounded.

Compound Noun

A compound noun consists of one or two simple nouns functioning as a single unit filled in the head noun slot of a noun phrase. A construction consisting of a noun followed by a noun resembles a noun phrase with a head noun and noun modifier. The following are more established compound nouns with "Noun +Noun", for example:

(15)	*ʔaʔɛ*	*matɔ*	(Patani Malay)
	water	eye	
	"tear"		
(16)	*matɔ*	*haɣi*	(Patani Malay)
	eye	day	
	"sun"		
(17)	*phɔ̂ɔ*	*mêɛ*	(Thai)
	father	mother	
	"parents"		
(18)	*phî*	*nɔ́ɔŋ*	(Thai)
	older sibling	younger sibling	
	"sibling"		

When a noun follows a verb in a compound, it often modifies the noun. The following are more established compound nouns with "Noun +Verb" as shown in the following examples:

(19)	*nasiʔ*	*goɣɛŋ*	(Patani Malay)
	rice	fry	
	"fried rice"		
(20)	*kappa*	*tubɛ*	(Patani Malay)
	boat	fly	
	"airplane"		
(21)	*náam*	*tòk*	(Thai)
	water	fall	
	"waterfall"		
(22)	*kwâaw*	*phàd*	(Thai)
	rice	fry	
	"fried rice"		

A construction consisting of a noun followed by an adjective resembles a noun phrase with a head noun and adjective modifier. The following are more established compound nouns with "Noun +Adjective", for example:

(23)	*baɟu*	*meɣɔh*	(Patani Malay)
	shirt	red	
	"a red shirt"		
(24)	*ɣumɔh*	*bɯsa*	(Patani Malay)
	house	big	
	"a big house"		
(25)	tûu	yen	(Thai)
	cupboard	cold	
	"refrigerator"		
(26)	*náam*	*nàk*	(Thai)
	water	heavy	
	"weight"		

Reduplication

Reduplication is one of the structures of the word that is similar in both Patani Malay and Thai. Reduplication refers to the morphological process of repeating a radical element or part of it. Reduplication is used to specialise or intensify the meaning of the base with a tendency to suggest plurality or emphasis. In Patani Malay and Thai, reduplication contractions can be divided into two main categories: repetitive and partial.

Repetitive Reduplication

Repetitive reduplication refers to the simple reduplication in which free words (especially adjectives, and sometimes nouns) are repeated for emphasis or intensification. It, therefore, consists of a pair of identical words.

Reduplication of Noun.

In Patani Malay, nouns can be duplicated to indicate indefinite plurality. Examples are given below.

(27)	*saiŋ*	→	*saiŋ saiŋ*	(Patani Malay)
	"friend"		"friends"	
(28)	*budɔʔ*		*budɔʔbudɔʔ*	(Patani Malay)
	"child"		"children"	

In Thai, reduplication of a noun indicates plurality, but the number of nouns that can be reduplication for this purpose is limited, for example:

(29)	*dèk*	→	*dèk dèk*	(Thai)
	"child"		"children"	
(30)	*nùm*		nùm nùm	(Thai)
	"young male"		"young males"	

Reduplication of Adjective.

In Patani Malay, an adjective can be duplicated to emphasize the quality or the state of an adjective, for example:

(31)	*bɯsa*	→	*bɯsa bɯsa*	(Patani Malay)
	"big"		"quite big"	
(32)	*kɯciʔ*		*kɯciʔ kɯciʔ*	(Patani Malay)
	"small"		"quite small"	

In Thai, an adjective can be duplicated to add emphasis, softness, approximation, or comparative meaning to the root. Examples are given below.

(33)	*dii*	→	*dii dii*	(Thai)
	"good"		*"really, good, better"*	
(34)	*cháa*		*cháa cháa*	(Thai)
	"slow"		"really slow, slower"	

Partial Reduplication

Partial reduplication refers to a pair of morphemes or words whose member has been altered in some ways. Partial reduplication mainly has the effect of elaboration, providing stylistic features. In Patani Malay, partial reduplication refers to a pair of morphemes or words whose second member has been altered in some ways. A reduplication pair may be inseparable because each part of them does not have a clear meaning as shown in the following examples:

(35)	*kɯna*	→	*kɯna <u>kɯnɛ</u>*	(Patani Malay)
	"know"		"to know"	
(36)	*makɛ*		*makɛ <u>makɔŋ</u>*	(Patani Malay)
	"eat"		"to eat"	

In Thai, a polysyllabic word is reduplicated with the first syllable intact, but the vowel of the second syllable changes. Examples are given below.

(37)	*sômtam*	→	*<u>sômtoŋ</u> sômtam*	(Thai)
	"papaya salad"		"papaya salad"	
(38)	*săŋyaa*		*<u>săŋyoŋ</u> săŋyaa or <u>săŋyiŋ</u> săŋyaa*	(Thai)
	"promise"		"promise"	

Differences in the Structure of Words in Patani Malay and Thai

The structure of words in Patani Malay and Thai are different in the addition of affixes and reduplication.

The Addition of Affixation

In Patani Malay, the structure of a word can be formed by adding an affix to a root to create new noun or verb lexical items. When a noun is preceded by */bɯ/* in Patani Malay, it will be changed from a noun to an intransitive verb ($N \rightarrow V_{itr}$) as shown in the following example.

(39)	*ʔumɔh*	→	*<u>bɯɣ</u>umɔh*	(Patani Malay)
	"house"		"to marry"	
(40)	*ʔanɔʔ*		*<u>bɯɣ</u>anɔʔ*	(Patani Malay)
	"son daughter"		"to give birth"	

In contrast with Patani Malay, Thai affixes can be added into a root to create only new noun lexical items. The Thai prefix */kaan/* is roughly equivalent to the gerund form of the verb in English as shown in the following example.

(41)	*khĭan*	→	*<u>kaan</u> khĭan*	(Thai)
	"write"		"writing"	

The Thai prefix */khwaam/* is roughly equivalent to the English suffix-ness as shown in the following example.

(42)	*rɛw*	→	*<u>khwaam</u>rɛw*	(Thai)
	"quick"		"quickness"	

Affixes of Patani Malay include prefixes that appear before the root *(e.g. /bɯ-/ in the word /ʔumɔh/ "house" becoming / <u>bɯ</u>ŋumɔh/ "to marry")* and suffixes which appear after the root *(e.g. /-mɛ/ in the word /minuŋ/ "to drink" becoming /minuŋ<u>mɛ</u>/ "beverage").* In contrast to Patani Malay affixation, Thai affixes */kaan/* can appear both before and after the root. The Thai prefix */kaan/* is normally placed before the root to create the gerund form, but it can also be placed after the root to create new lexical items as shown in the following examples.

(43)	*phûut*	→	*<u>kaan</u>phûut*	(Thai)
	"speak"		*"speaking"*	
(44)	*damnəən*		*damnəən<u>kaan</u>*	(Thai)
	"to proceed"		"to carry on the work"	

The Thai prefix /mahăa/ *"great"* is placed before the root to create a new word whose meaning is very great as shown in the following examples. In contrast to Thai, Patani Malay is not the prefix that serves as the root for creating the new word which means "great".

(45)	*nakhɔɔn*	→	*<u>mahăa</u>nakhɔɔn*	(Thai)
	"city"		"great city"	
(46)	*wítthayaalay*		<u>mahăa</u>wítthayaalay	(Thai)
	"college"		"university"	

Reduplication

In Patani Malay, an adjective can be duplicated to emphasize the quality or the state of an adjective, for example:

(47)	*bɯsa*	→	*bɯsa <u>bɯsa</u>*	(Patani
	"big"		"quite big"	Malay)
(48)	*kɯciʔ*		*kɯciʔ <u>kɯciʔ</u>*	(Patani
	"small"		"quite small"	Malay)

In contrast with Patani Malay, an adjective in Thai can be duplicated and assigned an "emphatic high tone". This modified form is the first constituent of the reduplicated word and emphasises the meaning of the root as shown in the following examples.

(49)	*dii*	→	*díi dii*	(Thai)
	"good"		"very good"	
(50)	*yâak*		*yáak yâak*	(Thai)
	"difficult"		"very difficult"	

In semantic reduplication, some reduplicated Thai word is semantically identical to the root form but not phonologically similar, as shown in the following examples.

(51)	*sŭay*	*ŋaam*	→	*sŭay ŋaam*	(Thai)
	"beautiful"	"beautiful"		"beautiful"	
(52)	*lék*	*nɔ́ɔy*		*lék nɔ́ɔy*	(Thai)
	"small"	*"a little"*		"small"	

Conclusion

The result of this study reveals the similarities and differences between Patani Malay and Thai. These aspects are to be considered to become a learning concept that facilitates second language learning. Firstly, affixations can be used to produce new lexical items and change the word class of a root in both Patani Malay and Thai, resulting in changes to a word structure. Prefixes that come before the root (such as */bɯɣumɔh/ "to marry", /pɯlawɛ/ "fighter")* and suffixes that come after the root (such as */makɛnɛ/ "food", /minuŋmɛ/ "beverage")* are examples of affixes in Patani Malay, whereas, in Thai, affixes can be also added to a root to create new lexical items and change the word class of the root. In Thai, some prefixes that come before the root *(*e.g., */kaanrian/ "studying", /khwaamdii/ "goodness")* and suffixes that come after the root to form abstract terms *(e.g. /phaasăasàat/ "linguistics", /săntìpʰâap/ "peace")*. Nevertheless, in Thai, the same affixes can appear both before and after the root to produce new lexical items (*e.g. /kaankhĭan/ "writing", /kitcakaan/ "business").*

Secondly, partial reduplication and repetitive reduplication are the two basic forms of reduplication in Patani Malay and Thai. Partial reduplication refers to a pair of morphemes or words whose member has been altered in some ways *(*e.g., *PM-/kɯna kɯnɛ / "to know", TH-/sănyiŋ sănyaa/ "promise")*. Repetitive reduplication refers to the simple reduplication in which free words are repeated for plurality or emphasis *(*e.g., *PM-/budɔʔ budɔʔ/ "children" /bɯsa bɯsa/ "very big"; TH- /dek dek/ "children" /dii dii/ "very good").* However, there are a few differences in adjective repetitive reduplication in Thai that can be duplicated in the root and assign an "emphatic high tone," which is characteristic of the Thai language. In addition, in semantic reduplication, some reduplicate Thai word is semantically identical to the root form, but does not phonologically resemble such as /sŭay/ *"beautiful"* /ŋaam/ *"beautiful"* /sŭay ŋaam/ *"beautiful"*.

Thirdly, the word structure of Patani Malay and Thai is compounding, taking two or more free morphemes to produce a new word, which is the meaning of the new free

morpheme that may be perceived from the sense of each morpheme. The most often compounded words in these two languages are nouns, verbs, and adjectives.

Acknowledgment

This article is part of my Ph.D. thesis entitled "A Study of Patani Malay Syntax: A Comparison of Selected Linguistic Problems Encountered by Patani Malay Speakers of Thai". The study was funded by the Office of the Higher Education Commission (OHEC), Thailand under the Program for Strategic Scholarships Fellowships Frontier Research Networks (specific for the southern region).

References

Aarts, F. (1982). The contrastive analysis debate: Problems and solutions. *Studia Anglica Posnaniensia, 14*, 47-68.

Brown, H. D. (2000). *Principles of language learning and teaching* (4th ed.). Pearson Education Limited.

Chotikakamthorn, M. (1981). *A comparative study of phonology in Satun Malay and Pattani Malay.* [Doctoral thesis, Mahidol University].

Cummins, J. (1980). The cross-lingual dimensions of language proficiency: Implication for bilingual education and the optimal age issue. *TESOL Quarterly*, *14*, 175-187.

Firbas, J. (1992). *Functional sentence perspective in written and spoken communication*. Cambridge University Press.

Fries, C. C. (1945). *Teaching and learning English as a foreign language*. University of Michigan Press.

Gass, S. M., & Selinker, L. (2008). *Second language acquisition: An introductory course.* Routledge.

Intrachat, P. (1984). *Learning local Malay language from primary health care conversations*. Mahidol University.

James, C. (1998). *Errors in language learning and use: Exploring error analysis*. Longman.

Jie, X. (2008). Error theories and second language acquisition. *US-China foreign language*, *6*(1), 35-42.

Krisnapan, D. (1985). *The phonology of Taba Malay*. [Master's thesis, Mahidol University].

Lado, R. (1957). *Linguistics across culture: Applied linguistics for languages teachers.* University of Michigan Press.

Likitrattanaporn, W. (2002). An analysis of grammatical errors towards approaches to solutions of instructional problems. *Journal of Humanities Parithat, Srinakharinwitrot University*, *24*(1), 80- 90.

Lyons, J. (1968). *Introduction to theoretical linguistics*. Cambridge University Press.

Miller, J. (2002). *An introduction English syntax*. Edinburgh University Press.

Nida, E. A. (1949). *Morphology: The descriptive analysis of the word* (2nd ed.). University of Michigan Press.

Ninlapan, P. (1993). *Expressive in Patani Malay.* [Master's thesis, Mahidol University].
Paramal, W. (1991). *Long consonants in Patani Malay*. [Master's thesis, Mahidol University].
Pike, K. L., & Pike, E. G. (1977). *Grammatical analysis*. Institute of Linguistics and the University of Texas at Arlington.
Pongpairoj, N. (2002). Thai university undergraduates' error in English writing. *Journal of Languages and Linguistics*, *20*(2), 66-99.
Premsrirat, S., Diphadung, S., Suwanket, E., Buasuang, A., Choosri, I., & Srichampa, S. (2004). *Ethnolinguistic mapping of Thailand*. Office of the National Cultural Commission.
Premsrirat, S., Pitirattanakhosit, U., Aljufree, S., Thawornphat, M., Paramal, W., Choosri, I., Kabae, T. (2008). *Research reports on language situation survey in 3 southernmost provinces in Thailand*. Center for Peace Studies, Mahidol University.
Richards, J. C., & Schmidt, R. (2002). *Longman dictionary of language teaching and applied linguistics* (3rd ed.). Longman.
Richards, J. C., & Schmidt, R. (2010). *Longman dictionary of language teaching & applied linguistics* (4th ed.). Pearson Education Limited.
Sapir, E. (1921). *Language: An introduction to the study of speech*. Harcourt, Brace & World Inc.
Stockwell, R., Brown, J. D., & Martin, J. D. (1965). *The grammatical structure of English and Spanish.* University of Chicago Press.
Thep- Ackrapong, T. (2005). Teaching English in Thailand: An uphill battle. *Journal of Humanities Parithat, Srinakharinwirot University, 27*(1), 51-62.
Thomas, D. D. (1993). *An invitation to grammar*. Summer Institute of Linguistics and Mahidol University Press.
Wacharasukhum, S. (2012). *The problem of using Thai Language in Melayu ethnic students in three southern border provinces*. Yala Rajaphat University.
Weinreich, U. (1953). *Languages in contact: Findings and problems*. Columbia University Press.
Whitman, L. R. (1970). Contrastive analysis: Problems and procedures. *Language Learning, 20*(2), 191-197.
Whorf, B. (1941). *Language and logic: A technology review*. MIT Press.
Wonggositkul, A. (1985). *Word classes in Patani Malay*. [Master's dissertation, Mahidol University].

DISCURSIVE CONSTRUCTION OF CAMPUS SEXUAL ASSAULT ON YOUTUBE COMMENTARIES

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Manuscript received 9 February 2023
Manuscript accepted 8 December 2023
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https://doi.org/10.33736/ils.5420.2023

ABSTRACT

Campus sexual assault has recently become a significant issue and has gained substantial global attention, including social media users in Indonesia. Prior research has not sufficiently examined the use of linguistic resources in campus sexual assault discourses. Drawing on critical discourse analysis, this study aims to explore the discursive constructive of sexual assault on Indonesian campuses through the evaluative resources employed by commentators on YouTube commentaries. The commentaries were created in 2021 in response to Daddy Corbuzier and Narasi Newsroom's video on campus sexual assault. Findings revealed that sexual assault on Indonesian campuses was attributed to power dynamics, social structures, power imbalances, power abuse, and patriarchal culture. These factors left the victims feeling powerless, which led to normalisation. These results provide insight into the contribution of broader discourse on sexual assault prevention and response.

Keywords: campus sexual assault; Indonesian campus; critical discourse analysis; discursive constructions; YouTube commentaries

Introduction

As a result of socio-educational development in the area of higher education, campus sexual assault has become a global phenomenon that affects university education scenarios in many countries worldwide (Boateng et al., 2023; Bovill et al., 2022; Humpherys & Towl, 2020). It is a global issue that demands society's attention and intervention. An alarming example of the severity of sexual assault is the occurrence of sexual assault by lecturers during thesis guidance on Indonesian campuses (Ahsin & Nugraheni, 2022; Aulia, 2022). This demonstrates that sexual assault is not limited to occurrences outside the campus but also exists within the campus environment. A report suggests that 77% of lecturers admitted to cases of sexual assault that occurred within the campus environment (Ministry of Education, Culture, Research, and Technology, 2021). This is a concern as it highlights the high occurrence of sexual assault in an environment that is supposed to be safe and supportive for students (Marfu'ah et al., 2021). Hence, it is essential to address the issue of sexual assault by campus authorities and the wider community, including media users.

Earlier studies on campus sexual assault at higher education institutions focused on students' perceptions as the research subjects. Very little research concentrated on media platforms such as YouTube, which the public can use to discuss and raise awareness about sexual assaults (Almanssori & Stanley, 2022; Colliver & Coyle, 2020). This also allows users to gain different perspectives and engage in more inclusive and comprehensive discussions on campus sexual assault. However, despite numerous studies from various disciplines that have focused on campus sexual assault (Bondestam & Lundqvist, 2020; de Heer & Jones, 2017; Liao & Luqiu, 2022; Linder et al., 2020; Nurbayani et al., 2022; Martin-Storey et al., 2018; Rosenthal & Freyd, 2018; Rothman, 2019; Shalihin et al., 2022; Soejoeti & Susanti, 2020), little has been published on the discursive construction of campus sexual assault from the perspective of those who have experienced or faced assault on campus. This study examined how commentators express their views and opinions and how they understand campus sexual assault in Indonesia in terms of its moral values and ethical perspectives. In order to understand how sexual assault has become a debatable phenomenon in higher education, this study aims to explore the discursive construction of sexual assault on Indonesian campuses through the evaluative resources employed by commentators on YouTube commentaries.

Theoretical Framework

Critical Discourse Analysis

Studies on discourse and power have been frequently conducted using Critical Discourse Analysis (CDA). CDA concerns how language use (discourse) reproduces social and ideological inequalities, power relations, and hegemonic practices. This extends beyond texts and discourses to the wider sociopolitical contexts they are situated in. The role of CDA is to identify concealed ideologies within written materials and present them transparently (Fairclough, 1993). Consequently, the CDA analyst is positioned to discover

and follow the ideologies employed by the public in texts or speeches. Fairclough (1992) developed the CDA framework using three dimensions examined from three complementary analyses: (1) the textual, (2) the discursive practice, and (3) the social practice. This framework helps identify discursive constructions related to social, cultural, and gender norms that affect sexual assault on Indonesian campuses. Applying CDA to analyse comments on campus sexual assault can help understand the power structure and ideology embedded in the language that commentators use to describe sexual assault on campus. CDA helps identify ways in which power and ideology are reflected in language.

Literature Review

Over the past few decades, sexual assault has become a significant issue on campuses globally. This is due to the high prevalence of sexual assault in universities, which is a serious public health problem (Howard et al., 2018; Mellins et al., 2017). To address this issue, universities worldwide have taken various actions, including implementing policies (Wies, 2015), reporting student experiences (Bergeron et al., 2019; Fethi et al., 2023), and raising awareness (Linder, 2018). However, despite these measures, university-based sexual assault still occurs in up to 45% of women and 32% of men, most commonly by individuals known to the victims (Fedina et al., 2018). This indicates that female students are more vulnerable to experiencing sexual assault on campus compared to males (Bhochhibhoya et al., 2019; Zinzow & Tompson, 2015). This vulnerability could be due to gender-based injustice and power imbalance caused by the patriarchal system and historical structural inequality.

Meanwhile, cases of sexual assault in Indonesia have recently emerged as a significant issue on campuses, where power imbalance and strong patriarchal culture play a significant role in the victims' decision of choosing not to report violence (Shopiani et al., 2021; Wahyuni et al., 2022). Sulistyawan et al. (2022) identified that campus rape is influenced by power imbalance and gender relations caused by the patriarchal system and historical structural inequality, which enables perpetrators to commit violence without consequences. This leads to the perception that women are in a lower position in the social hierarchy (Elindawati, 2021), creating a condition where the perpetrator feels more powerful and can arbitrarily commit acts of sexual violence against individuals who are considered weaker (Nikmatullah, 2020). In addition, perpetrators who hold positions tend to be assertive and may take advantage of their authority and the powerlessness of their victims, be it men or women (Nugraha & Subaidi, 2022). As a consequence, many victims of sexual assault choose to remain silent (Sitorus, 2019), which, in turn, can result in the underreporting of sexual assaults. Therefore, social media may have provided a safe platform for victims to come forward to talk about their experiences with sexual assault.

However, there is a lack of research on how social media users in Indonesia discursively construct campus sexual assault. To fill this gap, this study aims to analyse

the evaluative resources used by commentators on YouTube commentaries to gain insights into the discursive construction of sexual assault on Indonesian campuses using CDA. By focusing on the discursive aspects of sexual assault, this study aims to contribute to a more nuanced understanding of the issue and provide information to address it effectively. It also explores the social construction of sexual assault, which is essential for addressing the root causes of this problem.

Method

The data used in this study consisted of YouTube commentaries published in November 2020. These are commentaries of two YouTube videos about campus sexual assault. The rationale for choosing these two videos was that they attracted the most commentaries among YouTube videos on campus sexual assault (459 and 11,000 comments, respectively). The commentaries attached to the two videos were primarily in the Indonesian language. The main data source in this study was commentaries posted by Indonesian YouTube users who expressed their attitude toward campus sexual assault. The first video, "Campus Sexual Predators Concise" (translated from Indonesian language) has a duration of 1:07:32, produced and uploaded by Narasi Newsroom. It narrates cases of campus sexual assault from the perspective of the Minister of Education, Culture, Research, and Technology of the Republic of Indonesia, the Indonesian DAI Association; the hope help network, Indonesian female clerics, survivors of sexual assault, and students from several universities in Indonesia. The discussion was narrated in Indonesian language.

The second video is a podcast that discusses campus sexual assault inviting two speakers entitled NO MERCY FOR LUSTFUL LECTURER!!! (translated from Indonesian language). The speakers are Nadiem Anwar Makariem (the Minister of Education, Culture, Research, and Technology of the Republic of Indonesia) and Cinta Laura Keihl (an actress concerned with handling sexual assault in Indonesia). The YouTube video was published with a duration of 1:13:42 and attracted 11,000 commentaries.

This study adopts a critical discourse analysis approach to examine the discursive construction of campus sexual assault through commentary texts. Using this approach can help identify evaluative linguistic patterns and discourse procedures used by commentators to uncover cases of campus sexual assault. The analysis involved four steps. In the first step, the researchers read the comments to find dominant markers of the most widely repeated themes. In the second step, the researchers re-read the entire data set to determine whether all comments could be classified based on the identified themes. After data cleaning, 15 commentaries made by YouTube users under Narasi Newsroom and 21 commentaries made by YouTube users under Deddy Corbuzier were selected. The remaining comments were not suitable for the current analysis because these responses to the speakers and narrations of sexual assault outside of campus. For academic purposes, this study anonymised the commenters' names to the initial letters of their names. In the third stage, all themes with similar content were grouped into one category.

Finally, each category was labelled based on the underlying content. All data that have been classified by each category were then translated into English. The appendix shows images of the two videos analysed.

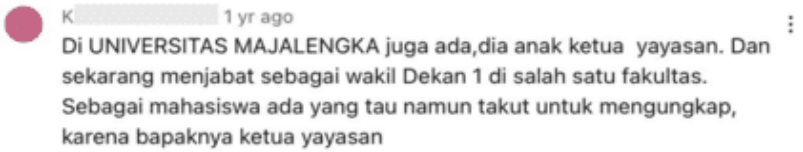
Results

The results revealed four themes: powerlessness, sexual coercion, victim blaming, and lack of self-understanding. Each discursive construction is presented separately to determine the existing conditions of campus sexual assault from the point of view of commentators, some of whom were also observers and victim-survivors.

Powerlessness

Powerlessness refers to a condition in which someone who has experienced a sexual assault directly or indirectly feels unable to cope with the consequences of their experience. Powerlessness can be caused by an inability to speak out and report, a culture of silence around their experiences, and a lack of knowledge to seek help. It can also be caused by factors such as trauma, frightening, sadness, and unpleasant experiences, as shown in example (1).

(1)

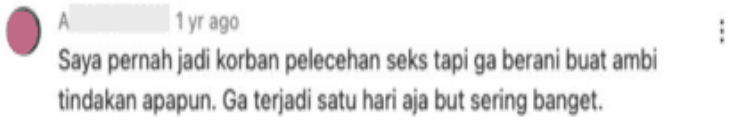


[There is also one at UNIVERSITAS MAJALENGKA. He is the son of the chairman of the foundation. He serves as the deputy dean 1 in one of the faculties now. As students, some know but they are afraid to expose him because of his father's position] (K-Narasi Newsroom)

In this comment, the commentator critiques the behaviour of a university official regarding sexual assault. The commentator employs evaluative language, such as “afraid to reveal” to express disapproval of the normalised behaviour that suppresses the victims’ ability to report such incidents. The use of the word “afraid” suggests a negative attitude toward the situation and implies that the institutional response to sexual assault is inadequate. Moreover, the commentator positions students as vulnerable victims of this behaviour, emphasising their powerlessness through the phrase “as students.” The power dynamics within the institution are further highlighted through phrases such as “son of the chairman” and “deputy dean 1”, positioning the perpetrator as part of a privileged elite with institutional influence. The commentary underscores the impact of the patriarchal system on silencing and disempowering victims of sexual assault, thereby

contributing to the perpetuation of gender-based injustice. In patriarchal cultures, women are often subjected to gender stereotypes that position them as weak and powerless, as shown in Example (2).

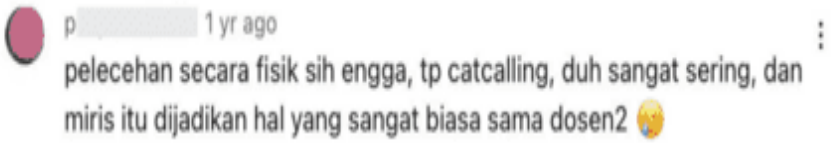
(2)



[I have been a victim of sexual harassment, but I am not brave enough to take any action. Not just a single day, but often. […].] (A-Deddy Corbuzier)

The commentator described herself as a "victim of sexual harassment", suggesting a negative evaluation of the experience as traumatic and dangerous. This highlights the impact of sexual assault on an individual's physical and psychological well-being and emphasises the need for a supportive and empowering response. The phrase "not brave to take any action" reveals the power dynamics at play in the environment as it indicates that the commentator feels powerless and unable to address harassment. This highlights the impact of social structures that uphold the culture of harassment and disempowerment. The phrase "not just a single day, but often" emphasises that sexual harassment is not an isolated incident but a systemic problem that the speaker has experienced multiple times. This highlights the normalisation of sexual harassment in our society and its detrimental impact on victims. The normalisation of such behaviour could be due to the lack of support structures or resources for victims of harassment or to cultural attitudes that blame or stigmatise victims. In addition, the normalisation of sexual assault can also be indicated through the verbal behaviour of the lecturer, as shown in Example (3).

(3)

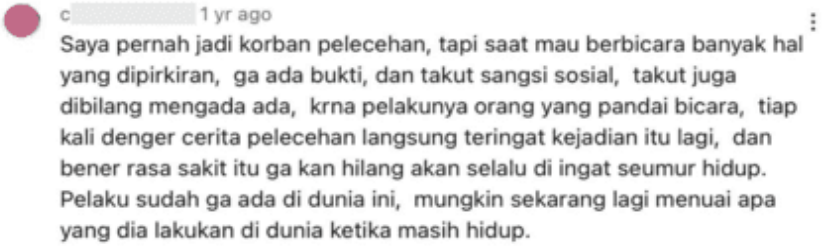


[No physical harassment, but catcalling is very often, and sadly has become a very common thing among lecturers.] (p-Narasi Newsroom)

The commentator evaluates the behaviour of a lecturer who engages in catcalling by providing a negative assessment. The use of the word "common" implies that such behaviour has been accepted as a typical occurrence in the educational environment. Meanwhile, the phrase "very often" indicates that the frequency of such behaviour is a significant issue. The commentator also positions themselves as a victim of such behaviour by using the phrase "catcalling is very often". This shows that the commentator has been a victim of such behaviour more than once and feels powerless to do anything about it. Furthermore, the use of the phrase "has become a very common thing among lecturers" suggests that people in positions of power in the educational environment reinforce such behaviour. The word "lecturers" also implies that the perpetrators of such behaviour hold a position of authority that exacerbates power imbalance. In this context, such behaviour can be viewed as a form of power abuse as lecturers use their positions of authority to justify inappropriate and disrespectful behaviour.

The normalisation of sexual harassment is also not limited to verbal actions. The absence of evidence not only contributes to the normalisation of such behaviour but also leaves victims feeling powerless and unable to voice their experiences of harassment, as evidenced in Example (4).

(4)

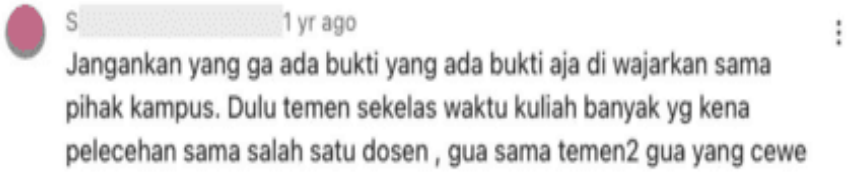


[I have been a victim of harassment, but when I wanted to talk, there were many things to consider. There was no evidence, and I was afraid of social sanction; I was fearful of being accused of making things up because the perpetrator is someone who speaks well […].] (c-Deddy Corbuzier)

The use of the phrase “victim of harassment”, again, indicates that the experience of violence suffered by the commentator is highly negative and damaging. The phrase “many things to consider” suggests that the victim may experience stress and trauma from the sexual assault. The phrase “no evidence” indicates the difficulty that victims face in proving the truth of the violence, consequently exposing injustice in the legal system, an urgent issue that needs to be addressed. Moreover, the use of the phrase “I was afraid of social sanction” demonstrates how victims of harassment fear being labelled negatively by the society, indicating that the existence of negative stigma and stereotypes against victims of harassment in society can deter them from reporting. Similarly, the phrase “fearful of being accused of making things up” illustrates how victims feel unsafe reporting violence as they fear of being perceived as liars. The commentator's evaluation highlights the power dynamics and social structures that influence the experiences of victims of sexual assault, particularly the phrase “the perpetrator is someone who speaks well”. The choice of this phrase indicates that the perpetrator may hold significant influence within the institution. This would have added to the victim’s fear of reporting the incident, as reporting may lead to not only social consequences, but retaliation from the perpetrator.

In addition, sexual assault appeared to be viewed as a normalised occurrence by the campus community, as shown in Example (5).

(5)



> [Not only those [cases] without evidence, even those with evidence will be justified by the campus [authority] […].] (S-Narasi Newsroom)

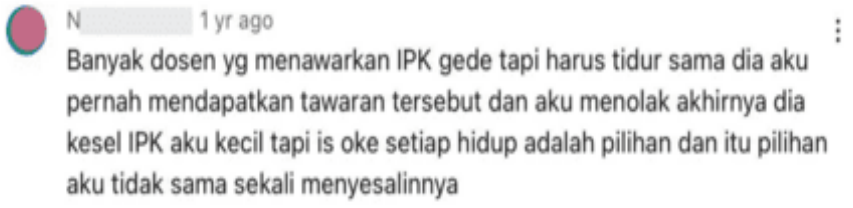
The commentary employs evaluative language to express the commentator’s disapproval of the action of the campus. The use of the word “justified” clearly indicates that the commentator is taking a stance on the issue and making a judgment based on an evaluation of the evidence surrounding the campus actions. This highlights the commentators’ negative attitude towards the issue and their belief that the university’s actions are unjustifiable. Moreover, the phrase “Not only those [cases] without evidence, even those with evidence” suggests that sexual harassment is accepted as normal within a campus, and that even when evidence exists, the campus may choose to justify, excuse, or even ignore such behaviour. This implies that the university is not taking the issue of sexual harassment seriously and may be complicit in perpetuating a culture of harassment and disempowerment. Furthermore, the comment points to the power dynamics within campuses. The phrase "those with evidence" highlights the potential that university have

the power or capacity to control information or evidence relating to their actions or decisions. This implies that a campus can control the narrative surrounding sexual harassment and may prioritise protecting its reputation over addressing the issue.

Sexual Coercion

Sexual assault on campus has transformed into various forms, one of which being sexual coercion. Sexual coercion involves the use of pressure or force to obtain sexual activity, such as the use of grades as a means of pressuring students to yield into accepting (Example (6)).

(6)

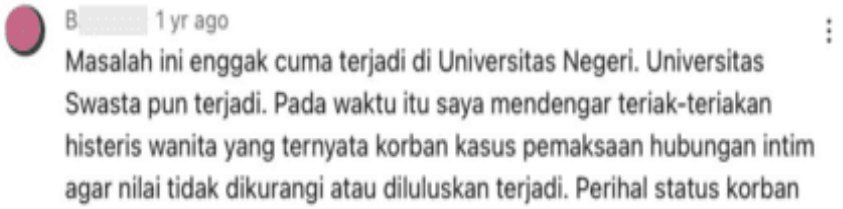


[Many lecturers offer a high GPA but have to sleep with them. Once, I got the offer and I refused, in the end, he got annoyed my GPA was low, but it was okay. […]] (N-Narasi Newsroom)

The commentary expressed a negative evaluation of the practice of lecturers offering a high GPA score in exchange for sexual favours. The use of the word “offer” implies a transactional relationship, where the power dynamic tends to encourage lecturers to utilize their positions in academia for sexual gain. The student's refusal to engage suggests a lack of consent. The phrase “have to sleep with them” emphasises the coercion involved. The impact of refusing the offer on the student’s GPA underscores the power imbalance between the lecturer and student, with the former exerting control over the latter’s academic progress. The normalisation of this culture perpetuates the idea that students choose to accept such arrangements while ignoring the coercive nature of such exchanges. It also creates a culture of silence, discouraging students from reporting instances of exploitation or coercion by their lecturers.

Cases of sexual coercion have also been reported to happen in private universities, as illustrated in Example (7).

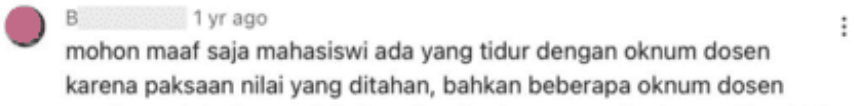
(7)



[This problem does not only occur at state universities, but also at private universities. At that time, I heard the hysterical scream of a girl who turned out to be a victim of a case of forced sexual intercourse for the sake of not reducing grade or passing […].] (B-Narasi Newsroom)

The commentator uses negative evaluations such as “problem”, “victim”, and the phrase “forced sexual intercourse” to describe the situation in which students are coerced into engaging in sexual activities for academic success. These evaluations were used to emphasise the seriousness and harm of the situation and to position the victims as vulnerable and powerless. In addition, the phrase “for the sake of not reducing grade or passing” highlights the power dynamics involved in this situation, where students have no choice but to comply with the perpetrator's demands. This shows that students are in a vulnerable position and their academic success depends on the success of the perpetrator of the violence. This situation is not just an individual problem, but the result of wider social and institutional structures that allow such abuses to occur. These structures include the power dynamics between lecturers and students, a culture of secrecy often surrounding cases of violence and sexual abuse, and a lack of effective system for reporting and addressing such abuse. In addition, lecturers have carried out cases of sexual coercion using grade withholding, as shown in Example (8).

(8)



[Sorry to say that some students sleep with unscrupulous lecturers because of coercion to withhold grades […].] (B-Narasi Newsroom)

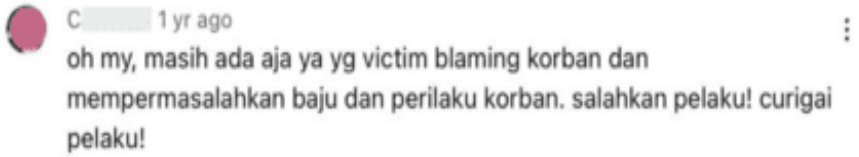
The above commentary shows the negative attitude of the commentator towards the phenomenon of students engaging in sexual relationships with their lecturers. The use of "sorry to say" conveys a sympathetic and apologetic tone, which implies a sense of disapproval and regret towards the situation. The word "unscrupulous" also suggests a negative evaluation by the lecturers involved in the situation. Additionally, the use of

"coercion to withhold grades" highlights the power imbalance between lecturers and students. The fact that lecturers can withhold grades implies that they have control over students' academic progress, and that students must comply with their demands to succeed academically. This power dynamic perpetuates the dominant ideology that lecturers hold more power and authority than students do.

Victim Blaming

Victim blaming refers to the practice of holding victims of violence or abuse responsible for the harm that they experienced. Example (9) illustrates how the blame is shifted away from the perpetrator and onto the victim, suggesting that they are somehow responsible for what happened to them.

(9)



[Oh my, there are still people who blame the victim and blame the clothes and victim behaviour. blame the perpetrator! suspect the perpetrator!] (C-Narasi Newsroom)

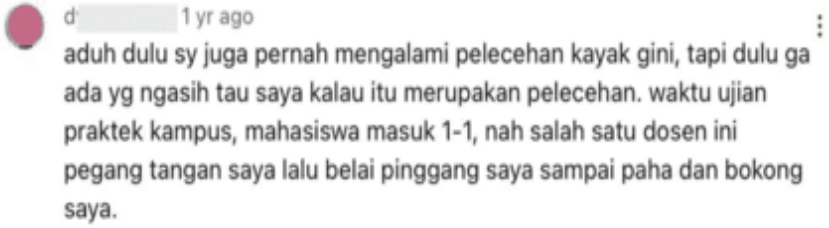
The use of “Oh my” describes an emotional reaction to the fact that views that blame the victim and criticise the victim's clothes and behaviour choices still exist in society. With the phrase “there are still people who blame the victim and blame the clothes and victim behaviour”, the commentator exposes a personal view on the issue of victim blaming. The use of the word “still” indicates dissatisfaction with this perspective. In particular, the emphasis on "blame the clothes and victim behaviour" illustrates how people often look for justification in the victim's clothes or behaviour in an attempt to explain the perpetrator's actions. The comment “blame the perpetrator!” strongly suggests an attitude centred on perpetrator accountability. This reflects the author’s stance that attention should be focused on the actions committed by the perpetrator and not diverted to victim-related factors. In addition, the phrase “suspect the perpetrator” expresses that one should have suspicions about the perpetrator, not the victim.

Lack Self-Understanding

Lack of self-understanding refers to a victim’s lack of awareness or comprehension that they have experienced assault. This lack of self-understanding can be caused by a variety of factors, including societal norms and expectations, personal beliefs, and a lack of

education about what constitutes assault. Example (10) shows victim unawareness and the speaker's negative evaluation of their experience of harassment.

(10)



[Gosh, in the past, I had experienced harassment like this one, but in the past no one told me it was harassment. […] (d-Narasi Newsroom)

The use of the expression “Gosh” conveys the speaker's surprise and shock relating to the experience. Additionally, the phrase “in the past no one told me it was harassment” suggests the probability that the speaker evaluates the situation as unjust and unfair because they were not aware that what they experienced was harassment. This negative evaluation reflects the lack of awareness around the issue of harassment in the speaker's environment. Furthermore, the statement suggests that there may be a power imbalance or a lack of power in the commentator's environment. The use of the phrase “in the past no one told me it was harassment” also suggests that those in position of power may not have acknowledged the existence of harassment or provided sufficient education or support to those who have experienced it. This power imbalance can perpetuate harassment, and thus, enable it to continue.

Discussion

This study employs critical discourse analysis (CDA) to investigate how commentators construct discursive sexual assault on Indonesian campuses through evaluative resources on YouTube commentaries. The findings indicate that YouTube commentaries employ negative evaluative resources to create negative prosody that condemns powerlessness, sexual coercion, victim-blaming, and lack of self-understanding, deeply entrenched in campus culture. This is consistent with Chiluwa and Ifukor's (2015) report showing that discourses on violence and crime use negative value judgments to denounce the lack of action taken by people in positions of power to address sexual assault. Through negative evaluative resources, this study reveals that sexual assault on Indonesian campuses is a practice resulting from power dynamics, social structures, power imbalances, power abuse, and patriarchal cultures that are still entrenched. This result is in line with Atkinson and Standing’s (2019) finding that institutional power structures contribute to an environment where sexual assault is normalised. Thus, this result indicates that sexual assault on Indonesian campuses is not only the result of individual actions but also related

to social and power systems that perpetuate gender injustice by using structural hierarchies that oppress individuals deemed weak (Connell & Messerschmidt, 2005; Fernando & Prasad, 2019). This leads to sexual assault victims frequently being positioned as powerless.

The powerlessness of sexual assault victims on campuses often manifests in various forms, such as feelings of fear, reluctance to act, lack of evidence, inability to speak out, lack of knowledge of seeking help, and trauma that can be used as evidence in cases of sexual assault. This indicates that sexual assault perpetrators exploit their higher social position to manipulate and control the situation, leaving victims feeling helpless. Consistent with Elindawati's (2021) findings, sexual assault often occurs against women in campus environments because of power relations that make victims afraid to report the violence they experience. This is demonstrated by the fact that victims of sexual assault tend to remain silent instead of reporting the incident and seeking justice (Sitorus, 2019).

Furthermore, the powerlessness experienced by sexual assault victims on campuses can stem from sexual coercion, which involves the manipulation of academic grades. This type of coercion involves offering high GPAs or withholding grades, which directly affect the academic success of the victim. This phenomenon perpetuates a social construction in which lecturers hold greater power and authority in the academic environment, making it possible for them to exploit sexually vulnerable students (Nugraha & Subaidi, 2022). This represents a manifestation of patriarchal culture in an academic environment in which lecturers have significant power and influence over students. Such power dynamics can foster a culture of fear and intimidation among students who may feel incapable of resisting such behavior because of the risk of negative consequences, such as receiving low grades. Rabbaniyah and Salsabila (2022) discovered in a strongly patriarchal culture, victims choose not to report violence in order to maintain interpersonal relationships, avoid conflict, obtain physical protection, and provide psychological security.

In addition, patriarchal culture tends to blame victims for gender discrimination. This is evident from the social stereotypes and biases that hold victims responsible for what happens to them, especially based on their clothing or behaviour. Such views imply that victims of sexual assault do not adhere to social values and norms (Shopiani et al., 2021). As a result, such attitudes worsen the condition of victims as society would perceive them as inviting the incident to happen. This issue arises because of a culture of gender injustice, which makes women often experience discriminatory treatment and vulnerability to sexual harassment. As revealed by various studies, female students at universities are at a higher risk of experiencing sexual harassment (Senn et al., 2015; Ullman, 2016), and the same happens in universities in Canada and the United States, where the level of sexual harassment against women enrolled in universities is quite high (Mellins et al., 2017; Senn et al., 2014). The findings from the current study also show a similar pattern, indicating that sexual harassment on Indonesian campuses is a serious problem that requires stakeholder attention and action.

Conclusion

This study highlights how negative evaluative resources employed in commentaries related to campus sexual assault in Indonesia reflect the negative culture surrounding powerlessness, sexual coercion, victim blaming, and lack of self-understanding. It further asserts that it is not solely a result of individual action, but rather produced by power dynamics, social structures, power imbalance, power abuse, and a deeply entrenched patriarchal culture. This study emphasises the need for stakeholders to take action to address sexual assault on Indonesian campuses, including implementing policies and procedures to protect victims, addressing power imbalance, and promoting gender equality. However, this study has several limitations. First, the use of YouTube comments as the primary data source may not represent the views and attitudes of the wider community towards sexual assault on Indonesian campuses due to possible biases towards certain demographics or ideologies, resulting in a skewed understanding. Second, the approach used was not sufficient to address the complexity and nuances of sexual assault on campus. Therefore, a multidisciplinary approach that involves other theories and stakeholders is required to address this issue. Finally, this study did not explore potential solutions or interventions to address the issue of sexual assault on Indonesian campuses. Therefore, further studies are required to verify these results. This study does not end the researchers' concern for campus sexual assault in Indonesia from lecturers' and students' voices. This was the beginning of the study's inquiry. The researchers hope this study raises further research in the understanding of unreported acts of campus sexual assault.

References

Ahsin, M. N., & Nugraheni, M. W. (2022). Analisis sara mills dalam pemberitaan pelecehan seksual mahasiswa Riau pada berita CNNindonesia. Com [Sara Mills' analysis on the reporting of sexual harassment of Riau University students in CNNindonesia.com]. *BELAJAR BAHASA: Jurnal Ilmiah Program Studi Pendidikan Bahasa dan Sastra Indonesia*, *7*(1), 119-135. https://doi.org/10.32528/bb.v7i1.11

Almanssori, S., & Stanley, M. (2022). Public pedagogy on sexual violence: A feminist discourse analysis of YouTube vlogs after# MeToo. *Journal of Curriculum and Pedagogy*, *19*(3), 254-277. https://doi.org/10.1080/15505170.2021.1895382

Atkinson, K., & Standing, K. E. (2019). Changing the culture? A feminist academic activist critique. *Violence Against Women*, *25*(11), 1331-1351. https://doi.org/10.1177/1077801219844609

Aulia, S., Cangara, H., & Wahid, U. (2022). Pan Kosicki framing analysis about sexual harassment in Riau University on kompas.com and tribunnews.com. *SEMIOTIKA: Jurnal Komunikasi*, *16*(1), 63-77. http://dx.doi.org/10.30813/s:jk.v16i1.3280

Bergeron, M., Goyer, M. F., Hébert, M., & Ricci, S. (2019). Sexual violence on university campuses: Differences and similarities in the experiences of students, professors

and employees. *Canadian Journal of Higher Education*, *49*(3), 88-103. https://doi.org/10.7202/1066637ar

Bhochhibhoya, S., Maness, S. B., Cheney, M., & Larson, D. (2019). Risk factors for sexual violence among college students in dating relationships: An ecological approach. *Journal of interpersonal violence*, *36*(15-16), 7722-7746. https://doi.org/10.1177/0886260519835875

Boateng, F. D., Youla Doumbia, N., Kooffreh, B., & Kwakye-Nuako, C. O. (2023). Relationship between date rape attitudes, rape myths and experiences with sexual violence among Ivorian college students. *Journal of School Violence*, *22*(2), 290-305. https://doi.org/10.1080/15388220.2023.2180747

Bondestam, F., & Lundqvist, M. (2020). Sexual harassment in higher education: A systematic review. *European Journal of Higher Education, 10*(4), 397-419. https://doi.org/10.1080/21568235.2020.1729833

Bovill, H., McCartan, K., & Waller, R. (2022). Female undergraduates playing it "safe" to stay "safe": Further understanding sexual violence against women. *Journal of International Women's Studies*, *23*(1), 192-207.

Chiluwa, I., & Ifukor, P. (2015). "War against our children": Stance and evaluation in# BringBackOurGirls campaign discourse on twitter and facebook. *Discourse & Society, 26*(3), 267-296. https://doi.org/10.1177/095792651456473

Colliver, B., & Coyle, A. (2020). Risk of sexual violence against women and girls' in the construction of "gender-neutral toilets": A discourse analysis of comments on YouTube videos. *Journal of Gender-based Violence*, *4*(3), 359-376. https://doi.org/10.1332/239868020X15894511554617

Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic masculinity: Rethinking the concept. *Gender & Society*, *19*(6), 829-859. https://doi.org/10.1177/0891243205278639

de Heer, B., & Jones, L. (2017). Measuring sexual violence on campus: Climate surveys and vulnerable groups. *Journal of School Violence*, *16*(2), 207-221. https://doi.org/10.1080/15388220.2017.1284444

Elindawati, R. (2021). Perspektif feminis dalam kasus perempuan sebagai korban kekerasan seksual di perguruan tinggi [Feminist perspective in the cases of women as a victim of sexual assault in higher education]. *AL-WARDAH: Jurnal Kajian Perempuan, Gender dan Agama*, *15*(2), 181-193. http://dx.doi.org/10.46339/al-wardah.v15i2.649

Fairclough, N. (1992). *Discourse and social change*. Polity Press.

Fairclough, N. (1993). Critical discourse analysis and the marketization of public discourse: The universities. *Discourse & Society*, *4*(2), 133-168.

Fedina, L., Holmes, J. L., & Backes, B. L. (2018). Campus sexual assault: A systematic review of prevalence research from 2000 to 2015. *Trauma, Violence, & Abuse*, *19*(1), 76-93. https://doi.org/10.1177/1524838016631129

Fernando, D., & Prasad, A. (2019). Sex-based harassment and organizational silencing: How women are led to reluctant acquiescence in academia. *Human Relations*, *72*(10), 1565-1594. https://doi.org/10.1177/0018726718809164

Fethi, I., Daigneault, I., Bergeron, M., Hébert, M., & Lavoie, F. (2023). Campus sexual violence: A comparison of international and domestic students. *Journal of International Students*, *13*(1), 1-21. https://doi.org/10.32674/jis.v13i1.3685

Howard, R. M., Potter S. J., Guedj C. E., & Moynihan, M. M. (2018). Sexual violence victimization among community college students. *Journal of American College Health*, *67*(7), 674-687. https://doi.org/10.1080/07448481.2018.1500474

Liao, S., & Luqiu, L. R. (2022) #MeToo in China: The dynamic of digital activism against sexual assault and harassment in higher education. *Signs: Journal of Women in Culture and Society*, *47*(3), 741-764.

Linder, C. (2018). *Sexual violence on campus: Power-conscious approaches to awareness, prevention, and response*. Emerald Publishing.

Linder, C., Grimes, N., Williams, B. M., & Lacy, M. C. (2020). What do we know about campus sexual violence? A content analysis of 10 years of research. *The Review of Higher Education*, *43*(4), 1017-1040.

Marfu'ah, U., Rofi'ah, S., & Maksun, M. (2021). Sistem pencegahan dan penanganan kekerasan seksual di kampus UIN Walisongo Semarang [The system of prevention and handling of sexual violence at UIN Walisongo Semarang campus]. *Kafaah: Journal of Gender Studies, 11*(1), 95-106.

Martin-Storey, A., Paquette, G., Bergeron, M., Dion, J., Daigneault, I., Hébert, M., & Ricci, S. (2018). Sexual violence on campus: Differences across gender and sexual minority status. *Journal of Adolescent Health*, *62*(6), 701-707. https://doi.org/10.1016/j.jadohealth.2017.12.013

Mellins, C. A., Walsh, K., Sarvet, A. L., Wall, M., Gilbert, L., Santelli, J. S., Thompson, M., Wilson, P. A., Khan, S., Benson, S. et al. (2017). Sexual assault incidents among college undergraduates: Prevalence and factors associated with risk. *PLoS one*, *12*(11), 1-23, e0186471.

Ministry of Education, Culture, Research, and Technology. (2021). Wujudkan lingkungan perguruan tinggi yang aman dari kekerasan seksual [Create a college environment that is safe from sexual violence]. https://www.kemdikbud.go.id/main/blog/2021/12/wujudkan-lingkungan-perguruan-tinggi-yang-aman-dari-kekerasan-seksual

Nikmatullah, N. (2020). Demi nama baik kampus vs perlindungan korban: Kasus kekerasan seksual di kampus [For the sake of the good name of the campus vs. victim protection: cases of sexual violence on campus]. *QAWWAM, 14*(2), 37-53. https://doi.org/10.20414/qawwam.v14i2.2875

Nugraha, R. A., & Subaidi, S. (2022). Kekerasan seksual dalam perspektif dominasi kuasa [Sexual violence in the perspective of power domination]. *IJouGS: Indonesian Journal of Gender Studies*, *3*(1), 21-31. https://doi.org/10.21154/ijougs.v3i1.3694

Nurbayani, S., Dede, M., & Widiawaty, M. A. (2022). Utilizing library repository for sexual harassment study in Indonesia: A systematic literature review. *Heliyon*, *8*(8), 1-8, e10194. https://doi.org/10.1016/j.heliyon.2022.e10194

Rabbaniyah, S., & Salsabila, S. (2022). Patriarki dalam budaya Jawa; membangun perilaku pembungkaman diri pada perempuan korban seksual dalam kampus [Patriarchy in Javanese culture; building self-silencing behavior on female sexual victims on campus]. *Community: Pengawas Dinamika Sosial*, *8*(1), 113-124. https://doi.org/10.35308/jcpds.v8i1.4586

Rosenthal, M. N., & Freyd, J. J. (2018). Sexual violence on campus: No evidence that studies are biased due to self-selection. *Dignity: A Journal on Sexual Exploitation and Violence*, *3*(1), 1-12. https://doi.org/10.23860/dignity.2018.03.01.07

Rothman, E. F. (2019). Preventing sexual violence on campus in the US: Four thought experiments. *Journal of Family Violence*, *34*(3), 177-184. https://doi.org/10.1007/s10896-018-9982-3

Senn, C. Y., Eliasziw, M., Barata, P. C., Thurston, W. E., Newby-Clark, I. R., Radtke, H. L., & SARE Study Team. (2014). Sexual violence in the lives of first-year university women in Canada: No improvements in the 21st century. *BMC Women's Health*, *14*, 1-8. https://doi.org/10.1186/s12905-014-0135-4

Senn, C. Y., Eliasziw, M., Barata, P. C., Thurston, W. E., Newby-Clark, I. R., Radtke, H. L., & Hobden, K. L. (2015). Efficacy of a sexual assault resistance program for university women. *New England Journal of Medicine*, *372*(24), 2326-2335.

Shalihin, M. S. E., Jamil, I. N., Aris, N. A. M., & Kamal, N. H. M. (2022). Sexual harassment in Malaysian educational institution–A review of its factors and effects. *Asian Journal of Civilizational Studies (AJOCS), 4*(3), 19-31.

Shopiani, B. S., Wilodati, W., & Supriadi, U. (2021). Fenonema victim blaming pada mahasiswa terhadap korban pelecehan seksual [Phenomenon of victim blaming in students against victims of sexual harassment]. *Sosietas*, *11*(1), 940-955.

Sitorus, J. C. (2019). Quo vadis, perlindungan hukum terhadap korban pelecehan seksual di kampus [Quo vadis, legal protection for victims of sexual harassment on campus]. *Lex Scientia Law Review*, *3*(1), 30-39. https://doi.org/10.15294/lesrev.v3i1.30731

Soejoeti, A. H., & Susanti, V. (2020). Diskusi keadilan restoratif dalam konteks kekerasan seksual di kampus [Discussion of restorative justice in the context of sexual assault on campus]. *Deviance Jurnal Kriminologi*, *4*(1), 67-83. http://dx.doi.org/10.36080/djk.v4i1.1311

Sulistyawan, A. Y., Suparno, S., Fernanda, S. A., & Adawiyah, R. (2022). Ketimpangan relasi kuasa dan gender pada kasus kekerasan seksual di kampus: Suatu telaah filsafat hukum [Inequality of power and gender relations in cases of sexual violence on campus: A study of legal philosophy]. *Jurnal Wawasan Yuridika*, *6*(2), 121-137. http://dx.doi.org/10.25072/jwy.v6i2.542

Ullman, S. E. (2016). Sexual revictimization, PTSD, and problem drinking in sexual assault survivors. *Addictive Behaviors*, *53*, 7-10. https://doi.org/10.1016/j.addbeh.2015.09.010

Wahyuni, S., Nurbayani, S., Kesumaningsih, I., & Hargono, D. (2022). Korban dan/atau pelaku: Atribusi victim blaming pada korban kekerasan seksual berbasis gender di lingkungan kampus. *Brawijaya Journal of Social Science, 2*(1), 1-17.

Wies, J. R. (2015). Title IX and the state of campus sexual violence in the United States: Power, policy, and local bodies. *Human Organization*, *74*(3), 276-286. https://doi.org/10.17730/0018-7259-74.3.276

Zinzow, H. M., & Thompson, M. (2015). Factors associated with use of verbally coercive, incapacitated, and forcible sexual assault tactics in a longitudinal study of college men. *Aggressive Behavior, 41*(1), 34-43. https://doi.org/10.1002/ab.21567

Appendix

YouTube Video of Narasi Newsroom

YouTube Video of Deddy Corbuzier

EVALUATING THE VALIDITY OF MEARA AND ROGERS' VOCABULARY APTITUDE TEST: A RASCH MEASUREMENT MODEL ANALYSIS

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Manuscript received 17 January 2023
Manuscript accepted 2 December 2023
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https://doi.org/10.33736/ils.5290.2023

ABSTRACT

Language aptitude tests, such as the LLAMA_ B3, developed by Meara and Rogers (2022), may play an important role in vocabulary learning research. This paper reports the evaluation of the construct validity of Meara and Rogers' (2022) Vocabulary Aptitude Test. Data collected from 314 participants were analysed using Rasch analysis. All the eigenvalues fell below 2, supporting the assumption of unidimensionality. Q3 findings showed that the assumption of local independence was met. This study found a strong reliability evidence for the items and a convergent estimate of the results. Accordingly, the test results displayed validity for the present sample of students. As far as the analysis shows, the items represent a single underlying construct, meaning that the LLAMA_ B3 is fundamentally coherent. Psychometrically, a single trait seems to have been identified. It can be concluded that both the items and participants behaved predictably, indicating that the test is certainly worth further investigation and refinement.

Keywords: vocabulary aptitude test; construct validity; foreign language aptitude; Rasch analysis

Introduction

The intriguing and slippery notion of language aptitude has captured researchers' attention for many years. Several concepts are typically associated with foreign language aptitude, including talent, giftedness, language acquisition ability, or language acquisition expertise (Ameringer et al., 2018). There are various tests claiming to assess these concepts, which makes it necessary to determine the type of interpretation that will be used before selecting any of the tests. This necessity shifts the focus from the theoretical underpinnings of foreign language aptitude to the instruments used to measure this trait (Bokander & Bylund, 2020).

As emphasis is placed on different learning conditions, researchers start to shift their attention from viewing aptitude as the only determining factor of second language (L2) success to treating it as a dynamic construct (Robinson, 2005). As a result, giant steps have been taken to study what might influence language aptitude as a mental construct, with working memory being the most frequently studied (Doughty & Mackey, 2021; Huang et al., 2020; Wen, 2019). One glaring gap, however, is that these primary studies only reported correlations between aptitude and other variables as holistic constructs rather than investigating the construct validity of aptitude (Li, 2015).

Numerous test batteries, including the Modern Language Aptitude Test (MLAT; Carroll & Sapon, 1959), Pimsleur Aptitude Battery (Pimsleur, 1966), Defence Language Aptitude Battery (DLAB; Petersen & Al-Haik, 1976), Cognitive Ability for Novelty in Acquisition of Language-Foreign (CANAL-FT; Grigornko et al., 2000), Language Learning and Meaning Acquisition (LLAMA; Meara, 2005), and the High-Level Language Aptitude Battery (HiLAB; Linck et al., 2013) have been created to measure the construct of aptitude. MLAT is the most common test to quantify language aptitude (Sparks et al., 2005). However, the LLAMA, which is a freely available and language-neutral test, has also gained a lot of attention (Mikawa & De Jong, 2021). These two unique features set LLAMA apart from the other aptitude measures.

The LLAMA_ B3 tests the ability to learn words. Language learning is believed to be significantly affected by word learning (Harmon et al., 2009). Although this test is a widely accepted tool to test language aptitude, its cultural adaptivity and validity have not been fully investigated. As LLAMA _B3 is language neutral test, it has the benefits of equality for every language. Hence, evaluating the usefulness of this test battery will benefit language researchers. Even though some studies have attempted to assess the validity of language aptitude tests scores, no study so far has examined the construct validity of the LLAMA_B3 test scores within the Iranian EFL context.

This study examines whether the latest version of LLAMA_B3 is a reliable and useful vocabulary aptitude test for Iranian EFL students. The results can provide good insight into students' foreign language aptitude for vocabulary acquisition and serve as a

valid starting point for interpreting LLAMA_B3 items. The following research questions are addressed.

1. To what extent are the results of the LLAMA _B3 valid for the present sample of participants?
2. How reliable are LLAMA _B3 scores for the items and the persons in the current study?

According to Messick (1985), validity refers to the "appropriateness, meaningfulness, and usefulness of the specific inferences made from the test scores" (p. 9), and "validation" is the "process of gathering evidence to support the specific inferences made from the test scores" (p. 9). The task of accumulating evidence to support all these inferences can be quite challenging to researchers, as it would not be possible to collect and analyse all types of data for all types of evidence that may be relevant. The present study thus only focuses on the assessment of LLAMA_B3 construct-related validity to determine if it fits the data provided by the test scores. The Rasch model is applied to further understand the data and to determine if the test items measure the same construct.

Review of the Literature

The development of foreign language aptitude (FLA) started in 1958 with John Bissell Carroll. Carroll and Sapon (2002) defined aptitude as “the rate at which people can learn an unknown language, and there are no definite differences between languages in terms of language learning abilities” (as cited in Stansfield & Reed, 2004, p. 54). Simply put, those who can learn a new language quickly have a certain degree of aptitude for learning a foreign language. Nevertheless, Carroll's assumption was not based on a broad theoretical framework (Smith & Stansfield, 2016).

Carroll and Sapon (1959) developed the Modern Language Aptitude Test (MLAT). Since then, language researchers utilising MLAT have modified the construct of language aptitude (O'Malley et al., 1993) although its main features emphasising the interdependency of external and personal factors in FLA are still in practice today (Reiterer, 2018).

A serious concern in specifying the characteristics of an individual to learn a foreign language is that such measurements are sometimes against the principle that learners deserve equal rights and opportunities in education (Skehan, 2016). Foreign language aptitude is sometimes used interchangeably with several other concepts, including talent, natural language-learning ability, or learning expertise (Ameringer et al., 2018). Therefore, testing experts often find it difficult to differentiate between aptitude and talent (Vinkhuyzen el al., 2009).

Aptitude tests seem to be a myth for many language researchers because the tests are inaccessible for research purposes. For instance, some protected tests are only administered to people who work for the US government (Robinson, 2002). Meara

developed the Language Learning and Meaning Acquisition test (LLAMA) in 2005. A free version of this aptitude test is easily available (Meara & Rogers, 2019). This test battery is based on what was established by Carroll and Sapon (1959) and Carroll (1962), and measures language aptitude using four different subtests: LLAMA_B3 relates to learning vocabulary, LLAMA_D relates to listening for new words, LLAMA_E relates to sounds and symbols, and LLAMA_F relates to grammar rules (Meara & Rogers, 2019).

LLAMA, a computer-based test battery, is special in that it does not limit its usage and accessibility (Granena, 2013). Although it is not as distinctive as MLAT, LLAMA has been used by many researchers (Artieda & Mu˜noz, 2016; Bokander & Bylund, 2020). The LLAMA manual describes the test as language-neutral (Meara, 2005). Such a feature may have given it an advantage over other language aptitude tests, which depend on specific languages. A participant's native language may inappropriately influence the outcome of an aptitude measure (Granena, 2013).

Researchers in this field have provided some evidence to support the broad argument about the distinctiveness of language aptitude tests. Abrahamsson and Hyltenstam (2008) explained that adopting the LLAMA as a research instrument supports the previous research that personality, attitude, motivation and test difficulty and cognitive loads of the items influence the way students perceive the items. However, very few researchers questioned the validity of this measuring tool (e.g., Bokander & Bylund, 2019; Mikawa & De Jong, 2021; Sachs et al., 2019). In the same vein, there seems to be no valid argument supporting LLAMA_B3. While some grammarians may ignore the role of word learning in second language learning, most educators believe that language cannot be learned without words (Alqahtani, 2015).

Some linguists equate language learning with learning words as words are the most basic and meaningful elements of any language (Walters, 2004). Others, like Li (2015), viewed aptitude as a predictor of different aspects of learning vocabulary and writing.

The differences in the nature of aptitude testing have encouraged experts to agree that more research is required to offer insight into the instrument to measure language aptitude (Singleton, 2017). Due to the variety of constraints for aptitude, the LLAMA test presents the best option for analysis. To understand the investigational and low-stakes purposes of LLAMA_B3 (Meara, 2005), it is essential to conduct a validation study on results from the first subtest of this testing battery named LLAMA_B3: Learning new words.

Bokander and Bylund (2020) were the most recent researchers who assessed the validity of the LLAMA test results (Meara, 2021). Except for LLAMA_B3, they found that the LLAMA battery displayed flaws at all three levels of measurement, including single items, components, and the entire test. It should not be used when the outcome could have serious consequences for test takers (Bokander & Bylund, 2020). To ascertain this position, we need to examine the potential of the LLAMA_B3 in a logical validation process.

The latest research does not provide enough support for all subtests of the LLAMA test battery; for example, Bokander and Bylund (2020) found that the trial response times for LLAMA_D were shorter than other subtests indicating that LLAMA_D was a different subtest from the rest. Further, LLAMA_E can test an individual's ability to connect familiar sounds with an unfamiliar writing system. The logic behind this test is that many students find it difficult to accept that letters do not always represent sounds used in their mother tongue.

Fundamental studies of linguistics and psychology have questioned the validity of data collected using aptitude tests to be interpreted in different teaching or research contexts (Stansfield & Reed, 2004). Similarly, they sought to inform the decision makers to select individuals with better performance in numerous fields. From a developmental viewpoint, it can be observed that second language learning aptitude is determined by heredity and the first language is not as influential as heredity (Dale et al., 2010).

However, the theoretical issues which fall within the scope of language aptitude instruments are far from solved. For example, Planchon and Ellis (2012) argued that on the aptitude test (DLAB), bilinguals outperformed monolinguals. Similarly, Sáfár and Kormos (2008), adopting Hungarian Language Aptitude Test, found that language aptitude has limited power in predicting language learning success. Dörnyei and Skehan (2003) argued that individual learners vary in their natural talent to learn foreign languages. Language aptitude is complicatedly affected by many other factors in the educational setting (Birdsong, 2018). That said, a test like LLAMA does not claim to measure knowledge or intelligence; it only measures untrained perceptual abilities. As a result, preparation before taking the test is pointless (Kagan, 2022).

Method

Participants

The study sample comprised 343 male and female Iranian university students (aged 18 to 22). All participants were native speakers of Persian with similar cultural backgrounds. By means of convenient sampling, some high school diploma holders who were doing their BSc were also employed for the study. Twenty-nine participants were later excluded as they did not complete the online test in university learning management system. The responses of the remaining 314 students were analysed.

Instruments

For the purpose of the study, the LLAMA_B3, designed by Meara and Rogers, was used. Developed in the form of a computer programme, the LLAMA _B3 tests the ability to learn the names of unusual objects. The programme shows the participants a series of 20 unknown objects and asks them to learn the names of the objects. The participants have two minutes to complete the task. The program then tests them by showing the objects one by one and asking them to determine the correct name from a list of 20 names. After

two minutes, a new screen appears on a new page. This screen includes the same 20 items that the participants have studied so far but are arranged differently. The participants then need to follow the directions in the bar at the bottom of the page. For example, if the instruction tells them to *Click on the taa*, they must click on the object with that name. If they fail to find the item they are looking for, they are advised to guess it by randomly clicking on an item.

Figure 1

The Set of the Pictures Used in LLAMA_B3

Procedure

As it was the first time that the participants took a language aptitude test, prior to the exposure, they were provided with a Persian translation of the LLAMA_B3 manual and some instructions on how it works. In case of ambiguity, the test takers were allowed to ask for clarification. In addition, they were taught how to enter personal ID codes that would be used to identify them to the computer application.

Out of the 314 responses, 17 respondents experienced online glitches. Each respondent was contacted via email or Telegram and given time to retake the test. Their first attempt to answer the questions was not recorded. Paul Meara was contacted for the raw data and the keystroke for coding the elicited responses via email. All data were graciously provided by Meara for academic research purposes. The entire dataset was collected and codified within 10 months, from October 2021 to July 2022.

Data Analysis

Rasch analysis was used to assess the construct validity of the LLAMA_B3 test results. The researchers tested the assumptions of unidimensionality and local independence. The principle of unidimensionality requires that each human attribute be measured separately (Bond & Fox, 2015). To find out if the LLAMA_B3 was one-dimensional, following Aryadoust et al. (2020), a principal component analysis of residuals (PCAR) was done.

Local independence, similar to detecting multicollinearity in regression, can be examined using several methods, including the G2 and V2 statistics (Chen & Thissen, 1997), the Cramer's V statistic (Baldonado et al., 2015) and Q3 coefficients (Fan & Bond, 2019) which indicate the correlation between the Rasch residuals of two test items. We used Q3 to test the assumption of local independence. If the Q3 coefficient is less than .3, the degree of local independence is satisfactory. When the value is high, the two items measure the primary construct and another construct (Aryadoust et al., 2020).

To provide more evidence of the validity of test scores, CONSTRUCT MAP 4 (Wilson, 2011) was used to analyse variance-covariance structures and item fit statistics. The fit statistics are presented in weighted mean square terms (infit) and unweighted mean square terms (outfit). The mean square (MnSq) index, which is expected to be 1.00, can be used to figure out how unusual the data set is. In MnSq metrics, for example, a value of 1.2 indicates that there is 20 percent noise in the data, while a value of 1.1 indicates less distortion; for standardized (*t*) metrics, a range between 1.96 and -1.96 is recommended (Linacre, 2002).

Besides Rasch analysis indexes (fit and difficulty), some researchers reported item difficulty and discrimination (2-parameter logistic model), difficulty, discrimination and low ability respondent behaviour (3-parameter model), difficulty, discrimination, low ability behaviour, and high ability behaviour (4- parameter model). As such, a four-parameter model (4 PM) provides information about the behaviour of high achievers, along with information from 1 PM, 2 PM, and 3 PM.

The JMETRIK software was used to analyse the 4-PM Rasch. This software estimates parameters using joint maximum likelihood (JML). Software packages that perform Rasch analyses generally use one of three estimation methods: conditional maximum likelihood estimation (CMLE), joint maximum likelihood estimation (JMLE), or marginal maximum likelihood estimation (MMLE). According to Nicklin and Vitta (2022), these methods produce similar results. Nevertheless, the JMETRIK manual (Meyer, 2014) does not provide hard-and-fast instructions on how discrimination indices should be interpreted. Instead, it maintains that when discrimination indexes are high, it is more probable that high-scoring examinees will get the item correct, while low-scoring examinees will tend to miss it.

As an extension of Rasch analysis, Wright maps facilitate the analysis of test items and participants' abilities. Several Rasch analysis software packages, including CONSTRUCT MAP 4, which was used in this study, provide a map of the person-item distribution, also known as the Wright map. The Wright Map indicates the level of readiness of the respondent by assessing the difficulty of the task and the respondent's ability (Linacre, 2002; Wilson, 2011), allowing a better understanding of how prepared the respondents are.

To examine the quality of the test scores, the separation index for items and persons was used. Further, this index measures the number of levels of item difficulty or person ability in the data (Linacre, 2019). A test that shows high separation (>2) can distinguish between items/people of different difficulty/ability levels.

Results and Discussion

The mean of the LLAMA_B3 scores of the participants was 8.5 (SD = 5.19), with scores ranging from 1 to 19 (maximum score of 20). According to Meara (2005), scores between 25% and 45% are considered average. Table 1 shows that the average score obtained in this study was 42%. It is reasonable to assume that the distribution of scores is fairly normal since the skewness index is less than 0.5 and the kurtosis value is less than 1 (Pallant, 2011).

Table 1
Descriptive Statistics

N	Mean	Std. Deviation	Minimum	Maximum	Skewness	Kurtosis
314	8.50	5.19	1.00	19.00	.46	-.81

As mentioned earlier, Rasch analysis was used to assess the construct validity of the LLAMA_B3 test results. The principal component analysis of residuals (PCAR) results helped establish the assumption of test unidimensionality. The associations among the item responses can be explained by a single underlying latent variable, which represents the target construct that is being measured (Bond et al., 2021). The key findings of the PCAR are presented in Table 2.

Table 2
Principal Component Analysis of Residuals

	Function 1	Function 2	Function3	Function4	Function5
Eigen value	1.85	1.51	1.45	1.30	1.26
Proportion Variance	0.09	0.08	0.07	0.07	0.06
Proportion Explained	0.25	0.20	0.20	0.18	0.17

Following Linacre (2006), if the first value of the correlation matrix of the residuals is less than 2.00, the residuals are treated as random noise. However, if the eigenvalue exceeds 2.00, there may be a second dimension besides the primary Rasch dimension. Table 2 indicates that the eigenvalues of the subfunctions were all below 2.00. Thus, the assumption of unidimensionality was considered met. Hambleton et al. (1991, p. 9) stated that the assumption of unidimensionality cannot be fully met, since "... several cognitive, personality, and test-taking factors always affect test performance, at least to some extent." Additionally, unidimensionality does not remain the same across different samples of participants (Linacre, 2019).

For the assumption of local independence, we used Q3 index. The highest correlation was between items 5 and 16 (-0.25). Hence, local independence was met, meaning that the items in the test are independent of each other and effectively measure only language aptitude. Glas (2016) suggests that tests that focus on item local independence are excellent indicators of unidimensionality. Such tests are useful in identifying potential problems with the scale or items.

For the fit indexes, CONSTRUCT MAP 4 was used to analyse the responses of the students. A convergent estimate of the results was obtained (Variance-Covariance Matrix: +2.002 and -2 log likelihood=+11.458.300). Following Wilson (2011), we therefore posit that the LLAMA_B3 is valid for the sample of students examined in this study.

Table 3

Scale Quality Statistics

Statistic	Items	Persons
Separation Index	5.65	2.29
Reliability	0.96	0.84

Table 3 provides details on the quality of the LLAMA_B3. There was a reliability of .96 for the items and .84 reliability for the persons in the current study. According to Duncan et al. (2003), reliability between .70 and .79 is considered acceptable, between .80 and .89 is considered good, and between .90 and .99 is considered excellent. The separation index for items and persons were 5.65 and 2.29 respectively, meaning the quality of the test was satisfactory. As such, the LLAMA_B3 can distinguish between items/people of different difficulty/ability levels.

Table 4

Fit Statistics for Test Items

Item* step	Outfit Unweighted MnSq	*t*	Infit weighted MnSq	*t*
Item 1	1.32	3.6	1.19	2.5
Item 2	1.11	1.3	1.05	0.7
Item 3	1.23	2.7	1.21	2.8
Item 4	1.03	0.3	1.07	1.0
Item 5	1.17	2.0	1.16	2.1
Item 6	1.16	1.9	1.18	2.4
Item 7	1.10	1.2	1.12	1.6
Item 8	1.05	0.6	1.01	0.2
Item 9	1.04	0.5	0.95	-0.6

Item 10	1.14	1.7	1.09	1.2
Item 11	0.99	-0.1	0.98	-0.3
Item 12	1.16	1.9	1.18	2.3
Item 13	1.06	0.8	1.03	0.4
Item 14	0.97	-0.3	0.92	-1.0
Item 15	1.03	0.5	0.88	-1.5
Item 16	0.99	-0.0	0.95	-0.6
Item 17	1.00	0.1	0.94	-0.7
Item 18	1.06	0.7	0.98	-0.2
Item 19	0.86	-1.9	0.80	-2.7
Item 20	1.14	2.01	1.40	2.80
Average	1.08	0.9	1.04	0.5

Table 4 illustrates that the largest infit index belonged to item 3 (1.21), while the smallest value belonged to item 19 (0.8); the remaining items were between 0.8 and 1.21, and the average infit was reported as 1.04. According to Wright at el. (1994), the mean square range of Infit and Outfit is 0.8-1.2 for high stakes and 0.7-1.3 for ordinary tests. Thus, almost all of the items in the LLAMA_B3 fit the Rasch model. However, the t values of infit indexes for items 1,3, 5,6,12,19, and 20 were outside the acceptable range of 1.96 and -1.96 (Yan et al., 2020), indicating that these items were less compatible with the model. The problem of misfit items can be seen from two perspectives: One, the item may discriminate poorly, or two, it may work well but not fit the measurement trait defined by other items (McNamara, 1996).

In this study, we examined a four-parameter model allowing the upper asymptote of each item to be fewer than 1 (Linacre, 2004), taking into account the possibility that even a high ability respondent might occasionally answer an easy question incorrectly. In Table 5, we present the results of this analysis.

Table 5

4-Parameter Estimates and Standard Errors

Item	A (SE) *discrimination*	B (SE) *difficulty*	C (SE) *chance(guess)*	U (SE) *upper asymptote (high ability learner's behaviour)*
Item1	2.02 (0.47)	-0.65 (0.20)	0.20 (0.07)	0.83 (0.03)
Item2	2.45 (0.29)	-0.76 (0.12)	0.13 (0.05)	0.93 (0.02)
Item3	2.00 (0.42)	-1.03 (0.19)	0.18 (0.08)	0.87 (0.03)
Item4	2.27 (0.32)	-0.38 (0.11)	0.11 (0.05)	0.95 (0.02)
Item5	1.85 (0.35)	0.05 (0.15)	0.12 (0.05)	0.91 (0.04)
Item6	1.53 (0.29)	0.09 (0.19)	0.13 (0.05)	0.93 (0.04)
Item7	1.91 (0.38)	-0.06 (0.16)	0.20 (0.06)	0.95 (0.03)
Item8	2.16 (0.35)	0.45 (0.12)	0.12 (0.04)	0.95 (0.03)

Item9	2.46 (0.28)	0.76 (0.10)	0.06 (0.02)	0.95 (0.03)
Item10	1.67 (0.35)	0.31 (0.17)	0.11 (0.04)	0.90 (0.05)
Item11	2.11 (0.34)	0.51 (0.13)	0.14 (0.04)	0.96 (0.03)
Item12	2.05 (0.35)	0.26 (0.13)	0.09 (0.04)	0.92 (0.04)
Item13	1.94 (0.34)	0.64 (0.17)	0.12 (0.04)	0.70 (NaN)
Item14	2.52 (0.25)	0.82 (0.10)	0.04 (0.02)	0.95 (0.03)
Item15	2.29 (0.33)	0.85 (0.14)	0.10 (0.03)	0.70 (NaN)
Item16	1.54 (0.32)	0.96 (0.25)	0.16 (0.04)	0.70 (NaN)
Item17	2.12 (0.35)	1.00 (0.16)	0.07 (0.03)	0.70 (NaN)
Item18	1.66 (0.39)	0.58 (0.26)	0.27 (0.05)	0.70 (NaN)
Item19	2.39 (0.34)	0.87 (0.10)	0.10 (0.02)	1.00 (0.00)
Item20	2.11 (0.41)	0.97 (0.16)	0.21 (0.04)	0.95 (0.03)

The second column of Table 5 illustrates the estimate of the item discrimination parameter. Item 14 had the highest value of 2.52 and item 6 had the lowest value of 1.53. The interpretation of discrimination indices is not prescriptive. It could be said that when discrimination indexes are high, high-scoring examinees are more likely to get the item right, while low-scoring examinees are more likely to miss it. It should be emphasised that discrimination, like other test characteristics, needs to be viewed in light of its purpose. For example, if LLAMA_B3 is to be used for selection purposes, it would be advisable to select highly discriminatory items.

The third column shows the estimate of the item difficulty parameter. The Rasch analyses calculate item difficulty as *Z* scores, which range from -3 (easiest) to 3 (most difficult). Based on this, from the present data set, item 3, with a *Z* score of -1.03, was the easiest item, and item 17, with a *Z* score of 1.00, was the most difficult. As with the previous index, this index needs to be weighed following the test's purpose. When using LLAMA_B3 for placement purposes, choosing items that consider the examinee's location is advisable. It is recommended that the items are presented in order of ease, that is, from the easiest to the most difficult. Further explanation is provided in the Wright Map presented in Figure 2.

The fourth column displays the estimation of the lower asymptote parameter (pseudo-guess). Our data set showed that item 18 had the highest index (0.27). IRT literature (Rulison & Loken, 2009) suggested that C indices over .4 should be considered problematic. Guessing occurs especially when students feel incapable of solving the question using their existing abilities.

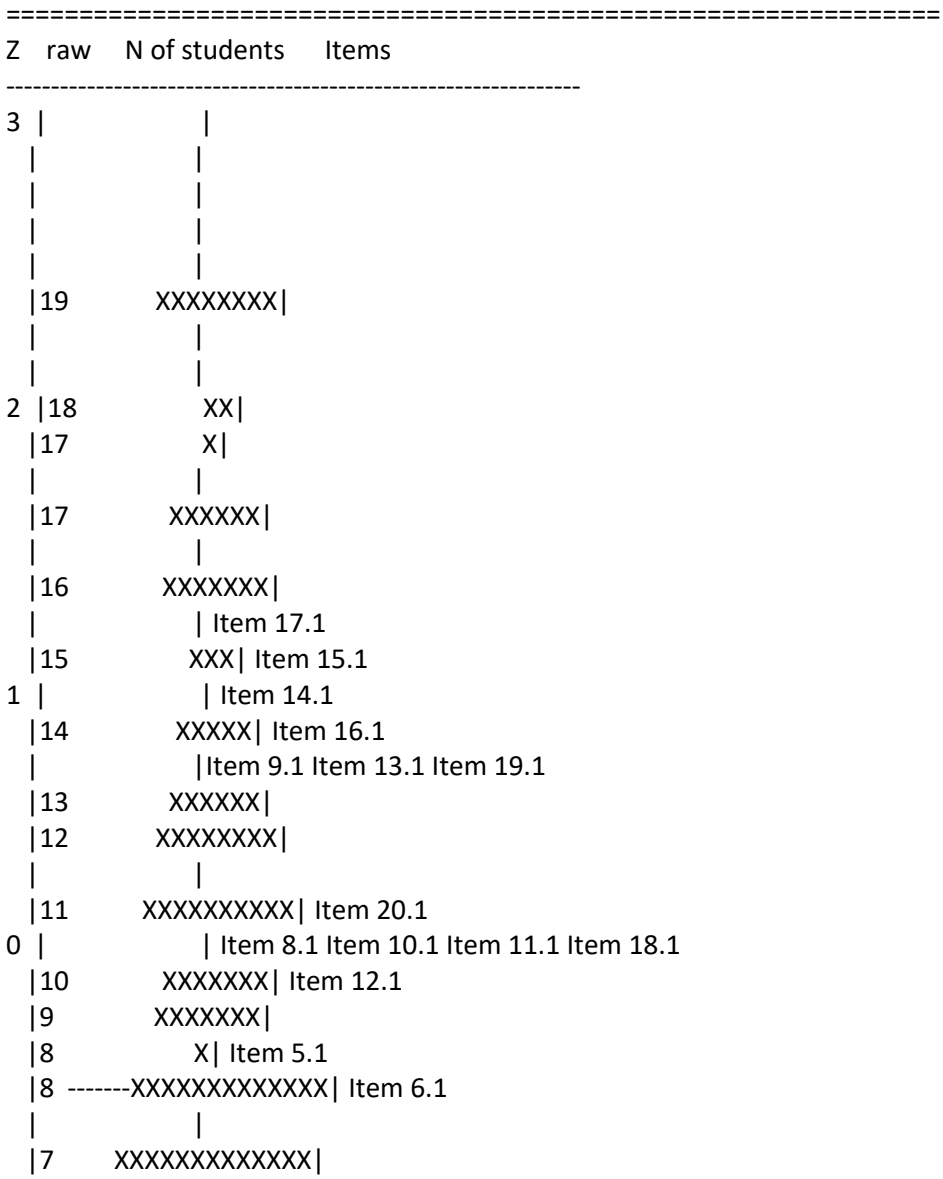
The last column shows the estimate of the upper asymptote parameter (careless errors), denoted as U. It is evident that the lowest index was .7 (items 13,15,16,17,18), which is significantly higher than the 0.00 value. Loken and Rulison (2010) used the upper asymptote of 1 to calculate the probability of a high-ability student failing to answer an easy item correctly. Careless errors can produce more serious estimation biases than guesses, particularly when these errors occur early in a test. When students are anxious, careless, unfamiliar with computer techniques, distracted by poor test conditions, or

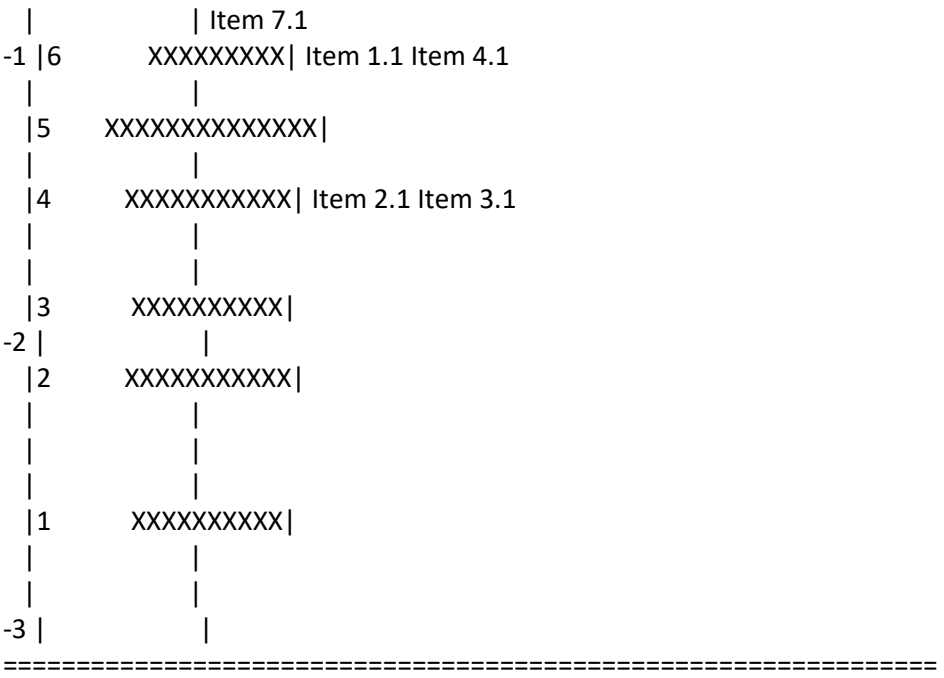
misinterpret the question, gifted students can sometimes miss items that they should have answered correctly (Rulison & Loken, 2009).

As mentioned in the data analysis section, CONSTRUCT MAP 4 was used in this study to provide a map of the person-item distribution known as the Wright map. Using the Wright Map, we determined how prepared the respondents were for the task at hand (Figure 2).

Figure 2

Map of Person and Response Model Estimates





Each X represents 2 students, each row is 0.128 logits

Figure 2 illustrates the Wright map showing respondents' performance on LLAMA_B3. In the two vertical broken line, the left side represents the students, whereas the right side represents the items. On the left side of the map, participants' abilities are arranged from the most to the least able in *Z* scores and Raw scores, starting from the top. On the right side of the map, the most difficult items are at the top and the easiest items are at the bottom. At the point where the mean item is 0.00 logit, we have items 8, 10, 11 and 18, followed by easier items, such as items 12, 5, 6, 7, 1, 4, 2 and 3. Items 20, 9, 13, 19, 16, 14, 15, and 17 are located on the top side of the graph, indicating a higher degree of difficulty.

In the sample of 48 respondents, 15% who scored 16+ (maximum 20), could not be located by any specific test item, meaning no specific test item could be used to evaluate their ability level. Throughout Figure 2, empty spaces are used as a way of demonstrating this point. This can be taken to mean that the test designer needs to develop some items that will be appropriate for learners of higher abilities. It is possible that some individual factors have affected the performance of the test takers. Our findings also showed that 60 students, almost 20% of the sample, scored below the easiest items, that is, items 2 and 3. In other words, the students found the test to be too challenging for them. Since there is a difficulty gap between -1.5 logit and -1.00 logit, 28 students (nearly 9% of the sample) were left without appropriate items. This difficulty gap is displayed from the fact that no students and items (no x in front of the logits as shown in figure 2) are displayed for these logits. There is also a difficulty gap between 0.6 and 0.7 logits, where 26 students (8%) were not provided with specific items.

Similarly, 26 respondents or 8% of the sample, who scored at 0.5 and 0.6 logits, were not given appropriate items at this level of ability. Overall, 188 students (nearly 60%) did not find items that matched their abilities. It may be due to the fact that the test items, strange figures along with meaningless words, made up a decontextualised test.

It should be noted that there was an overlap of difficulty between the following pairs or sets of items: items 2 & 3; 1 & 4; 8, 10, 11 & 18; 9, 13 & 19; as well as all items with item 1. Accordingly, each set's first or last item performs the same function as the other. This means that some of these items can be omitted from the test. However, it should also be noted that the modifications proposed here are not intended to reject the construct validity of the test; rather, they are intended to inform test users of some potential limitations.

Conclusion

Testers and users must understand what the results of the items and people's performance tell them about the theory they are testing and what the theory tells them about the people and items they are testing. The analysis thus far suggests that most of the items fit the model and should represent a single underlying capability. The findings in this paper support the argument that LLAMA_B3 is fundamentally coherent and valid for the sample of students that was studied. Research that focuses on other populations would be able to determine whether the same findings could be replicated. Additionally, it would be beneficial to analyse the predictive validity of LLAMA_B3 to gain better understanding of the usefulness of the instrument.

Based on the findings of this study, we conclude that scores on these items are highly reliable, indicating that the items measure the same underlying concept. The current study, nonetheless, did not include any evidence of criterion-related validity. For this, further research is needed to establish the predictive power of LLAMA_B3 in vocabulary learning. The present study also did not provide evidence for differential validity. It may be helpful to design a factorial study to compare the performance of male and female learners and try the test with other age groups and learners of foreign languages other than English as evidence of differential validity. This would allow researchers to determine differences between the results of the two genders, or if the results are consistent regardless of the language or age group. It would also help to ascertain if there is any bias in the test results.

Acknowledgement

The research was supported by a grant from Shahid Rajaee Teacher Training University, with an agreement number of 4933 and a date of May 27, 2023.

References

Abrahamsson, N., & Hyltenstam, K. (2008). The robustness of aptitude effects in near-native second language acquisition. *Studies in Second Language Acquisition*, *30*, 481-509. https://doi.org/10.1017/S027226310808073X

Alqahtani, M. (2015). The importance of vocabulary in language learning and how to be taught. *International Journal of Teaching and Education*, *III* (3), 21-34. https://doi.org/10.20472/te.2015.3.3.002.

Ameringer, V., Green, L., Leisser, D., & Turker, S. (2018). Introduction: Towards an interdisciplinary understanding of language aptitude. In S. M. Reitererm (Eds.), *Exploring language aptitude: Views from psychology, the language sciences, and cognitive neuroscience* (pp. 19-42). English Language Education, vol 16. Springer. https://doi.org/10.1007/978-3-319-91917-1_1

Artieda, G., & Mu˜noz, C. (2016). The LLAMA tests and the underlying structure of language aptitude at two levels of foreign language proficiency. *Learning and Individual Differences, 50*, 42-48. https://doi.org/10.1016/j.lindif.2016.06.023

Aryadoust, V., Ng, L. Y., & Sayama, H. (2020). A comprehensive review of Rasch measurement in language assessment: Recommendations and guidelines for research. *Language Testing, 38*(1), 6-40. https://doi.org/10.1177/0265532220927487

Baldonado, A. A., Svetina, D., & Gorin, J. (2015). Using necessary information to identify item dependence in Passage-Based Reading Comprehension Tests. *Applied Measurement in Education, 28*(3), 202-218. https://doi.org/10.1080/08957347.2015.1042154

Birdsong, D. (2018). Plasticity, variability and age in second language acquisition and bilingualism. *Frontiers in Psychology, 9*, 81-98.

Bokander, L., & Bylund, E. (2020). Probing the internal validity of the LLAMA Language Aptitude Tests. *Language Learning, 70*(1), 11-47. https://doi.org/10.1111/lang.12368

Bond, T. G., & Fox, C. M. (2015). *Applying the Rasch Model: Fundamental measurement in the human sciences* (3rd ed.). L. Erlbaum.

Carroll, J. B., & Sapon, S. M. (1959). *Modern language aptitude test manual*. Psychological Corporation.

Carroll, J. B. (1962). The prediction of success in intensive foreign language training. In R. Glaser (Ed.), *Training research and education* (pp. 87-136). University of Pittsburgh Press.

Carroll, J. B., & Sapon, S. (2002). *Modern Language Aptitude Test: Manual*. Second Language Testing.

Chen, W. H., & Thissen, D. (1997). Local dependence indexes for item pairs using Item Response Theory. *Journal of Educational and Behavioural Statistics, 22*(3), 265-289. https://doi.org/10.2307/1165285

Dale, P. S., Harlaar, N., Haworth, C., & Plomin, R. (2010). Two by two: A twin study of second language acquisition. *Psychological Science, 21*(5), 635-640. https://doi.org/10.1177/0956797610368060

Dörnyei, Z., & Skehan, P. (2003). Individual differences in second language learning. In C. J. Doughty & M. H. Long (Eds.), *The handbook of second language acquisition* (p. 589-630). Oxford, UK: Blackwell.

Doughty, C. J., & Mackey, A. (2021). Language aptitude: Multiple perspectives. *Annual Review of Applied Linguistics, 41*, 1-5. https://doi.org/10.1017/s0267190521000076

Duncan, P. W., Bode, R. K., Min Lai, S., Perera, S., & Glycine (2003). Rasch analysis of a new stroke-specific outcome scale: The stroke impact scale. *Archives of Physical Medicine and Rehabilitation, 84*(7), 950-963. https://doi.org/10.1016/s0003-9993(03)00035-2

Fan, J., & Bond, T. (2019). Applying Rasch measurement in language assessment. *Quantitative Data Analysis for Language Assessment I*, 83-102 https://doi.org/10.4324/9781315187815-5

Glas, C. A. (2016). Frequentist model-fit tests. *Handbook of item response theory, volume two: statistical tools*, 313-361. https://doi.org/10.1201/b19166-22

Grigorenko, E. L., Sternberg, R. J., & Ehrman, M. E. (2000). A theory-based approach to the measurement of foreign language learning ability: The Canal-F theory and test. *Modern Language Journal, 84*(3), 390-405. https://doi.org/10.1111/0026-7902.00076

Hambleton, R. K., Swaminathan, H. and Rogers, H. J. (1991). *Fundamentals of Item Response Theory.* SAGE Publications

Harmon, J. M., Wood, K. D., & Kiser, K. (2009). Promoting vocabulary learning with the interactive word wall. *Middle School Journal, 40*(3), 58-63. https://doi.org/10.1080/00940771.2009.11495588

Huang, T., Loerts, H., & Steinkrauss, R. (2020). The impact of second- and third-language learning on language aptitude and working memory. *International Journal of Bilingual Education and Bilingualism, 25*(2), 522-538. https://doi.org/10.1080/13670050.2019.1703894

Granena, G. (2013). Cognitive aptitudes for second language learning and the LLAMA Language Aptitude Test. *Language Learning & Language Teaching*, 35, 105-130. https://doi.org/10.1075/lllt.35.04gra

Kagan, J. (2022). Aptitude Test: Definition, how it's used, types, and how to pass. *Investopedia*. https://www.investopedia.com/terms/a/aptitude-test.asp

Li, S. (2015). The construct validity of language aptitude. *Studies in Second Language Acquisition, 38*(4), 801-842. https://doi.org/10.1017/s027226311500042x

Linacre, J. M. (2002). What do infit and outfit, mean-square and standardized mean. *Rasch Measurement Transactions, 16*(2), 878. https://www.rasch.org/rmt/rmt162.pdf

Linacre, J. M. (2004). Rasch model estimation: Further topics. *Journal of Applied Measurement, 5*(1), 95-110.

Linacre J. M. (2006). Rasch analysis of rank-ordered data. *Journal of Applied Measurement, 7*(1), 129-139.

Linacre, J. M. (2015). What do infit and outfit, mean-square and standardized mean? Rasch Measurement, *Trans 2002*, *16*, 878-882.

Linacre, J. M. (2019). *A user's guide to WINSTEPS® Rasch-Model Computer Programs*: Program Manual 4.4. 6. Mesa-Press, Chicago, IL. https://www.winsteps.com/winman/copyright.htm

Linck, J. A., Hughes, M. M., Campbell, S. G., Silbert, N. H., Tare, M., Jackson, S. R., Doughty, C. J. (2013). Hi-LAB: A new measure of aptitude for high level language proficiency. *Language Learning, 63*, 530-566. https://doi.org/10.1111/lang.12011

Loken, E., & Rulison, K. L. (2010). Estimation of a four-parameter item response theory model. *British Journal of Mathematical and Statistical Psychology, 63*(3), 509-525. https://doi.org/10.1348/000711009x474502

McNamara, T. F. (1996). *Measuring second language performance.* Longman.

Meara, P. (2005). *LLAMA Language aptitude tests*. Lognostics.

Meara, P. M., & Rogers, V. E. (2019). *The LLAMA tests*. Lognostics. https://www.lognostics.co.uk/tools/LLAMA_3/index.htm

Messick, S. (1985). *Standards for educational and psychological testing*. American Psychological Association.

Meyer, P. J. (2014). *Applied measurement with jMetrik* (1st ed.). Routledge.

Mikawa, M., & De Jong, N. H. (2021). Language neutrality of the LLAMA test explored: The case of agglutinative languages and multiple writing systems. *Journal of the European Second Language Association*, *5*(1), 87-100. https://doi.org/10.22599/jesla.71

Nicklin, C., & Vitta, J. P. (2022). Assessing Rasch measurement estimation methods across R packages with yes/no vocabulary test data. *Language Testing*, *39*(4), 513-540. https://doi.org/10.1177/02655322211066822

O'Malley, J. M., Parry, T. S., & Stansfield, C. W. (1993). Language Aptitude Reconsidered. *The Modern Language Journal, 77*(2), 1-24. https://doi.org/10.2307/328950

Pallant, J. F. (2011). *SPSS survival manual: A step by step guide to data analysis using the SPSS program*. Allen & Unwin.

Pimsleur, P. (1966). The Pimsleur language aptitude battery. Harcourt, Brace, Jovanovic.

Planchon, A., & Ellis, E. (2012). A diplomatic advantage? The effects of bilingualism and formal language training on language aptitude amongst Australian diplomatic officers. *Language Awareness, 23*(3), 203-219. https://doi.org/10.1080/09658416.2012.742907

Reiterer, S. M. (2018). Exploring language aptitude: Views from psychology, the language sciences, and cognitive neuroscience. Springer-Nature.

Robinson, P. (2002). Effects of individual differences in intelligence, aptitude, and working memory on adult incidental SLA: A replication and extension of Reber,

Walkenfield and Hernstad (1991). In P. Robinson (Ed.), *Individual differences and instructed language learning* (pp. 211-265). John Benjamins Publishing.

Robinson, P. (2005). Aptitude and second language acquisition. *Annual Review of Applied Linguistics, 25*, 46-73. https://doi.org/10.1017/s0267190505000036

Rulison, K. L., & Loken, E. (2009). I've fallen and I can't get up: Can high-ability students recover from early mistakes in CAT? *Applied Psychological Measurement, 33*(2), 83-101. https://doi.org/10.1177/0146621608324023

Sachs, R., Akiyama, Y., & Nakatsukasa, K. (2019). The value of introspective measures in aptitude-treatment interaction research. *Journal of Second Language Studies, 2*(2), 336-364. https://doi.org/10.1075/jsls.19001.sac

Sáfár, A., & Kormos, J. (2008). Revisiting problems with foreign language aptitude. *IRAL - International Review of Applied Linguistics in Language Teaching, 46*, 113-136. https://doi.org/10.1515/iral.2008.005

Singleton, D. (2017). Language aptitude: Desirable trait or acquirable attribute? *Studies in Second Language Learning and Teaching, 7*(1), 89-103. https://doi.org/10.14746/ssllt.2017.7.1.5

Skehan, P. (2016). Foreign language aptitude, acquisitional sequences, and psycholinguistic processes. In G. Granena, D. O. Jackson, & Y. Yilmaz (Eds.), *Cognitive individual differences in L2 processing and acquisition* (pp. 105-130). John Benjamins.

Sparks, R. L., Javorsky, J., & Ganschow, L. (2005). Should the modern language aptitude test be used to determine course substitutions for and waivers of the foreign language requirement? *Foreign Language Annals*, *38*(2), 201-210. https://doi.org/10.1111/j.1944-9720.2005.tb02485.x

Stansfield, C. W., & Reed, D. J. (2004). The story behind the modern language aptitude test: An interview with John B. Carroll (1916–2003). *Language Assessment Quarterly: An International Journal, 1*(1), 43-56. https://doi.org/10.1207/s15434311laq0101_4

The LLAMA tests. (2020). *The LLAMA Tests*. https://www.lognostics.co.uk/tools/LLAMA_3/index.htm

Vinkhuyzen, A. a. E., Van Der Sluis, S., Posthuma, D., & Boomsma, D. I. (2009). The heritability of aptitude and exceptional talent across different domains in adolescents and young adults. *Behaviour Genetics*, *39*(4), 380-392. https://doi.org/10.1007/s10519-009-9260-5

Walters, J. (2004). Teaching the use of context to infer meaning: a longitudinal survey of L1 and L2 vocabulary research. *Language Teaching, 37*(4), 243-252. https://doi.org/10.1017/s0261444805002491

Wen, Z. E. (2019). Working Memory as Language Aptitude [Review of *Working Memory as Language Aptitude*]. In Z. E. Wen (Ed.), *The Phonological/Executive Model* (pp. 187-214). Routledge. https://doi.org/10.4324/9781315122021-10

Wilson, M. (2011). Some notes on the term: "Wright Map". *Rasch Measurement Transactions*, *25*(3), 1331.

Wright, B. D., Linacre, J. M., Gustafson, J. E., & Martin-Löf, P. (1994). *Reasonable mean-square fit values. Rasch Measurement Transactions, 8*(3), 370. https://www.sciepub.com/reference/117986

Yan, Z., Heene, M., & Bond, T. (2020). *Applying the Rasch model* (4th ed.). Routledge.

FORMATION OF *MA-* AND *PA-* ALLOMORPH: THE CASE OF SONORANT SEGMENTS' CLUSTERING

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Manuscript received 6 March 2023
Manuscript accepted 8 December 2023
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https://doi.org/10.33736/ils.5509.2023

ABSTRACT

The *maN-* and *paN-* are some affixes in Banjarese language that manifest the occurrence of homorganic nasal assimilation when forming allomorphs. But in some allomorphs, such as *ma-* and *pa-,* the nasal segment was completely deleted from the affixes. This study aims to provide a rational explanation for the deletion of the nasal segment in both allomorphs. A set of base words was obtained from a dictionary, and respondents were selected to recite each word, along with the derived word after it had received the affixes. The *ma-* and *pa-* were formed as a result of each prefix being followed by a sonorant segment, both consonant and vowel. This is different from the Malay language, which only allows nasal segments to be deleted when a sonorant consonant follows them. This study is hoped to add some value to the previous studies as well as become a pioneer for upcoming studies.

Keywords: Banjarese affix, nasal segment, nasal deletion, sonorant feature, clustering

Introduction

Banjarese People and Their Language

Banjarese is a traditional language with distinct characteristics for its speakers, serving as a symbol of the identity of the indigenous people of South Kalimantan, which has been passed down through generations as their local language (Ningsih, 2018). Banjarese

language (later known as BL) often acts as a language of communication between the people in Central Kalimantan, East Kalimantan, and North Kalimantan (Sunarti, 1978). According to Kawi et al. (1993), before the 16th century, BL was associated with a group of people with their own social culture called Kutai, a native ethnic group of the East Kalimantan region. It is believed that BL and the people themselves originated from Kalimantan Island. Furthermore, Daud (1997) highlighted that the Banjarese people were originally indigenous inhabitants of the majority of the South Kalimantan region. Figure 1 shows the map of Kalimantan Island, which is the ancestral homeland of the Banjarese people.

Figure 1

The Map of Kalimantan, Indonesia (Google Maps, n.d.)

Despite originating from Kalimantan, the Banjarese community can now be found in various locations, both in Indonesia and Malaysia. According to Lamry (2016), the Banjarese people migrated from their homeland on a large scale, and this migration is better known as "*madam*" in the BL, to Tanah Melayu (now known as Malaysia) at the end of the 19th century through the beginning of the 20th century. Most of them are known as "*perantau hilang"* (lost migrant) which refers to the act of continuing to live abroad and never returning to their homeland, South Kalimantan again. These people then set up a new settlement known as "*kampung Banjar"* (Banjarese village) and continued their traditional lifestyle as practised in South Kalimantan.

Even in the new environment, the BL continues to be used as a means of communication within the community. The community has also adapted to the new surroundings by utilising the local language to interact with the other communities and adhere to the new place's rules and regulations. BL can be categorised as part of the agglutinative languages, that use affixes to create new words. This characteristic is similar to some of the languages as Malay language and Indonesian. There are a few aspects to be considered when assuming a certain language to be an agglutinative language. Some of them include the number of morphemes in a word, which are two, the based word and the affix. Secondly, all affixes are considered bound morphemes, in which each of them has its respective function. Thirdly, the boundary between morphemes in a word is clear and visible.

Problem Statement

Local scholars have previously conducted studies on BL, primarily focusing on its semantic and pragmatic aspects. For example, a study by Abdul Wahab and NorHashim (2020) identified several words used by the Banjarese community in the Bagan Serai district. On the other hand, Wahyu (2020) has identified that the local wisdom of this community continues to grow and become part of the culture of this community.

BL is often related to the Malay language in terms of its existence. The high percentage of kinship between these two languages from their lexicostatistics aspect indicates that both are grouped at the same level of language family kinship (Abdul Wahab & Che Halin, 2021; Abdul Wahab, 2022). Hapip et al. (1981) stated that BL is part of the Malay language used in South Kalimantan. This, however, is not agreed upon by Suryadikara (1994) stating that the existence of the Malay language and the people originated from Sumatera. Adelaar (1985) believes that thousands of years ago, there was a Proto Malayic language that descended into the languages of Banjarese, Ibanese, Jakarta Malay, Standard Malay, and Minangkabau. Contrary to that belief, Yasin (2017) stated that BL is a language that was formed due to the interaction of three tribes, namely Malay, Javanese, and Dayak as indigenous tribes, in addition to the original vocabulary of the BL itself.

BL does have a lot of similarities with the Malay language, one of which is in how these languages develop their vocabulary inventories. As stated before, BL can be considered an agglutinative language, referring to a language that uses affixes to form a new word. The Banjarese affixes have been studied by a lot of scholars, especially those from Indonesia, the origin place of BL. Yayuk (2017) for example, has concluded that affixes do exist in the BL consisting of prefix, suffix, confix, and infix. Humaidi et al. (2017) analysed Banjarese affixes based on the word class that follows them, dividing the words into three classes: verbs, nouns, and adjectives. Similarly, Hapip et al. (1981) also divided the word classes into five categories: objects (O), countable words (Bl), verbs (K), state words (S), and adverbs (Kt).

Based on examples provided by previous scholars, it seems that some of the affixes can form various morphological forms yet still have the same semantic meaning. Scholars, on the other hand, rarely discuss these various morphological forms known as allomorphs. Hapip et al. (1981) have deliberated a bit about a process called morphophonemic, the formation of phonological variations within morphemes. They stated that allomorphs of *maN-* are *ma-, man-, maŋ-* and *mam-,* while *paN-* are *pa-, pan- , paŋ-* and *pam-.* On the other hand, Giovanni (2004) has listed six types of allomorphs for maN- which include the previously mentioned allomorphs plus two more, *maɲ-* and *maʔ-* . However, there is no discussion on *paN-* prefix provided by this scholar.

This morphophonemic process also has been discussed by Benjamin (2009) in his study on Austronesian affixes. Instead of calling the formation of allomorphs a morphophonemic process, this scholar called it nasal mutation. According to him, almost all modern grammarians of Malay and Indonesian treat *me-* and *-N-* as parts of a single prefix (*meN-)* that generates a nasal mutation in the initial consonant of the verb stem except when those stems begin with /l/ and /r/. Since BL comes from the same language group as Malay and Indonesian language, hence this statement is also applicable to this language. BL also shares most of its affixes with Malay and Indonesian languages. However, in Banjarese affixes, the central unrounded vowel /a/ is more favoured compared to the central unrounded vowel /ə/ like in the Malay and Indonesian languages.

The formation of allomorphs within the same affix is due to a process called homorganic nasal assimilation. That is when a nasal is homorganic with the consonant that goes after it, it will share the place of articulation of the following consonant (Katamba, 1989). Hasrah (2020) stated that homorganic nasal is not an unusual phenomenon that happens in Malay dialects throughout the Peninsular. To further strengthen this statement, Hamid and Syed Jaafar (2017) affirmed that homorganic nasal assimilation in the Malay dialect of Saribas happens when the nasal velar segment /ŋ/ at the prefix boundary takes some features (homorganically) from the base word consonant following it to form a derived word. According to Katamba (1989), the homorganic nasal assimilation in the Malay language happens automatically. It applies wherever a nasal is followed by another consonant in the same word.

This situation seems to apply to the study as both Banjarese prefixes, *maN-* and *paN-* end with a nasal segment. In addition, both, the Malay language, and BL are from the same language family, the Malayic language. Hence, homorganic nasal assimilation can also occur in BL. However, there could be other kinds of processes that could lead to the formation of allomorphs in BL. Rather than accepting the fact that homorganic nasal assimilation is the only process that forms allomorphs, this study aims to find out all the processes that contribute to the existence of allomorphs in some Banjarese affixes.

Hence, the objective of this study is to identify the existence of allomorphs in Banjarese affixes. To set the ground rules, this study will be focusing on the *maN-* and *paN-* only even though this topic has been discussed by previous scholars. The result of this study was compared with the existing data to ensure the validity of the data. Once all the allomorphs have been determined, the next objective will be to determine the factors

that influence the formation of these allomorphs, especially the *ma-* and *pa-.* This study aims to provide a rational explanation for the deletion of nasal segments in both allomorphs. To understand this morphological change, we will delve into the concept of distinctive features, which will shed light on why these affixes transformed.

Methodology

Research Design

This study was conducted based on a qualitative approach, a form of social action that stresses the way people interpret and make sense of their experiences to understand the social reality of individuals (Zohrabi, 2013). It makes use of interviews, diaries, journals, classroom observations and immersions, and open-ended questionnaires to obtain, analyse, and interpret the data content analysis of visual and textual materials and oral history (Mohajan, 2018). Hence, as the aim of this study is to analyse the formation of allomorphs in certain Banjarese affixes, this kind of approach seems appropriate to be used. The qualitative approach enables us to indicate the similarities and uniformity of the morphological forms of BL words collected through certain methods.

The sample for this study involved native speakers of BL in four different places across Malaysia and the demographic of the respondents is shown in Table 1.

Table 1
Respondent's Demographic Information

	Kuala Kurau Perak	Bagan Serai Perak	Batu Pahat Johor	Sabak Bernam Selangor
Gender				
Male	2	19	5	4
Female	0	5	2	3
Total = 40	**2**	**24**	**7**	**7**
Age				
25 and below	0	4	0	0
26 to 55	1	11	0	5
56 and above	1	9	7	2

Level of education				
Primary School	0	0	2	1
High School	2	16	5	5
STPM	0	3	0	0
Diploma	0	4	0	0
Bachelor's degree	0	0	0	1
Master's degree	0	1	0	0
Occupation				
Student	0	3	0	0
Self-employment	2	13	3	6
Wage earner	0	5	2	1
Retired	0	3	2	0

Instrument and Data Collection Procedures

This study was approved and was conducted according to the guidelines set by the Universiti Kebangsaan Malaysia Research Ethics Committee. Informed consent was obtained from respondents prior to the study.

The following are some of the methods used to collect data for this study: interview techniques and word lists. This study aims to identify the change of sound that occurs when a base word in BL goes through the derivation process. Hence, the use of the interview method is an appropriate way to collect this phonologically concerned data. This research adopted the unstandardised interview method, in which the interview does not engage a specific framework for questioning.

The conversation topics are based on a list of BL words prepared in advance, even before the interview started. Respondents were asked about the meaning of some words in BL and they explained the meaning in Malay language. For this purpose, individuals who are proficient in both languages, BL and Malay language, were selected as respondents. After learning about the meaning of the base word, the respondent were asked to pronounce the derived word that appears after the base word receives either the *maN-* or the *paN-* affix. Respondents were then asked about the meaning of the resulting derived word to compare the given meaning with the meaning found in the dictionary.

According to Omar (2008) the world list method requires an informant to answer every word prepared in the list. A word list (or lexicon) is a list of a language's lexicon (generally sorted by frequency of occurrence either by levels or as a ranked list) within some given text corpus, serving the purpose of vocabulary acquisition. The list should contain familiar words that are frequently being used in the community. Vaux and Cooper (1999) stated that the word lists used in dialect surveys typically include words for farm implements, natural phenomena, household items, and culture-specific concepts. These

kinds of words were found to be incredibly successful in eliciting both interest and useful vocabulary from non-urban informants.

Through this method, some Banjarese verbs in the form of base words were given to the respondents. The respondents then stated the derived word formed once the base word receives the *maN-* or *paN-* prefix. Contrary to the interview method, this word list method does not require the respondents to state the meaning of each word in the Malay language. The list of words used for this method is the same as the one used in the interview method. The list was created based on a Banjarese dictionary known as Kamus Bahasa Banjar Dialek Hulu-Indonesia that was published in South Kalimantan, Indonesia (Sugono, 2008). The Banjarese people are known to be native people in some of the South Kalimantan provinces (Imadduddin, 2016). Hence, the words listed inside this dictionary are deemed to be more original due to the fact that this dictionary was published in the area where the native speakers are. In addition to that, the dictionary also provided every word with its own derived word(s). This has further simplified the process of collecting data for this study while allowing a comparison to be made between the new data and the existing one in the dictionary.

Banjarese's Phoneme Inventory

All the data sets need to be compared first to see the similarities or differences. Various types of verbs were used in this study, each starting with a different initial segment. Two verbs will be representing each phoneme; one for the *maN-* prefix and another one for the *paN-* prefix. The data were categorised according to the initial segment of the base word. For example, the words / lapas/ and /limbah/ both have the same initial segment which is /l/. Hence, both words were listed in the same category. Table 2 and Figure 2 show the list of segments (phonemes) that exist in BL.

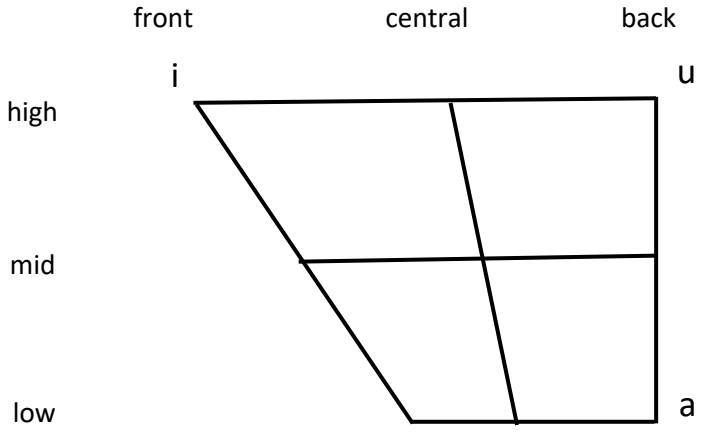
Table 2

Consonant Phonemes in the Banjarese Language (Acc. to Kamus Bahasa Banjar Dialek Hulu-Indonesia 2008)

	Bilabial		Alveolar		Palatal		Velar		Glottal	
	(-) voiced	(+) voiced	(-) voiced	(+) voiced	(-) voiced	(+) voiced	(-) voiced	(+) voiced	(-) voiced	(+) voiced
Plosive	p	b	t	d			k	g		
Nasal		m		n		ɲ		ŋ		
Trill				r						
Frikative			s		ʧ	ʤ			h	
Lateral				l						
Approx. Half Vowel	w					j				

Figure 2

Vowel Phonemes in the Banjarese Language (Acc. to Kamus Bahasa Banjar Dialek Hulu - Indonesia 2008)



The number of BL consonant phonemes is the same as the original consonant phonemes of the Malay language, which is 18 phonemes. However, BL seems to be lacking in vowel phonemes as it only has three (/a/, /i/, /u/) compared to Malay, which has six (/a/, /e/, /i, /o/, /u/, /ə/).

Distinctive Features

Phonemes were thought to be the ultimate constituents of language, as they are the smallest unit that a sound can be broken down into. However, in later years phonologists indicated that phonemes could further be divided into smaller constituents known as features (Roach, 2009). Nowadays, a feature is considered the most basic unit of phonological structure that distinguishes one sound from another within a language. Ladefoged (1993) stated that a feature is a phonetic property that can be used to classify sounds. Generally, features are used more in phonology than in phonetics since the study of phonology is concerned with sound relations and patterns. According to Fromkin et al. (2014), when a feature distinguishes one phoneme from another, it is a distinctive feature or, equivalently, a phonemic feature. Table 3 indicates each segment (consonants and vowels) that exists in BL along with their distinctive features.

Table 3

Distinct Features of Banjarese Segments (Phonemes)

Segment	Cons (±)	Syll (±)	Son (±)	Voice (±)	Cor (±)	Ant (±)	Cont (±)	Nasal (±)	Stri (±)	Lat (±)
/a/	-	+	+	+	-	-	+	-	-	-
/b/	+	-	-	+	-	+	-	-	-	-
/tʃ/	+	-	-	-	+	-	-	-	+	-
/d/	+	-	-	+	+	+	-	-	-	-
/g/	+	-	-	+	-	-	-	-	-	-
/h/	+	-	+	-	-	-	+	-	-	-
/i/	-	+	+	+	-	-	+	-	-	-
/dʒ/	+	-	-	+	-	-	-	-	+	-
/k/	+	-	-	-	-	-	-	-	-	-
/l/	+	-	+	-	+	+	+	-	-	+
/m/	+	-	+	+	-	+	-	+	-	-
/ŋ/	+	-	+	+	-	-	-	+	-	-
/n/	+	-	+	+	+	+	-	+	-	-
/ɲ/	+	-	+	+	+	-	-	+	-	-
/p/	+	-	-	-	-	+	-	-	-	-
/r/	+	-	+	+	+	+	+	-	-	-
/s/	+	-	-	-	+	+	+	-	+	-
/t/	+	-	-	-	+	+	-	-	-	-
/u/	-	+	+	+	-	-	+	-	-	-
/w/	+	-	+	+	-	-	+	-	-	-
/j/	+	-	+	+	+	-	+	-	-	-

Notes: Cons – Consonant, Son – Sonorant, Ant – Anterior, Nasal – Nasal, Lat – Lateral, Syll – Syllabic, Voice – Voice, Cont – Continuant, Stri – Strident

Feature Geometry Theory

Feature geometry is a phonological theory that represents distinctive features as a structured hierarchy rather than a matrix or a set. Feature geometry grew out of autosegmental phonology, which emphasises the autonomous nature of distinctive features and the non-uniform relationships among them. Chomsky and Halle (1968) presented a theory known as segmental representation, in which each segment is decomposed into a simple list of binary-valued distinctive features. For instance, the word /ɲala/ (to light) as shown in Figure 3.

Figure 3

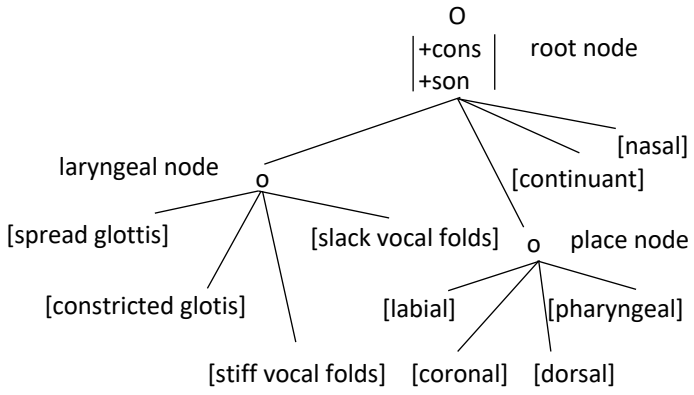
Set of Distinctive Features of Each Segment

ŋ	a	l	a
+son	+son	+son	+son
+cons	-cons	+cons	-cons
-syll	+syll	-syll	+syll
+cor	-cor	+cor	-cor
-ant	-ant	+ant	-ant
-high	-high	-high	-high
-low	+low	-low	+low
-back	+back	-back	+back
-cont	+cont	-cont	+cont
+nas	-nas	-nas	-nas
-lat	-lat	+lat	-lat

There is no classification of the features inherent to the theory. In fact, various distinctions fall naturally into groups as mentioned before (major class features, cavity features, etc.). This grouping of features is not based so much on any similarity of articulatory or acoustic correlates as on the functional coherence of the feature groupings in particular act as a set in widely attested phonological processes (McCarthy, 1988). A geometry feature depicts the segregation of distinctive features onto different planes of phonological representation, called tiers. The coordination of gestures on the tiers is accomplished by association lines, which are links between the different levels. These lines are subjected to a single well-formedness constraint, the Line-Crossing Prohibition, in which no association lines between the same two autosegmental tiers may cross (McCarthy, 1988). Figure 4 shows the spreading of a geometry feature:

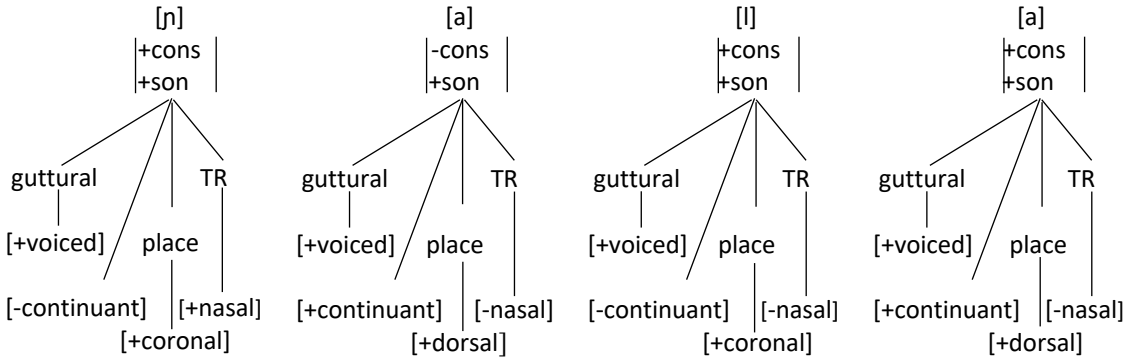
Figure 4

Feature Geometry Spreading



Hence, the features of /ɲala/ can be represented in Figure 5. The model begins with the Root node, the structural instantiation of a single segment. The Root node then spreads to imply the spread of all features dominated by the Root node, which for sure covers the entire set of features. According to McCarthy (1988), the spreading of the Root node will indicate total assimilation, an impeccably justified process cross-linguistically, while delinking of the Root node will indicate the deletion of the segment. In this proposed model, two major class features [sonorant] and [consonantal] differ from all other features in one important aspect; they arguably never spread, delink, or exhibit OCP (Obligatory Contour Principle) effects independently of all other features. The OCP is a constraint which prohibits the adjacent of identical elements. To make it simple, the major class features do not assimilate, reduce, or dissimilate except in conjunction with processes that affect the entire segment. Hence, both major class features should not be represented on separate tiers as dependents of the Root node (McCarthy, 1988). Otherwise, they would be expected to spread, delink, and so on just as the other features do.

Figure 5
Feature Geometry Spreading of Each Segment



Results and Discussion

The maN- and paN- Prefix in Banjarese Language

Yayuk (2017) has defined the meaning of the maN- and paN- prefix in one of her articles. The scholar also equates each of the Banjarese's affix with the affix that exist in Indonesian language.

The maN- Prefix

The prefix *maN*- in the Banjarese language has the grammatical meaning of becoming, leading to, producing, resembling, and giving (Yayuk, 2017). This *maN*- prefix consists of

four forms of allomorph which are *ma-, man-, maŋ-,* and *mam-.* Table 4 shows the allomorphic forms of this prefix once the derivation process took place.

Table 4
Allomorphic Forms of maN- Prefix

No.	Base Word	Gloss	Derived Word	Gloss
1.	ɲala	light up	ma+ɲala	lighting up
2.	dʒamur	dry	man+dʒamur	drying
3.	gandul	hitchhike	maŋ+gandɔl	hitchhiking
4.	babun	gendang (a musical instrument)	mam+babun	hitting the gendang

The paN- Prefix

The prefix *paN-* carries the meaning of a person who does, a person who likes to do, and a tool that does something (Yayuk, 2017). According to the data, this prefix seems to have four allomorphic forms, namely, *pa-, pan-, paŋ-* and *pam-.* Table 5 shows the form variation of this prefix once the derivation process takes place.

Table 5
Allomorphic Forms of paN- Prefix

No.	Based Word	Gloss	Derived Word	Gloss
1.	limbah	fall	pa+limbahan	a place where the water fall
2.	tʃatuʔ	beat	pan+tʃatɔʔ	beater (tool)
3.	gaduh	handle	paŋ+gadɔh	person who likes to be involved in other's business
4.	buŋkas	expose	pam+buŋkas	tool use to expose

Within these allomorphs listed for both prefixes, there is a change in the nasal segment at the coda position of the prefix. The nasal segment is either replaced with nasal bilabial /m/, nasal alveolar /n/, nasal palatal /ŋ/, or completely deleted. The change in the nasal segment could be due to a process known as assimilation, a phonological process in which a segment changes to resemble its neighbours more closely (McCarthy, 2003). Homorganic nasal assimilation, as defined by Katamba (1989), refers to the phenomenon where a nasal segment shares the place of articulation with the following consonant.

However, it seems that assimilation is not the only process that led to the formation of allomorphs for both affixes. This can be seen through the formation of *ma-* and *pa-* allomorph, in which the nasal segment was completely deleted. Hence, it is

impossible for us to assume that assimilation is the only process that takes place here. The *ma-* and *pa-* is formed when the prefixes are followed by a base word with initial unvoiced obstruent segments (/p/, /t/, /s/, /k/). However, in this case, it is the unvoiced obstruent segment that is deleted instead of the nasal segment. Hence, this is not considered for this analysis. The subsequent description of the nasal deletion process is divided into two parts; the first will be on the nasal, liquid, and semi-vowel segments, the second will be on vowel and glottal segments.

Liquid (/l/, /r/), Semi-vowel (/w/, /j/) and Nasal (/m/, /n/, /ɲ/, / ŋ/) Initial Bases

Table 6 indicates the list of base words that formed ma- and pa- allomorph respectively. When a nasal segment is placed next to a voiceless obstruent segment (/k/, /p/, /s/, /t/), homorganic nasal assimilation occurs, and the voiceless obstruent segment is deleted. This is due to a constraint against nasal/voiceless obstruent clusters (Lombardi, 2001) which can be justified in terms of the articulatory difficulty of the quick velum raising needed to produce a voiceless obstruent. However, a different result occurs when the nasal segment is in a clustering position with either a nasal, liquid, or semi-vowel segment. Instead of having the liquid or semi-vowel deleted, the nasal segment is the one that is deleted. Ahmad (1995) stated that in the Malay language, the nasal segment is deleted when it is clustered with liquid, glide, or nasal segment. In addition to this, Farid (1980) also stated that nasal deletion is obligatory following the constraint that does not allow the clustering of sonorant consonants at the beginning of a word.

Table 6

List of Base Words that Formed the ma- and pa- Allomorph (Initial Nasal, Liquid and Semi-vowel Segment)

Phoneme		Base Word	Derived Word	Gloss
Liquid	/l/	lapas	ma+lapas	letting go
		limbah	pa+limbahan	place the water fall
	/r/	rahaj	ma+rahaj	exposing
		rabut	pa+rabutan	like to fight
Semi-vowel	/w/	wilaŋ	ma+wilaŋ	counting (thing)
		wadaj	pa+wadajan	dessert maker
	/j/	jakin	ma+jakenkan	convicing
		jakin	pa+jakenɲaʔ	most convincing
Nasal	/m/	maŋkar	ma+maŋkar	hardening
		mandaʔ	pa+mandakan	stopover
	/ŋ/	ŋinum	ma+ŋinum	drinking
		ŋalih	pa+ŋaleh	most difficult
	/n/	nadʒat	ma+nadʒat	praying
		nawuŋ	pa+nawuŋan	shelter

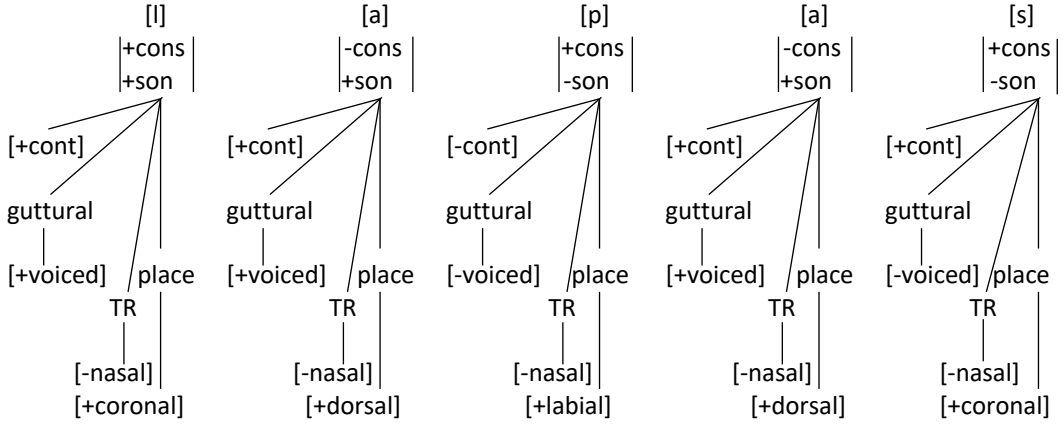
/ɲ/	ɲala	ma+ɲala	lit up
	ɲaɲi	pa+ɲaɲeʔ	singer

Both statements seem to fit in explaining the situation here. It seems that the [+sonorant] feature plays an important role in causing the nasal segment to be deleted in the derived word. All nasal, liquid, and semi-vowel segments have a [+sonorant] feature. Hence, according to Farid's (1980) statement, these segments are not allowed to be clustered together at the beginning of a word. Thus, when the derivation process takes place, the nasal segment in the prefix shall be deleted to meet this requirement. Figure 6 depicts the derivation of the base word /lapas/ (to let go).

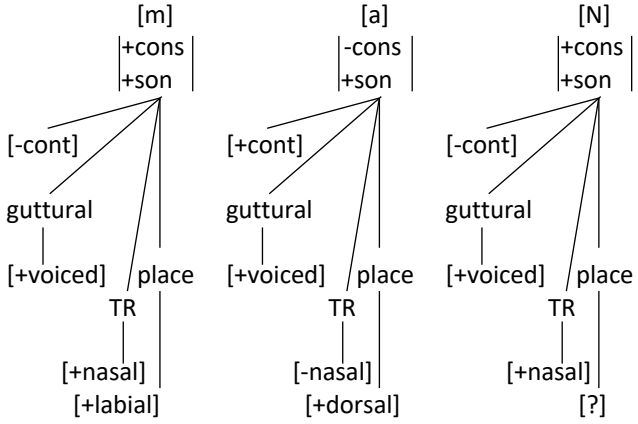
Figure 6

Formation of ma- and pa- Allomorph (Initial Nasal, Liquid and Semi-vowel Segment)

a. Base word: /lapas/ (to let go)

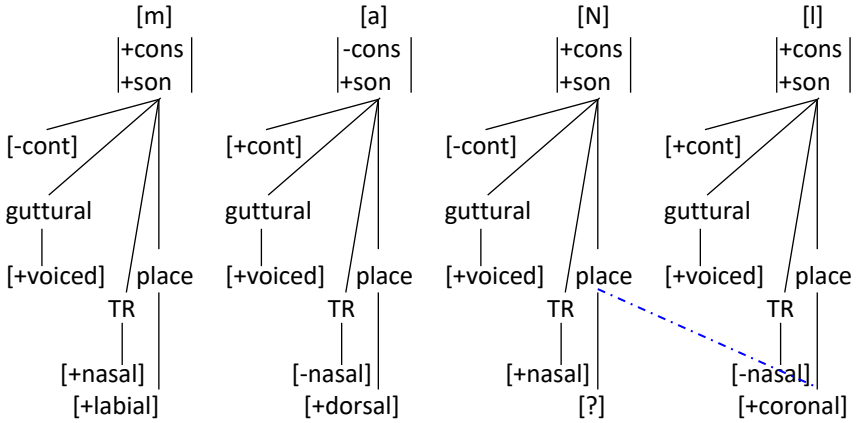


b. Input *maN-* prefix

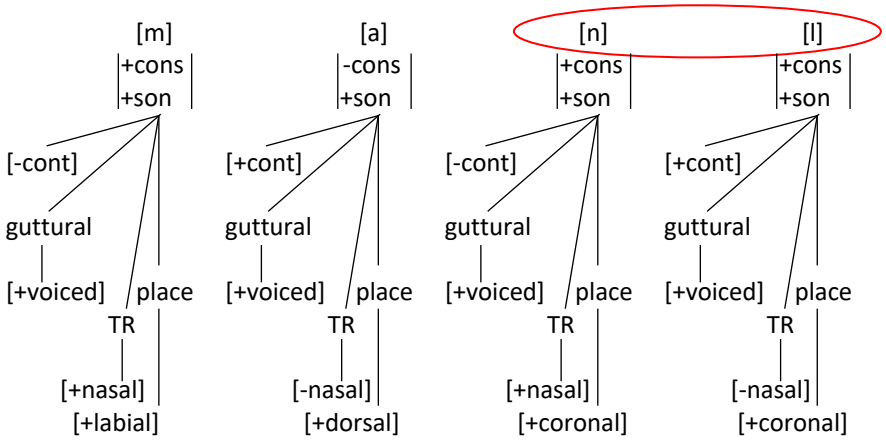


+ /lapas/

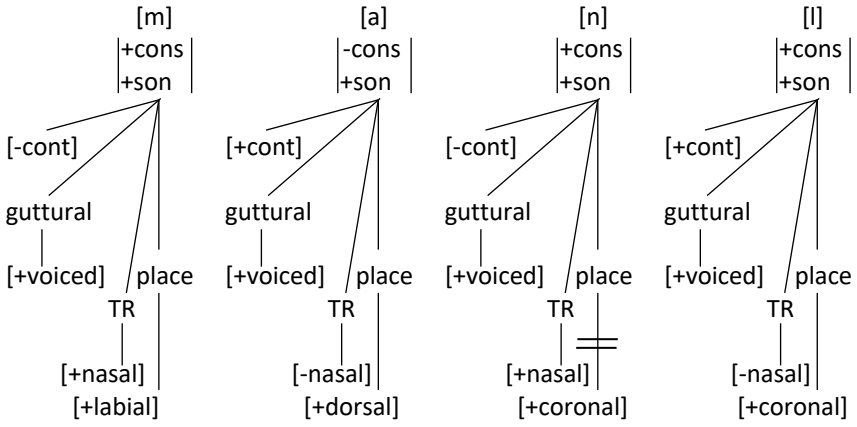
c. Place assimilation at the prefix-base boundary



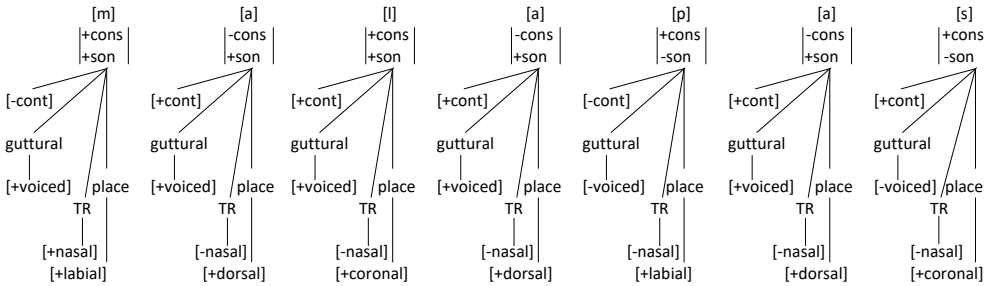
d. Sonorant segments' clustering



e. Nasal deletion



f. Derived word: [malapas] (letting go)



Vowel (/a/, /i/, /u/) and Glottal (/h/) Initial Bases

Table 7 shows the list of base words that form ma- and pa- Allomorph (Initial Vowel and Glottal Segment). The reason why the discussion of nasal deletion for vowel and glottal segments was separated is that BL has shown a different result compared to some languages within the same such as Malay and Indonesian. When the derivation process takes place, both Malay and Indonesian allow the nasal segment at the coda position of the prefix to be in the derived word. In other words, no nasal deletion occurred after the base word received the *məN-* and *pəN-* prefix. For instance, the base word /alih/ which exists in all three languages carries the same meaning in all three languages, which is to move something. Figure 7 depicts the derivation process of this word in Malay and Indonesian.

Table 7

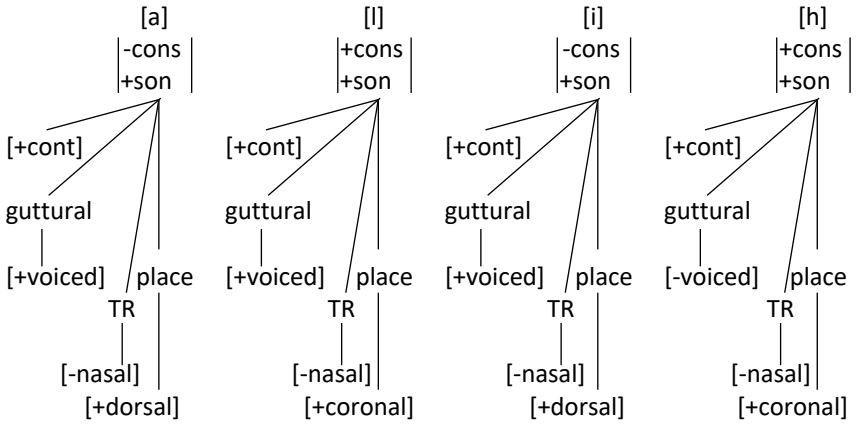
List of Base Words that Form ma- and pa- Allomorph (Initial Vowel and Glottal Segment)

Phoneme		Base Word	Derived Word	Gloss
Vowel	/a/	alih	ma+alih	moving
		agaʔ	pa+agakan	like to brag
	/i/	ilaj	ma+ilaj	lifting
		igut	pa+igutan	like to bite
	/u/	ulah	ma+ulah	making
		urut	pa+urut	massager
Glottal	/h/	hadaŋ	ma+hadaŋ	waiting
		haru	pa+haru	stirrer

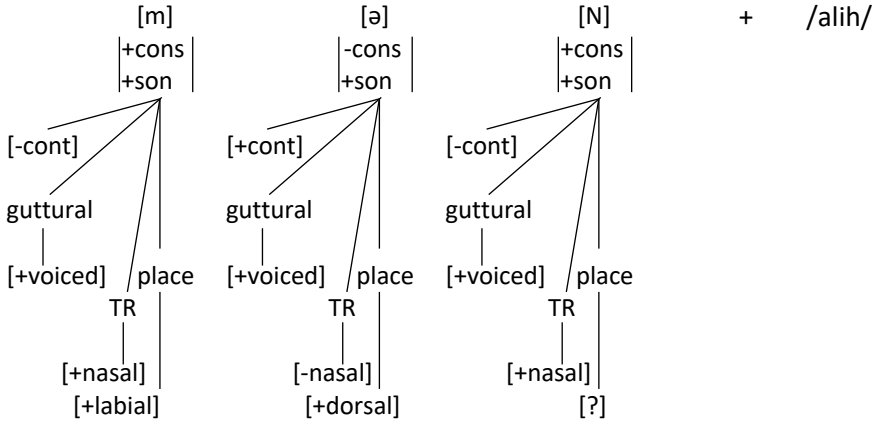
Figure 7

Formation of mə- and pə- Allomorph in Malay and Indonesian (Initial Vowel and Glottal Segment)

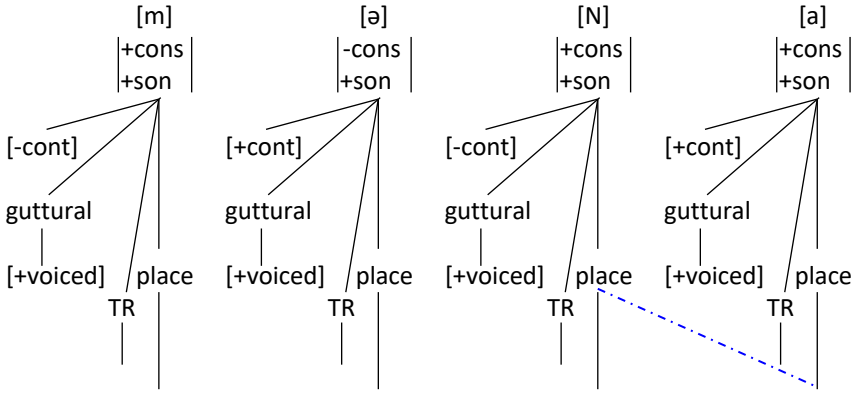
a. Base word: /alih/ (to move something)



b. Input *məN-* prefix

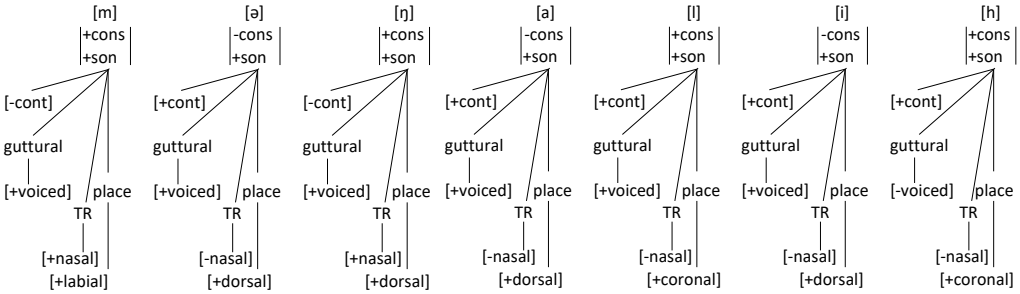


c. Place assimilation at prefix-base boundary



[+nasal] [-nasal] [+nasal] [-nasal]
[+labial] [+dorsal] [?] [+dorsal]

d. Derived word: [məŋalih] (moving something)

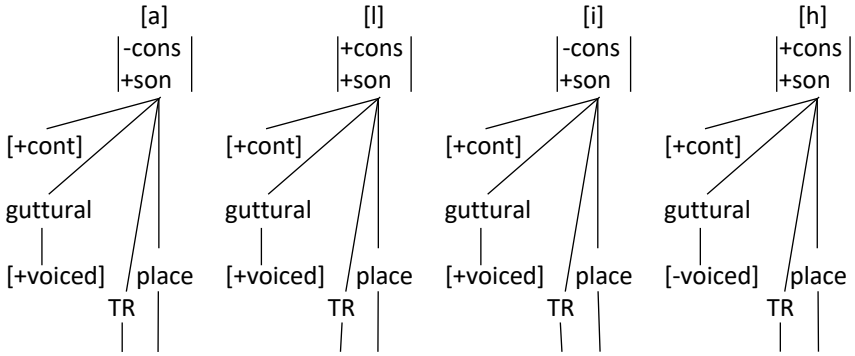


Unlike Malay and Indonesian, BL does not allow the nasal segment in the prefix to be in the derived word when it is followed by a sonorant segment. The statement provided by Farid (1980) only focuses on the clustering of sonorant consonants, but in BL, it seems that nasal deletion does occur even when the nasal segment is clumped together with a vowel and glottal segment at the beginning of a word. All vowel and glottal sounds are produced with continuous, non-turbulent airflow in the vocal tract, which is why they have the [+sonorant] feature. Hence, it can be said that in the BL derivation process, nasal deletion does not only occur when a nasal segment is in cluster position with a sonorant consonant. Instead, it also happens when a nasal and sonorant vowel are clustered together. This constraint however, only applies at the boundary between prefix and base word when the derivation process takes place. The clustering of nasal, vowel and glottal segments is still allowed to exist in other kinds of situations. Figure 8 depicts the derivation process of the same word /alih/ in BL.

Figure 8

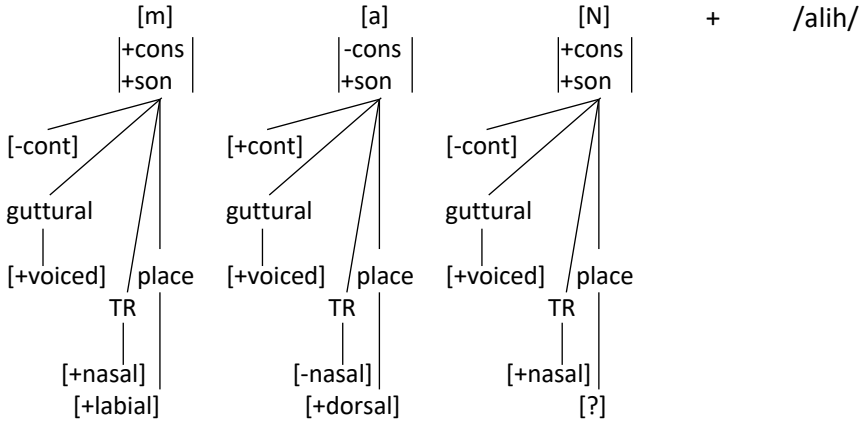
Formation of ma- and pa- Allomorph in Banjarese (Initial Vowel and Glottal Segment)

a. Base word: /alih/ (to move something)

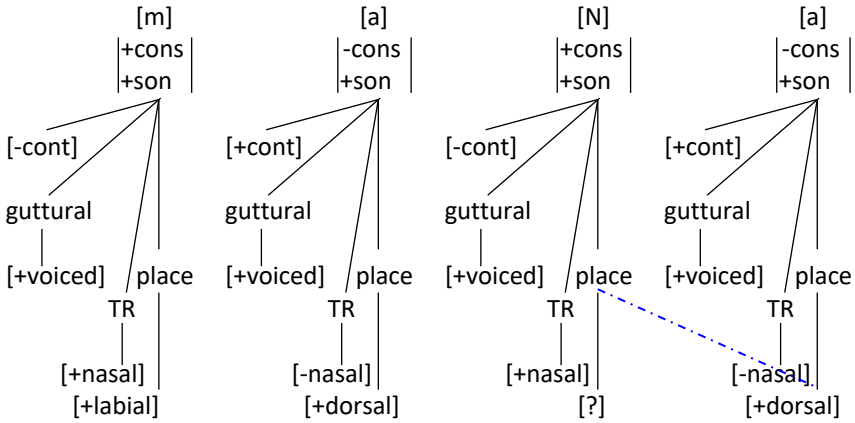


[-nasal] [-nasal] [-nasal] [-nasal]
[+dorsal] [+coronal] [+dorsal] [+coronal]

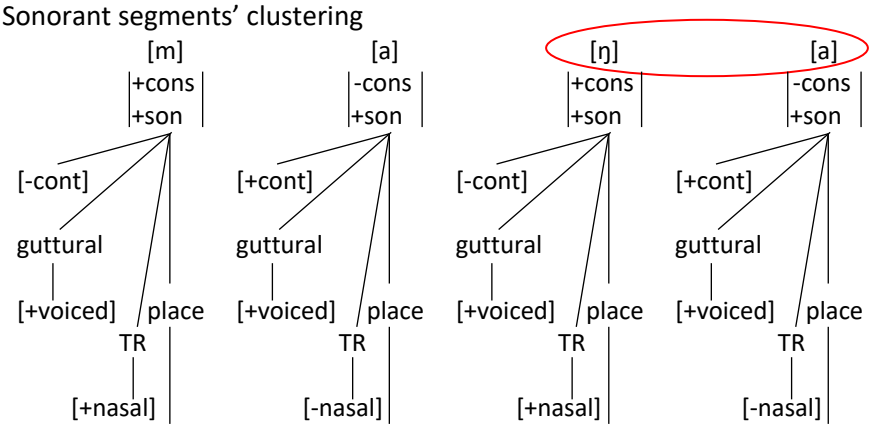
b. Input *maN-* prefix



c. Place assimilation at prefix-base boundary

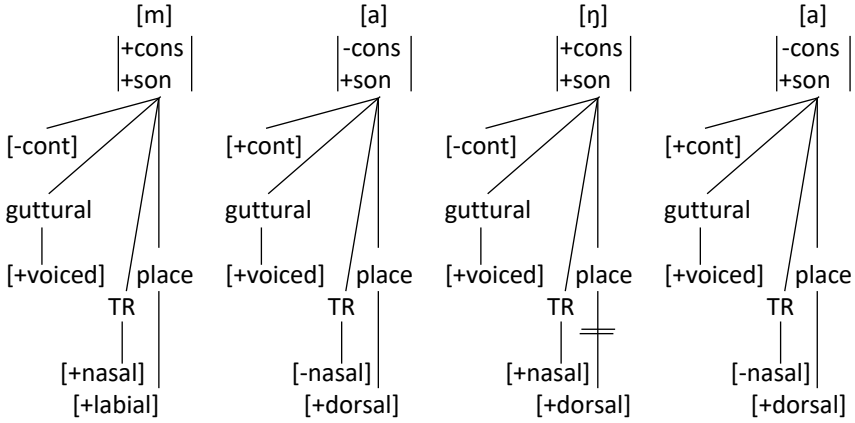


d. Sonorant segments' clustering

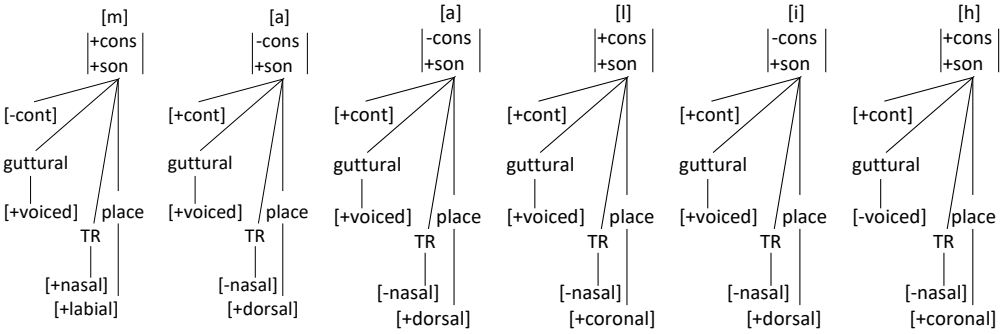


[+labial] [+dorsal] [+dorsal] [+dorsal]

d. Nasal deletion



e. Derived word: [maalih] (moving something)



Differences in Nasal Deletion Process of Banjarese and Malay Language

Affixation process in BL sometimes can results into the formation of allomorph, a unit of meaning that varies in sound and spelling without changing the meaning. In some affixes, the allomorphs also were formed as a result of a process called homorganic nasal assimilation. The *maN-* and *paN-* prefix are some of the examples that indicate the change of nasal according to the segment reside beside it. The nasal segment shares the place of articulation of the following segment, changing itself to a nasal segment within the same place of articulation. However, in some allomorphs, the nasal segment seems to be deleted compeletely and this can be seen with the ma- and pa- allomorphs. As a result, homorganic nasal assimilation is not the only process that can create allomorphs. For some allomorphs, nasal segments need to be deleted and this happens when both *maN-* and *paN-* is being followed by a sonorant segment.

Farid (1980) stated that in Malay language the nasal deletion is obligatory following the constraint that does not allow the clustering of sonorant consonants at the beginning of a word. The same statement was given by Ahmad (1995) which is the nasal segment will be deleted when it is clumped with liquid (/l/, /r/), glide (/w/, /j/), or nasal segment (/m/, /n/, /ɲ/, /ŋ/). However, the situation is slightly different when it comes to BL. Other than liquid, glide, and nasal segment, the nasal segment in Banjarese affixes (especially *maN-* and *paN-*) will also be deleted when it is clumped together with vowel (/a/, /i/, /u/) and glottal (/h/), both with a [+sonorant] feature. Hence, it can be concluded that in the Banjarese language, the nasal segment is deleted when it is clumped together with sonorant segments at the beginning of a word. The clustering of sonorant segments still is allowed within the word as long as it does not involve the prefixes.

As for the formation of *ma-* and *pa-,* the nasal segment is assumed to undergo homorganic nasal assimilation. However, due to the [+sonorant] feature of the next segment, the nasal segment is deleted to overcome the constraint that prohibits the clustering of sonorant segments at the beginning of a word. This indicates that the affixation process in BL is slightly different compared to the one in Malay and Indonesian language.

Conclusion

This study aims to provide a rational explanation for the nasal deletion during the formation of *ma-* and *pa-* allomorphs in the Banjarese language by analysing the data obtained through interviews and the word list method. The result of this study has shown that the ma- and pa- allomorphs were formed as a result of each prefix being followed by a sonorant segment, both consonant and vowel. This is different from the Malay language, which, according to Farid (1980), only allows nasal segments to be deleted when a sonorant consonant follows them. The results of this study indicate the difference between this language and Malay can be seen through the formation of allomorphs. This study only covers Banjarese speakers in some areas of Malaysia. To achieve more precise results, we suggest that a similar study be conducted involving Banjarese speakers in Indonesia or other parts of Malaysia, and the results can be compared with this study.

Acknowledgement

This research was funded by Universiti Kebangsaan Malaysia under the grant: Pembinaan Repositori Pertuturan (Speech-Rep) Bahasa Banjar di Malaysia (GUP-2022-057).

References

Abdul Wahab, M. K. (2022). Pengelompokan bahasa Melayu dengan bahasa Banjar dalam salasilah hipotetikal bahasa: Kajian perbandingan leksikostatistik. *Jurnal Melayu*, *21*(1), 1-21.

Abdul Wahab, M. K., & Che Halin, A. K. (2021). Leksikostatistik dan glotokronologi antara bahasa Banjar dengan bahasa Melayu: Kajian linguistik sejarah dan perbandingan. *Jurnal Kesidang, 6*, 44-61.

Abdul Wahab, M. K., & NorHashim, M. N. (2020). Aspek leksikal kata nama dalam dialek masyarakat Banjar di Mukim Bagan Serai Perak. *e-Jurnal Bahasa dan Linguistik, 2*(2), 67-78.

Adelaar, K. A. (1985). *Proto malayic: The recontruction of its phonology and part of its lexicon and morphology*. Offsetdrukkerij Kanters B.V.

Ahmad, Z. (1995). Vowel epenthesis in Malay. *Akademika*, *47*, 15-36.

Benjamin, G. (2009). Affixes, austronesian and iconicity in Malay. *Bijdragen tot de Taal, Land- en Volkenkunde, 165*, 291-323.

Chomsky, N., & Halle, M. (1968). *The sound pattern of English*. Harper & Row.

Daud, A. (1997). *Islam dan masyarakat Banjar: Deskripsi dan analisa kebudayaan Banjar*. Raja Grafindo Persada.

Farid, M. O. (1980). *Aspects of Malay phonology and morphology: A generative approach.* Universiti Kebangsaan Malaysia.

Fromkin, V., Rodman, R., & Hyams, N. (2014). *An introduction to language*. Wadsworth Cengage Learning.

Giovanni, N. (2004). *A morphological analysis of verb affixes in the series of "Si Palui" articles in the Banjarmasin Post* [Bachelor's Thesis, Universitas Kristen Petra, Surabaya].

Google Maps. (n.d.). [The map of South Kalimantan]. https://goo.gl/maps/N3BgTUhZ7cLwnR5M9

Hamid, N. A., & Syed Jaafar, S. R. (2017). Asimilasi homorganik nasal dialek Melayu Saribas. *GEMA Online® Journal of Language Studies, 17*(2), 192-218.

Hapip, A. D., Kawi, D., & Noor, B. (1981). *Struktur bahasa Banjar Kuala*. Pusat Pembinaan dan Pengembangan Bahasa Departemen Pendidikan dan Kebudayaan Jakarta.

Hasrah, M. T. (2020). Nasal homorganik dalam dialek Melayu Semenanjung. *International Journal of Humanities Technology and Civilization (IJHTC), 1*(9), 1-23.

Humaidi, A., Kamariah, K., & Haswinda, H. (2017). Infleksi dalam Bahasa Banjar. *Stilistika: Jurnal Bahasa, Sastra, dan Pengajarannya, 2*(2), 265-272.

Imadduddin, P. (2016.) Perubahan nilai budaya urang Banjar (dalam persfektif teori troompenaar). *Al-Banjari: Jurnal Ilmiah Ilmu-Ilmu Keislaman, 15*(1), 27-56.

Katamba, F. (1989). *Introduction to phonology*. Longman.

Kawi, D., Durasid, D., & Effendi, R. (1993). *Refleksi etimon proto austronesia dalam bahasa Banjar.* Pembinaan dan Pengembangan Bahasa Departemen Pendidikan dan Kebudayaan Jakarta.

Ladefoged, P. (1993). *A course in phonetics.* University Of California, Los Angeles.

Lamry, M. S. (2016, Ogos 9-11). Madam ka Banua Urang: Migrasi dan Perubahan Sosial dalam Kalangan Orang Banjar di Malaysia [Conference presentation]. *International conference on social and intellectual transformation of the contemporary Banjarese*, Banjarmasin, Indonesia.

Lombardi, L. (2001). *Segmental phonology in optimality theory: Constraints and representations*. Cambridge University Press.

McCarthy, J. J. (1988). Feature geometry and dependency: A review. *Phonetica, 43*, 84-108.

McCarthy, J. J. (2003). *Optimality theory: An overview*. Oxford International Encyclopedia of Linguistics.

Mohajan, H. K. (2018). Qualitative research methodology in social sciences and related subjects. *Journal of Economic Development, Environment and People, 7*(10), 23-48.

Ningsih, Y. (2018). Language maintenance of Banjarese among students of the state Polytechnic of Tanah Laut. *The 1st Annual International Conference on Language and Literature, KnE Social Sciences*, 957-963.

Omar, A. (2008). *Kaedah penyelidikan Bahasa di lapangan*. Dewan Bahasa dan Pustaka.

Roach, P. (2009). *English phonetics and phonology*. Cambridge University Press.

Sugono, H. D. (2008). *Kamus bahasa Banjar dialek Hulu - Indonesia*. Balai Bahasa Banjarmasin.

Sunarti, dkk. (1978). *Sastra lisan Banjar*. Pusat Pembinaan dan Pengembangan Bahasa Jakarta.

Suryadikara, F. (1981). *Kata-kata pungut dari bahasa Jawa dalam bahasa Banjar*. Pusat Pembinaan dan Pegembangan Bahasa.

Vaux, B., & Cooper, J. (1999). *Introduction to linguistic field methods*. LlNCOM GmbH.

Wahyu, W. (2020). Local wisdom in Banjarese culture perspective. *Advances in Social Science, Education and Humanities Research*, *636*, 648-653.

Yasin, M. F. (2017). Asal-usul bahasa Banjar (tinjauan historis komparatif). http://eprints.ulm.ac.id/2353/

Yayuk, R. (2017). Morfem terikat dalam bahasa Banjar. *Gramatika, 5*(2), 127-140.

Zohrabi, M. (2013). Mixed method research: Instruments, validity, reliability and reporting findings. *Theory and Practice in Language Studies*, *3*, 254-262.

INCORPORATING MULTILITERACY PEDAGOGY ELEMENTS INTO EFL SPEAKING CLASS THROUGH DIGITAL STORYTELLING

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Manuscript received 20 March 2023
Manuscript accepted 7 December 2023
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https://doi.org/10.33736/ils.5545.2023

ABSTRACT

In a globalised world where cross-cultural communication is becoming increasingly important, the ability to communicate effectively in various contexts through spoken language is crucial. Multiliteracy enables individuals to communicate effectively and confidently in a variety of contexts, both within their own culture and across cultures. Digital storytelling utilises diverse modes of communication, promotes creativity and global communication, and integrates technology in the learning process, making it a valuable tool for multiliteracy pedagogy. Thus, the study aims to show how multiliteracy pedagogy elements are incorporated into English as a Foreign Language speaking class through digital storytelling. This is a pilot study in which thematic analysis is used to find the themes within four knowledge processes of multiliteracy pedagogy in digital storytelling activity. The findings show that through experience, the students can practise speaking in an authentic context, develop their language skills through conceptualising and analysing their stories, and receive feedback from peers and teachers. Therefore, digital storytelling achieves the purpose of representing all four elements of multiliteracy

pedagogy, namely, situated practice, overt instruction, critical framing, and transformed practice which facilitate the growth of speaking proficiency.

Keywords: multiliteracy; teaching pedagogy; digital storytelling; EFL speaking

Introduction

In contemporary education, students learn not only through reading and writing, but also through visual engagement, auditory processing, and practical application. Traditional conceptions of literacy must be reconsidered in light of the modern complexities arising from globalisation and technological progress. As the world becomes more interconnected, a specific form of literacy, known as multicultural literacy, becomes essential. The concept of multiliteracies emerges as an approach to address the variation of meaning-making across cultural, social, and domain-specific contexts. This implies that focusing only on the norms of basic structures of the national language is no longer adequate for literacy instruction. Instead, in today's context of interaction and meaning representation, learners need to be able to navigate variations in meaning patterns across different contexts.

One area where the development of multiliteracy can be particularly valuable is in the realm of speaking skills. In the past, speaking skills were often taught through memorisation and recitation of texts. However, nowadays, effective communication often involves the ability to create and deliver messages using a variety of modalities, including verbal, nonverbal, and visual elements (Rubini et al., 2019). In Indonesia, the prevalent method for teaching speaking is the communicative approach. This approach has been a part of the English as a Foreign Language (EFL) curriculum in Indonesia since 1984 and aims to develop students' communicative competence by providing opportunities to use the language meaningfully and appropriately in various contexts to students (Hakim, 2022). Digital storytelling is one example of a multimodal approach to speaking that can help students develop these skills (Fu et al., 2022).

Digital storytelling provides an excellent opportunity for students to practise speaking skills. When creating a digital story, students need to think about how they will present their ideas and use their voices to convey emotion and tone (Kallinikou & Nicolaidou, 2019). Students can also practise their speaking skills when providing feedback to their peers on their digital stories. By providing constructive feedback, students can learn to communicate their thoughts clearly and effectively. Furthermore, digital storytelling can serve as a platform for students who struggle to speak in a foreign language (Fu et al., 2022). Through digital storytelling, students can gain confidence in speaking as they work to tell their stories in a compelling and engaging way.

The current study aims to address a gap in the literature regarding how the incorporation of multiliteracy pedagogy into EFL speaking class in Indonesia through digital storytelling. One potential research gap in the field of language education is the

extent to which multiliteracy pedagogy can develop learners' speaking skills. While there has been some research on the use of multiliteracy approaches in language teaching, only a few studies emphasise the need to explore the potential benefits of digital storytelling on students' speaking skills in EFL classrooms, with a focus on the four stages of knowing processes of multiliteracy pedagogy, especially in Indonesia. Given the increasing importance of oral communication skills in a globalised world, it is important to explore how multiliteracy pedagogy might support the development of students' speaking skills. Furthermore, this study could have significant implications for language education practice and policy by exploring the relationship between multiliteracy pedagogy and speaking skill development. Related to that, the current study addresses the following research question: How are multiliteracy pedagogy elements (i.e., situated practice, overt instruction, critical framing, and transformed practice) incorporated into English as a Foreign Language speaking class through digital storytelling to develop students' speaking skills?

Literature Review

Multiliteracy Pedagogy Framework

According to Cope and Kalantzis (2000), there are two concepts of "multi" in multiliteracy, i.e., multilingual, and multimodal. Multimodal literacy is the way of developing meanings from the perspective of multimodal texts, including written form, visual elements, and design, from multiple perspectives to meet the demands of particular social contexts. The other "multi" dimension is multilingual, it is an immense and significant difference in environments and communication patterns (Cope & Kalantzis, 2000). Multiliteracies pedagogy broadens classroom instruction by incorporating what is novel in the current environment (Cope & Kalantzis, 2015).

Multiliteracies pedagogy encourages multimodal teaching and learning, with six different modes of meaning being important in this approach, including linguistics, visual, audio, gestural, spatial awareness, and multimodal as the medium to strengthen students' multiliteracies (Nabhan & Hidayat, 2018; Nabhan, 2019; New London Group, 1996). Incorporating multiple modes, such as adding visual or animation elements to language learning, enhances students' attention and facilitates information retention (Dewi et al., 2022). Also, as the multiliteracy approach promotes learner autonomy through ICT integration, the teacher acts as a facilitator that supports a learner-centred classroom as well as helps students to move across various modes and media to accomplish specific goals, shifting away from the traditional teaching format (Borsheim et al., 2008; Kaur & Sidhu, 2007). Moreover, the new literacy pedagogies include the concept of empowering students in their learning journey through project-based inquiries, as encapsulated by the term "multiliteracy", which clearly identifies the diversity of media, discourses, and languages (Hong & Hua, 2020; New London Group, 1996; Yelland et al., 2008). Designing a multiliteracy project can help the students have better learning environments by

integrating both traditional print-based resources and multimodal resources (Puteh-Behak & Ismail, 2018).

The pedagogy of multiliteracies consists of four elements; situated practice, overt instruction, critical framing, and transformed practice (Cope & Kalantzis, 2000; New London Group, 1996). The concept of situated practice suggests that learners should be encouraged to acquire new knowledge while also receiving support based on their existing knowledge and skills. Overt instruction highlights the significance of explicit teaching and learning of abstract concepts and theories to enable learners to gain a more profound comprehension of a specific subject. Meanwhile, critical framing refers to the importance of comprehending how social and cultural elements impact the creation and interpretation of knowledge. Finally, transformed practice can be recognised through two indicators: effectively applying knowledge in unfamiliar contexts and creatively transferring and combining knowledge in new situations (Yelland et al., 2008).

Digital Storytelling in Speaking Context

Digital storytelling is a form of media production in which students use technology to create their own stories and complete multimodal tasks (Greenwood, 2008; Lee, 2014; Rohayati, 2020). Digital storytelling, with the support of computer networking technology, permits and empowers arts learners to nurture and utilise their numerous literacy, creativity, and critical abilities to speak their minds (Borsheim et al., 2008). It helps students represent their ideas in multiple ways including narration and visual performance (Ruppert et al., 2017). This digital story project provides students with new tools for sharing and discussing their life experiences as well as exploring their ideas. This demonstrates that the creation of digital stories allows students to create a story using a variety of modalities (Rohayati, 2020). By incorporating new media into the classroom, the students can be more engaged. (Greenwood, 2008).

Huang (2023) argued that completing digital storytelling tasks can improve English speaking proficiency as it requires students to engage in various speaking activities. The activities include discussing the content of the story with group members, presenting the storyboard, practising their speech, recording their voice-over, and sharing the digital story. Moreover, Al-Amri (2020) suggests that digital storytelling can be used as a tool to provide more opportunities for EFL learners to practise their speaking skills in several ways. Digital storytelling provides a platform for students to practice their oral skills. It also encourages them to engage in discussions of each stage in which they have opportunities for more communication and polish the content of the story. In line with this, Rubini et al. (2019) argue that digital storytelling provides opportunities for peer feedback and collaboration in which they can improve their ideas as well as communication skills. Meanwhile, Arroba and Acosta (2021) assert that repetition and practice in digital storytelling activity, in which it allows students to avoid errors in the speaking process.

Digital storytelling processes usually consist of five steps (Gregori-Signes, 2008). First, students will create a storyline for their digital narrative. Subsequently, they will select appropriate images and music to illustrate the story. Following this, they will enhance their public speaking skills by presenting their narrative to their peers. Afterward, students will record the story, concentrating on refining their pronunciation and intonation. Finally, with guidance from their teachers, they will assemble the digital story with technical support. On the other hand, Reinders (2011) explained two main stages of implementing digital storytelling projects in speaking classrooms. In the preparation stage, the objective, the types of stories and the framework of the story, the genre and the structure of the text are stated. Next, students plan the story by finding and deciding on a topic they are going to tell. Providing several brainstorming questions will help activate their memory of a story that is worth telling. Also, having a discussion to preview the topic. The next stage is the production stage in which the students create the storyboard and the final product.

Related Studies of the Use of Digital Storytelling in EFL Speaking Classroom

Studies on the use of digital storytelling in speaking context date back to Eissa (2019) that found a significant improvement in vocabulary choice, correct grammar usage, pronunciation, fluency and performance, and stress and intonation usage from statistical analysis of pre- and post-test. The learners' perceptions were also analysed through a questionnaire, which showed that they felt more confident in their speaking abilities after using digital storytelling as a pedagogical tool in Arabic teacher training curricula. Subsequently, Fu et al. (2022) reported that digital storytelling had a positive impact on learners' speaking competence in terms of fluency and language use, as the experimental group outperformed the control group. Similarly, Arroba and Acosta (2021) used a quantitative approach to determine the effectiveness of digital storytelling as an alternative strategy for developing English-speaking skills in Thai undergraduate students in two phases: survey administration and the application of a quasi-experimental method. The results showed that learners who used digital storytelling demonstrated significant improvement in their speaking skills compared to those who received conventional teaching methods. The ability to modify output allowed learners to practice the spoken language by asking for help in pronunciation, stress, or intonation patterns in certain individual words or merely repeating complete sentences.

In a different EFL context, Abdolmanafi-Rokni and Qarajeh (2014) reported similar results in which the students in the experimental group who were exposed to digital storytelling had better speaking skills in terms of pronunciation, grammar, vocabulary, and fluency. Al-Amri (2020) explored the benefits of communicative language teaching and provides examples of classroom activities using digital storytelling. Using qualitative content analysis to identify themes and patterns related to EFL learners' communicative competence, he found that improvements in phonology, grammar, and vocabulary were the most notable. Another important finding is that learners made fewer mistakes in their

speech, and there was a statistically significant improvement in grammar, as well as an improvement in learners' motivation towards speaking activities after the intervention (Kallinikou & Nicolaidou, 2019). Rubini et al. (2019) reported the results of an action research study that investigated the effectiveness of digital storytelling in improving students' speaking skills. The study used a paired sample t-test to compare the results of pre-tests and post-tests and found that digital storytelling improved the speaking skills and communication skills of most participants through peer feedback and collaboration. Similarly, Roza and Rustam (2023) reported that digital storytelling helped to make students' speech more coherent and cohesive, resulting in significant improvements in fluency, coherence, and cohesion of academic public speaking performances. While prior research has shown that digital storytelling is beneficial for improving students' speaking abilities, it is still necessary to understand how digital storytelling is conducted. Moreover, previous research has mostly used quantitative methods, and there is a lack of studies investigating the classroom activities of digital storytelling as a multiliteracy pedagogical tool for developing speaking skills.

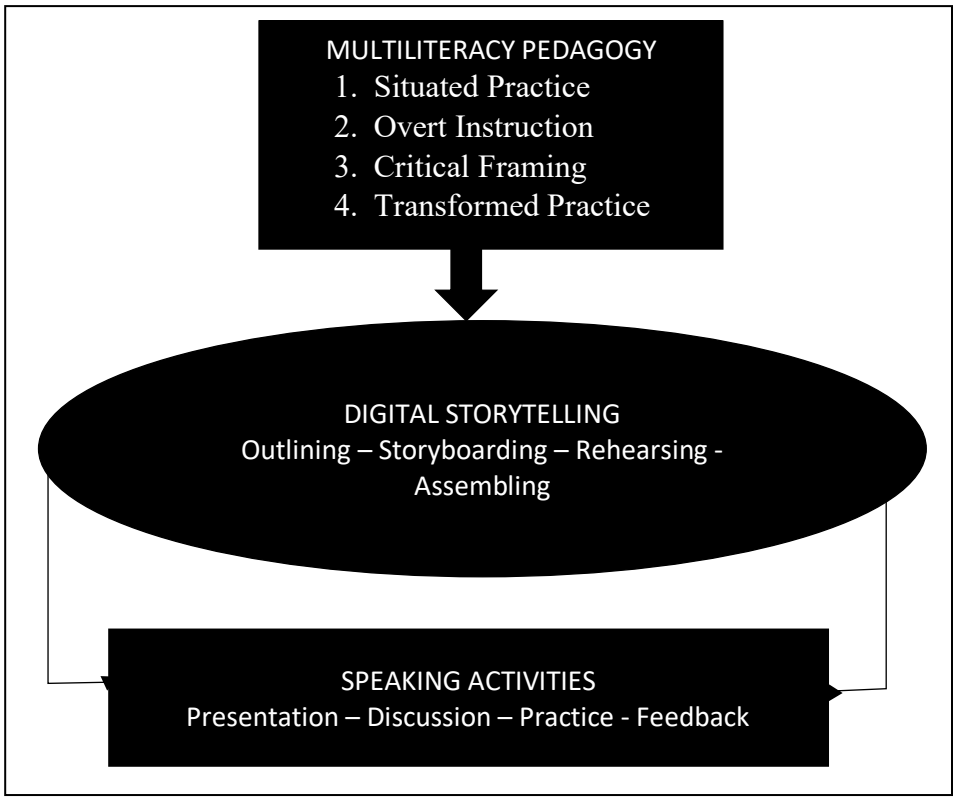
Theoretical Framework

The theoretical framework for Digital Storytelling incorporates the elements of Multiliteracy Pedagogy into the learning process. It also fosters various speaking activities, enabling students to actively participate in the EFL Speaking class. This framework serves as a guide for understanding the underlying principles and elements of Digital Storytelling in EFL speaking classrooms, which is grounded in multiliteracy pedagogy theory.

The framework shows that digital storytelling involves three main activities: finding topics, storyboarding, and assembling the digital story. In finding topics and storyboarding, the students present their work and receive feedback from the teacher and other students. The storyboarding activity includes gathering materials and organising the story, with classroom discussions to discuss the content of the story. Assembling the digital story also includes the activity of voice-over recording. The students check their pronunciation through several apps and work on their tone and intonation through feedback. The activities provide EFL students with ample opportunities to use English during speaking classes. It is in line with the communicative approach, an integral component of the EFL curriculum in Indonesia since 1984. The research site, EFL Speaking class in Universitas Riau Kepulauan, aims to equip students with the necessary skills to communicate effectively in English, particularly in everyday, academic, and work contexts at an intermediate level as explained in the Speaking II course's syllabus. The course utilises various teaching methods such as small-group discussions, role plays, simulations, and project-based learning. Through these methods, students learn how to use appropriate and effective oral expressions to describe themselves and others, jobs, and hobbies, as well as their opinions on various topics. Therefore, to further support students in developing their speaking abilities, the speaking course incorporates digital storytelling into the curriculum and syllabus to provide

engaging and meaningful communicative activities for the students. Students can also express their own voices through the stories they create. It can provide students with an engaging and meaningful way to practice and improve their English-speaking abilities.

Figure 1
Digital Storytelling's Framework



Methodology

The study is a pilot study of a larger qualitative case study in which thematic analysis is used according to the four concepts of multiliteracy pedagogy, situated practice (experiencing), overt instruction (conceptualising), critical framing (analysing), and transformed practice (applying). A deductive approach of thematic analysis was used in this study. It is an approach in which themes are identified based on pre-existing theories or frameworks (Braun & Clarke, 2006). The analytic process consists of reading and re-reading to identify initial codes based on keywords and phrases; sorting out the codes to meet the requirement of each research question, as this study is a theory-driven; sorting the codes into categories, which are then interpreted to form themes; and representing the themes (Braun & Clarke, 2006).

Participants

The participants of the study are 10 students taking the Speaking II course at Universitas Riau Kepulauan, Batam, Indonesia. The objective of the course is to equip students with the essential skills for effective communication in English, particularly in everyday, academic, and work contexts at an intermediate level, as outlined in the syllabus for the Speaking II course. Indonesia is an archipelago nation that consists of more than 17.000 islands. The site, Batam, is a multicultural city, with a population composed of migrants from varied regions in Indonesia as a result of its fast-growing urban and industrial development. The participants are from different social and cultural backgrounds. Their average English proficiency is A2 level of CEFR (Common European Framework of Reference).

Table 1
Demographic Information of the Participants

Demographic features		N	Percentage (%)
Gender	Male	1	10
	Female	9	90
	17-23	7	70
Age	24-30	2	20
	31-37	1	10
Ethnicity	Javanese	3	30
	Malay	3	30
	Minang	1	10
	Batak	1	10
	Sundanese	1	10
	Moluccans	1	10

Data Collection and Analysis

Ethical approval for the study and to report this case was obtained from Faculty of Education Universitas Riau Kepulauan where the study was conducted (009/D-FKIP/UNRIKA/III/2023).

To collect the data, an open-ended questionnaire and observation field notes were used as well as students' artefacts to enrich the data corpus. The themes of identification and classification to select the data set were based on the indicators of the Knowing Process (Yelland et al., 2008). The indicators of knowing processes in multiliteracy pedagogy were incorporated into Braun and Clarke's (2006) thematic analytic process as follows:

1) Guiding the analysis focus on specific aspects of the data that relate to the research questions and identify themes that reflected these aspects based on the process

orientation as seen in Initial Analytical Template (Table 2). In the familiarisation stage, the indicators of situated practice, overt instruction, critical framing, and transformed practice were used to identify examples in the data that reflected the processes.

2) Then, the initial codes that reflect these processes were generated.
3) The codes that relate to the same process were grouped and developed into themes.
4) Finally, the themes were organised and presented in the findings in a way that reflected the research questions and the processes identified in the data.

Table 2 presents an analytical template based on the Knowing Process indicators (Yelland et al., 2008) to analyse the incorporation of multiliteracy pedagogy in digital storytelling for the development of EFL students' speaking skills.

Table 2

Initial Analytical Template of Multiliteracy Pedagogy's Knowledge Processes (Yelland et al., 2008)

Knowledge Process	Process Orientation's Indicator	Question/Prompt
Situated practice/ Experiencing	Identify, retrieve, recall, clarify, check, locate, restate, illustrate, and verify	How did you select the interesting story to share? Did you face any challenges or difficulties in finding an engaging story? (Interview)
Overt Instruction/ Conceptualising	Define, give examples, classify, generalise, synthesise, abstract, structure, organise	How are students defining and naming keywords and terminology in their story? How are students giving examples related to their story? (Field Notes)
Critical Framing/Analysing	Compare, contrast, explain, infer, interpret, argue, differentiate, and evaluate	Can you recall any specific thoughts or assumptions you had during that time? How did they influence your perception of the situation? (Interview)
Transformed Practice/Applying	Apply, use, produce, transfer, translate, design, create	How did you apply and integrate different modes to communicate your ideas? (Interview)

Findings

The data collected from the open-ended questionnaire, observation, and artefacts revealed how digital storytelling incorporated multiliteracy pedagogy in EFL speaking by analysing the stages of the digital storytelling project, as conveyed in student activities that involved different semiotic modes, as the unit of analysis.

Situated Practice (Experiencing)

One of the stages of multiliteracy pedagogy is situated practice or experience. It focuses on utilising the student's existing knowledge, life experience, and cultural background. The themes of the situated practice stage were developed by identifying initial codes as can be seen in Table 3.

Table 3
Example of Initial Coding and Themes in Situated Practice

Excerpt	Coding	Theme
Interviewer: How did you select your story? Was there any challenges or difficulties in finding an engaging story?	[1]Identifying experiences [2]Recalling memories	Drawing on the learner's prior knowledge and life experience
Respondent 4: "I was having a difficulty to find an interesting story at first so I put a lot of thought[2] first before I decided which story that I want to share[1]. But then I started discussing it with my classmates[3]. We had a lot of conversations about our ideas and it really helped me less anxious[4] and more comfortable with speaking in English.	[3]Discussion with classmates [4]Reducing anxiety	Facilitating speaking skill development

In the digital storytelling project, the students tried to identify personal experiences that they thought were worth telling and had a moral value for the audience. After finding some choices of story, they decided on one topic as their story. Then, the students retrieved their background knowledge about the topic by answering some

brainstorming questions and tried to fit the information they got into the narrative framework. This stage was conducted through a class discussion forum.

Other respondents, on the other hand, were not specific in choosing the topic of their narrative. Then, through a class discussion, their teacher and classmates suggest narrowing their story to a more specific topic. When trying to figure out what specific story they were going to tell, they recalled their memories of the experiences. The excerpts above reflect the process orientations such as identifying the topics, retrieving background knowledge, and recalling memories and experiences related to the story. It also reflects the process of social interaction in generating ideas for the narrative. Initially, the student faced difficulty in finding an interesting story and she engaged in a collaborative process with classmates. By discussing their ideas, the speaker generated more ideas and got feedback on their own ideas, leading to a sense of comfort and reduced anxiety when speaking in English.

Overt Instruction (Conceptualising)

The next stage of multiliteracy pedagogy is overt instruction or conceptualising. It focuses on defining concepts and relating the concepts into a generalisation. The themes of the overt instruction stage are displayed in Table 4.

Table 4

Example of Initial Codes and Themes in Overt Instruction

Excerpt	Coding	Theme
Field Note: Student 5 presented her storyboard. She talked about a local culture of eating *Pinang*[2] that she experienced during her journey to an island in Maluku. The teacher asked her, "What is *Pinang*?" She answered, "It will leave a red stain when you eat it, it's like nutmeg."[1] "Is it meant to be eaten?" the teacher asked again.[4] Some of the other students answered the questions based on their perspectives.[3] "They believe it made their teeth healthier"(S7)	[1]Defining something [2]Giving example of local culture [3]Active participation [4] Teachers' Prompts	Defining the local culture Promoting effective communication skills

"They smashed the *Pinang* and mixed it with *kapur sirih*"(S6)
"So elderly people overthere have a strong teeth"(S8)

As shown in Table 4, activities that represent overt instruction in digital storytelling consist of defining local culture, giving examples, classifying, organising the story, and synthesizing. The integration of conceptualising stage in the digital storytelling project according to the excerpts above, is seen through students' activities in defining the local culture and giving examples and organising their story into a structure of a narrative. Furthermore, to stimulate the students to generalise and synthesise their discussion results of local culture, the teacher also prompted some questions.

Critical Framing (Analysing)

The next stage of multiliteracy pedagogy is critical framing or analysing. It focuses on analysing the functions of any form of communication that conveys meaning (Cope & Kalantzis, 2015). The themes of critical framing are seen in Table 5.

Table 5
Example of Initial Codes and Themes in Critical Framing

Excerpt	Coding	Theme
Interviewer: Can you recall any specific thoughts or assumptions you had during that time? How did they influence your perception of the situation? Respondent 4: I read a lot of news related to terrorism at that time[3]. It makes me think straight to terrorism (because of political condition)[1]. And…probably because it was dark, my mind wandered[4]…, …there are a lot assumption of terrorism in society[2].	[1]Evaluating political state [2]Influence of societal assumption [3]Evaluate information [4]Expressing opinions	Analysing the intentions and purposes of events in the stories Presenting opinions and arguments

In this study, critical framing involved students comparing various cultural contexts and purposes, analysing the intentions and purposes of events in the stories, and identifying and inferring the reason and value of the stories through their personal and cultural perspectives. In response to a student's narrative about her experience in a failed attempt of rappelling, the student inferred that it was not because she is a woman that she was afraid to do rappelling. She argued that a woman is as capable as a man as she believes in gender equality. She expressed her opinion as follows:

> "It is not because I am a woman. My friend is also a woman and she did it well. I think I didn't have enough exercise before rappelling" (S1)

Another respondent told an interesting narrative of how she wrongly accused someone as a terrorist and how embarrassing it was. She recalled her memories of the experiences, her feeling and her thought at that time. It led her to evaluate the political state at that time and her stance towards the act of terrorism. The other excerpts showed that a student picked a story of a culture shock that she experienced during her journey to an island in Maluku, her father's origin. In constructing the story, she compared and contrasted habits and culture between her homeland, Pulau Karimun and Maluku. The discussion about local culture in Maluku invited other students to interpret the culture of eating Pinang in other regions such as Java and Sumatera, based on their different perspectives, and then compared it through a class discussion. Other students responded to the story by giving opinions about the topic, an assumption of how the story could happen. It led them to evaluate the problem that occurred in complication and identified the value of the story. Therefore, activities in the stage included identifying and inferring the reason and value of the story through interpretation of their personal and cultural perspective, giving arguments of the events that happened in the story by analysing the purposes and intentions and comparing one culture with another to make a synthesis.

Transformed Practice (Applying)

In transformed practice, learners are expected to apply their knowledge, create meaning, and make a practical impact on the world (Yelland et al., 2008).

During the presentation, the students had a discussion related to the content of their story. They also received feedback from both the teacher and their peers on aspects such as their word choices, pronunciation, and intonation. The feedback and interaction were documented in the observation field notes. The last stage of the digital storytelling activity was assembling their materials into a video. The participants used various software and apps to create their digital storytelling, such as Kinemaster, Inshot, and Instagram. In the final stage, their digital story was published on social media platforms such as Instagram and Youtube, to try to reach a larger audience.

Table 6

Example of Initial Codes and Themes Based on Knowing Process Indicators in Transformed Practice

Excerpt	Coding	Theme
Field Note: During the presentation[1], respondent 2 suggested respondent 8, "I think you must say,'I forgot to take the ticket with me', not 'bring the ticket with me"[2] Interviewer: How did you apply and integrate different modes to communicate your ideas? Respondent 4: I must say that the process of making the imagination into a real video[4] was the hardest part, I chose Inshot and Instagram to combine the picture and animation, I record my voice directly in Inshot. I also used gifts for expressions.[3]	[1]Presentation [2]Feedback [3]Making multimodal text [4]Assemblying digital story	Enhancing communication ability through presentation and feedback Creatively transferring and/or recombining knowledge in new settings

Discussion

The integration of the multiliteracy pedagogy framework into the EFL speaking class through digital storytelling, as explored in this study, proves the potential of this approach to language learning. By creating digital stories using multiple modes of communication, such as text, images, and sound, students are provided with an engaging and dynamic context to develop their speaking skills (Eissa, 2019). Additionally, the acquisition of digital literacy skills can help students become more confident and effective communicators in a range of contexts (Rajendran & Yunus, 2021).

Multiliteracy pedagogy consisted of four knowing processes, namely, situated practice, overt instruction, critical framing, and transformed practice (Cope & Kalantzis, 2015). In situated practice, learning activities focus primarily on personal knowledge, concrete experience, evidence, and data (Yelland et al., 2008). In identifying the topics,

some students had already found the moral value and the bigger picture that they were portraying through their stories. This is in line with Puteh-Behak and Ismail (2018) that students use multimodal resources to explore their existing knowledge and skills in situated practice. Another benefit of this approach is that it encourages students to actively engage in class discussions and develop their oral communication skills (Al-Amri, 2020; Rubini, 2019). By identifying a specific topic and crafting a narrative framework, students learn how to structure their thoughts and organise their ideas effectively (Fu et al., 2022; Roza & Rustam, 2023). The process of recalling memories and experiences related to the topic of their story requires students to use descriptive language and engage in learning activities (González Mesa, 2020).

Through the class discussion forum, students are encouraged to share their personal experiences and knowledge with their classmates, allowing them to practise expressing their ideas in a clear and concise manner (Fu et al., 2022; Kallinikou & Nicolaidou, 2019). They generated more ideas and got feedback on their own ideas, leading to a sense of comfort, reduced anxiety, and build confidence when speaking in English (Cope & Kalantzis, 2015). Moreover, students also learn how to structure their thoughts and organise their ideas effectively (Rubini et al., 2019). The integration of multiliteracy pedagogy into the learning process is not just a means of transferring information, but also a way of constructing knowledge and meaning through interaction with others (Cope & Kalantzis, 2015).

Learning activities that reflected the stage of overt instruction or conceptualising focused on constructing the concepts and synthesizing theory. This includes defining and applying concepts and linking them into a visual representation. (Yelland et al., 2008). The development of speaking skills is promoted by encouraging students to actively engage in class discussions, brainstorming, and sharing personal experiences (Arroba & Acosta; 2021). The teacher's role in posing questions that stimulate students to generalise and synthesize their discussion results, for example by relating local culture to broader contexts also promotes critical thinking and communication skills, as students are challenged to articulate their ideas and defend their arguments (Lee, 2014).

By interpreting the students' personal and cultural perspectives on the story, the students construct the story in a bigger frame rather than just a slice-of-life story (Roza & Rustam, 2023). Analysing the point of view represented in the story revealed the big message that was hidden in the narrative. Those messages are the values of the story derived from their judgment toward an event and are believed to be crucial to inform the audience. Those activities and interactions provide students with opportunities to develop their speaking skills and build cultural competency as it encourages students to express their thoughts, opinions, and evaluations of the events presented in the stories (Gonzalez Mesa, 2020). Through questioning and discussion, students are pushed to elaborate on their ideas and articulate their reasoning (Eissa, 2019). The ability to present ideas, opinions, and arguments to others in a clear and persuasive way is an essential aspect of effective communication (Lee, 2014). Speaking skills include not only the ability

to produce sounds and communicate orally but also the capacity to organise and structure ideas, use persuasive language, and engage with an audience.

Transformed practice refers to the application of knowledge and understanding in real-world situations. The data suggested that students create texts and put them to use in communicative actions, thereby developing students' ability to communicate effectively in various contexts (Lee, 2014). Additionally, the development of students' speaking skills was also supported by opportunities to practice using language in real-world situations and receiving feedback on their performance (Cope & Kalantzis, 2015). The data also showed that the students were assigned to present their ideas and receive feedback on that assignment (Reinders, 2011). Presentation and feedback provide a powerful combination for enhancing communication ability. When the students are skilled at presenting ideas, they can communicate effectively and confidently in various contexts (Lee, 2014; Nabhan, 2019).

It was also found that the students creatively transferred and/or recombined knowledge in a new setting. In the context of multiliteracy pedagogy, this theme refers to the ability of learners to transfer and/or recombine knowledge from different literacies (e.g., linguistic, visual, digital, etc.) and use it in creative ways in new contexts (Lee, 2014). The students are encouraged to move beyond the traditional view of literacy as reading and writing and instead adopt a more expansive view of literacy as a set of skills and practices that enable effective communication in diverse contexts (Fu et al., 2022). From the data, the students were able to present information using both visual and written elements in a multimedia presentation or create a digital story that combines text, images, and sound to convey a message. Through creatively transferring and recombining knowledge, learners can effectively communicate their ideas and messages in diverse contexts (Rubini et al., 2019).

According to Cope and Kalantzis (2001), multiliteracy pedagogy is about transforming the learner into an active designer rather than just acquiring competence. Digital storytelling allows students to think about their identities, as well as others, and how their backgrounds reflect those (Ruppert et al., 2017). Thus, the digital storytelling project could be an appropriate representation of multiliteracy pedagogy, as multiliteracy concerns include how cultural variations might be considered when developing learning instructions (Cope & Kalantzis, 2015). The activity of creating a digital storytelling project improves speaking skill as students have to use their language skills to narrate their story and explain their choices of modes used. In voice recording activity, repeated practice will help them to improve their tone, intonation, and pronunciation through self, peer, and teacher feedback (Arroba & Acosta, 2021). Also, by publishing their story on social media platforms, students are expected to overcome their fear of public speaking and gain confidence in expressing their thoughts to a wider audience (Huang, 2023).

Conclusion

The study explored the incorporation of multiliteracy pedagogy elements into an EFL speaking class through digital storytelling. The purpose of the study was to demonstrate how digital storytelling could effectively incorporate the four elements of multiliteracy pedagogy (i.e., situated practice, overt instruction, critical framing, and transformed practice) to facilitate the development of speaking proficiency. The study used thematic analysis as the methodology to identify themes within the four knowledge processes of multiliteracy pedagogy and speaking skill development. The result indicated that incorporating multiliteracy elements through digital storytelling engaged the students in authentic speaking practices. It provides insights into how teachers can use the findings to inform their instructional practices and design activities that encourage students' active participation in EFL speaking classes. However, it is important to acknowledge the limitation of this study as it is a pilot study employing a case study method. Consequently, the findings may not be generalisable to other contexts or populations. Additionally, the study only focuses on EFL speaking skills and does not take into account other important skills such as reading and writing. Related to the validity and reliability of the design, some challenges such as technical difficulties with the digital storytelling software and the time allotted for the project may not be sufficient for all students to complete their stories in the classroom. Thus, it recommends for future studies improve the feasibility and practicality of the research design by providing more training on the software to the participants and allowing more time for the project.

References

Abdolmanafi-Rokni, S. J., & Qarajeh, M. (2014). Digital storytelling in EFL classrooms: The effect on the oral performance. *International Journal of Language and Linguistics, 2*(4), 252-257.

Al-Amri, H. M. (2020). Digital storytelling as a communicative language teaching based method in EFL classrooms. *Arab World English Journal, 11*(1), 270-281.

Arroba, J., & Acosta, H. (2021). Authentic digital storytelling as alternative teaching strategy to develop speaking skills in EFL classes. *LEARN Journal: Language Education and Acquisition Research Network, 14*(1), 317-343.

Borsheim, C., Merritt, K., & Reed, D. (2008). Beyond technology for technology's sake: Advancing multiliteracies in the twenty-first century. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 82*(2), 87-90.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. http://dx.doi.org/10.1191/1478088706qp063oa

Cope, B., & Kalantzis, M. (Eds.) (2000). *Multiliteracies: Literacy learning and the design of social futures*. Psychology Press.

Cope, B. & Kalantzis, M. (2015). *A pedagogy of multiliteracy: Learning by design*. Macmillan.

Dewi, D. S., Hartono, R., Saleh, M., & Wahyuni, S. (2022). Analisis Kemampuan guru dalam penggunaan podcast pada pembelajaran Bahasa Inggeris. *Prosiding Seminar Nasional Pascasarjana (PROSNAMPAS)*, *5*(1), 262-266.

Eissa, H. M. S. (2019). Pedagogic effectiveness of digital storytelling in improving speaking skills of Saudi EFL learners. *Arab World English Journal*, *10*(1), 127-138. https://doi.org/10.24093/awej/vol10no1.12

Fu, J. S., Yang, S. H., & Yeh, H. C. (2022). Exploring the impacts of digital storytelling on English as a foreign language learners' speaking competence. *Journal of Research on Technology in Education, 54*(5), 679-694.

González Mesa, P. A. (2020). Digital storytelling: Boosting literacy practices in students at A1-level*. HOW Journal*, *27*(1), 83-104. https://doi.org/10.19183/how.27.1.505

Greenwood, T. J. N. (2008). Digital Storytelling in the Classroom: New media pathways to literacy, learning, and creativity. *Journal of Media Literacy Education 3*(2), 134-136.

Gregori-Signes, C. (2008). Integrating the old and the new: Digital storytelling in the EFL language classroom. *Greta*, *16*(1), 43-49.

Hakim, I. (2022). Exploring the challenges of communicative language teaching in Indonesian context from a constructivist perspective. *ELS Journal on Interdisciplinary Studies in Humanities, 5*(1), 1-11. https://doi.org/10.34050/elsjish.v5i1.19163

Hong, A. L., & Hua, T. K. (2020). A review of theories and practices of multiliteracies in classroom: Issues and trends. *International Journal of Learning, Teaching and Educational Research, 19*(11), 41-52.

Huang, H. T. D. (2023). Examining the effect of digital storytelling on English speaking proficiency, willingness to communicate, and group cohesion. *TESOL Quarterly, 57*(1), 242-269.

Kallinikou, E., & Nicolaidou, I. (2019). Digital storytelling to enhance adults' speaking skills in learning foreign languages: A case study. *Multimodal Technologies and Interaction, 3*(3), Article 59. https://doi.org/10.3390/mti3030059

Kaur, S., & Sidhu, K. G. (2007). Using the multiliteracies approach to promote English literacy in higher education. *Asian Journal of University Education*, *3*(1), 111-132.

Kaur, S., Ganapathy, M., & Sidhu, K.G. (2012). Designing learning elements using the multiliteracies approach in an ESL writing classroom. *The Southeast Asian Journal of English Language Studies, 18*(3), 119-134.

Lee, L. (2014). Digital news stories: Building language learners' content knowledge and speaking skills. *Foreign Language Annals, 47*(2), 338-356.

Nabhan, S. (2019). Bringing multiliteracies into process writing approach in ELT classroom: Implementation and reflection. *EduLite: Journal of English Education, Literature, and Culture, 4*(2), 156-170. http://doi.org/10.30659/e.4.2.156-170

Nabhan, S., & Hidayat, R. (2018). Investigating literacy practices in a University EFL context from multiliteracies and multimodal perspective: A case study. *Advances in Language and Literary Studies, 9*(6), 192-199

New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review*, *66*(1), 60-92.

Puteh-Behak, F., & Ismail, I. R. (2018). Multiliteracies project approach: Dated or a worthy learning tool? *GEMA Online Journal of Language Studies*, *18*(2), 312-334. http://doi.org/10.17576/gema-2018-1802-20

Rajendran, V., & Yunus, M. M. (2021). Interactive learning via digital storytelling in teaching and learning. *International Journal of Education and Literacy Studies, 9*(3), 78-84.

Reinders, H. (April, 2011). Digital storytelling in the foreign language classroom. ELTWorldOnline.com, 3. http://blog.nus.edu.sg/eltwo/2011/04/12/digitalstorytelling-in-the-foreign-language-classroom/

Rohayati, S. (2020). Engaging Students in a genre-based digital storytelling project. *Journal of Language Intelligence and Culture, 2*(1), 1-15.

Roza, Z., & Rustam, S. (2023). Digital storytelling to facilitate academic public speaking skills: case study in culturally diverse multilingual classroom. *Journal of Computers in Education*, *10*, 499-526. https://doi.org/10.1007/s40692-023-00259-x

Rubini, A. P., James, P. P., Yong, K. L., & Yunus, M. M. (2019). Hear me out! Digital storytelling to enhance speaking skills. *International Journal of Academic Research in Business and Social Sciences, 9*(2), 190-202. http://dx.doi.org/10.6007/IJARBSS/v9-i2/5533

Ruppert, N., Adcock, L. T., & Crave, J. (2017). Digital Storytelling: A tool for identifying and developing cultural competence with preservice teachers in an introduction to middle level education course. *Current Issues in Middle Level Education*, *22*(1), 31-36.

Yelland, N., Cope, B., & Kalantzis, M. (2008). Learning by design: Creating pedagogical frameworks for knowledge building in the twenty-first century. *Asia-Pacific Journal of Teacher Education, 36*(3), 197-213.

INFLUENCE OF A MEDIATING TRANSLATION IN TRANSLATING ADDRESS FORMS IN THE MALAYALAM NOVEL, *CHEMMEEN* INTO FRENCH

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Manuscript received 22 March 2023
Manuscript accepted 7 December 2023
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https://doi.org/10.33736/ils.5555.2023

ABSTRACT

Chemmeen (1956), a Malayalam novel by Thakazhi, narrates a love story set in a Kerala fishing village. Its first English translation was done by Menon in 1962. This translation became the source text for a French translation in 1965. The French translation, being an indirect translation from Malayalam through English, largely mirrors the English version. This study focusses on how the various terms of address employed in the original Malayalam text have been translated into English and how these have influenced the French version. Newmark's (1988) typology of translation procedures is employed to identify the procedures adopted in translating the terms of address into the mediating translation. Koller's (1979) types of equivalence is applied to determine the types of equivalence that have been achieved and the extent that the mediating translation has influenced the French translation. The findings showed that the English translation has, for the most part, communicated the address forms by providing descriptive and functional equivalents. Nevertheless, these translations did not capture the original essence of the terms, resulting in inadequate portrayal of their cultural significance. The French version, based on the English translation, has been clearly influenced by the

mediating translation and hence also does not convey the nuances in the fishermen's socio-cultural dimension effectively.

Keywords: *Chemmeen*; indirect translation; terms of address; mediating translation

Introduction

The Malayalam novel, *Chemmeen,* written by Thakazhi Sivasankara Pillai (popularly known as Thakazhi) in 1956 was a best seller and recipient of the Sahitya Academy award (1965). Malayalam is the language spoken primarily by the people of Kerala, a state in the south-western part of India. *Chemmeen* reached the English reading audience when it was first translated into English by Menon and published in 1962. Menon's (1962) English translation was done during the post-colonial period during which English translations of works in Indian languages were encouraged.

Chemmeen gained a worldwide presence after it was translated into Russian, Spanish, Arabic, Japanese, Vietnamese, Sinhala, and Chinese. Menon's English translation is the mediating translation (MT) from Malayalam into French; in other words, it took on the role as a source text (ST) for Balbir (1965) to create her target translation (TT) in French. To our knowledge, the French translation is the only version that was not translated directly from Malayalam. The French translation, *Un amour indien* (1965), therefore, would have been influenced by the English translation as it was the only ST available for the translator. No records of Balbir having had access to the original Malayalam novel have been found.

Menon's (1962) translation had many omissions, and these were mirrored in the French manuscript. Likewise, the equivalents provided for many colloquial expressions and idioms had the nuances compromised and the intensity of emotions considerably downplayed. The culture and traditions observed by the fisherman community as well as the axis on which the entire story revolves did not hold a significant position in the TT. There have been claims that Menon's writing was titled towards gratifying the western audience's palate and hence the nature of the English translation (Thomas, 2002).

To date, there are no significant studies on the French novel, *Un amour indien* (1965), that was translated indirectly through Menon's (1962) English version. While existing studies do point to the fact that Menon's translation is not a faithful representation of the original text, a more important question would be how effective the French translation is, given the fact that it was translated from English and not from the original manuscript. This presents a gap in the study of the French translation of the novel *Chemmeen.*

As an attempt to fill this gap, this study investigates the translation of the texts involved from the linguistic perspective, focusing on the terms of address involved at the familial and community level that are recorded in the Malayalam novel, *Chemmeen,* and translated by Menon into English and then into French by Balbir via English. This paper's objective is twofold:

1. To identify the translation procedures employed in expressing the address forms in the English (which serves as a MT) and the French translations.
2. To examine the extent the MT has influenced the TT in conveying the address forms to the target audience.

Newmark's (1988) typology of translation procedures and Koller's (1979) type of equivalence form the basis of this paper.

Literature Review

Forms of Address

Braun (1988, p. 7) defines forms of address as "words and phrases used for addressing. They refer to the collocutor and thus contain a strong element of deixis". Forms of address generally exist in the forms of pronoun, verb, and noun associated with words that are syntactically dependent on them. Pronouns of address are for the most part, second person pronoun "you" in English. Verb forms of address are verbs in which reference to the collocutor is expressed. Nouns of address are represented by names, kinship terms, titles that have abstract quality of address or titles of professions, terms of endearment, and terms that denote relationship, that is, the addressee's relationship to someone else. Besides terms of address, to maintain social relationships, there are other linguistic devices such as terms of reference, honorific prefixes, and intonation patterns.

Brown and Gilman (1960) elaborate on the association of the different forms of the second person pronoun "you" with two characteristics such as power and solidarity, the two prominent dimensions that are key to the analysis of social life. Brown and Gilman propose the symbols T and V (From the Latin *Tu* and *Vos*), that refer to the two singular pronouns of address, as "… generic designators for a familiar and polite pronoun in any language" (p. 254). Dinçkan (2019), drawing from Brown and Gilman (1960), states that "the reciprocal or the non-reciprocal use of familiar and polite terms, is considered the key in understanding power and solidarity relationship" (p. 94). If a reciprocity of T forms exists between two characters, this indicates power or solidarity, but on the other hand, if the T and the V forms are non-reciprocal, there could be a power relationship. Dinçkan (2019) quotes Friedrich (1972, p. 274) who emphasises that the second person pronouns not only work independently but also in relation to other sets, including words for kinship, proper names, official ranks, words representing occupation, relative age, and other similar categories. Power and solidarity interactions are, therefore, expressed through address terms in English.

Forms of address in languages are largely culture-bound. With culture being an integral part of a language, deciding on the appropriate natural equivalents for the address terms can present an enormous task to the translators. Ethelb (2015), on studying the translation of terms of address from Arabic to English based on the novel *Ziqaq Al-*

Madaq, says that terms of address are associated with significant cultural characteristics and hence there is a peril of mistranslations of cultural elements if their cultural connotations are not considered. The knowledge of the target culture would alleviate the challenges of the translation of social honorifics rather than seeking to produce their equivalent meanings.

Mansor (2018) examines the translation of the English pronoun "you" to its Malay equivalent in the first episode of Grey's Anatomy, a famous American medical drama series. English has just one form of *you* when addressing people whereas the Malay language has several alternatives. Malay has *awak*, *kau*, *engkau*, *kamu*, *anda* and a few others such as *hang*, *mu*, *kitak,* and *demo* that are dialect forms. The appropriate usage of the terms is important, and it depends on factors such as the age of the addressee and the sort of relationship shared. Mansor quotes Morin (2005), who suggests that:

> the differences in pronominal systems, proper names and also kinship terms of both source and target languages can affect the translation process. Issues in translating linguistic elements … occur when their meaning determined on the basis of the use the receptor language and not on the basis of the form in the source language. This can be observed in the translation of the English pronoun "you" into Indonesian. Indonesian differentiates two forms of second person pronoun: familiar "bapa", "ibu", "saudara" and formal "you" when translating from English to Indonesian but the reverse is not possible as English does not have an equivalent for familiar and formal second person pronoun. (p. 70)

Indirect Translation (ITr)

Rosa et al. (2017) state that indirect translation (ITr), that is, a translation of a translation, has a long history. The Bible and Shakespearean translations are typically considered as familiar examples. Despite this, ITr has received little attention from translation scholars. It is only recently that works in this field has started to gain significant traction in the Translation Studies (TS) domain. Rosa et al. list several definitions of ITr from previous researchers. In general, ITr is described as a product that is "based on a source (or sources) which is itself a translation into a language other than the language of the original, or the target language" (Rosa et al., 2017, p. 119).

Indirect translation is also distinct from other types of translation, such as support translations and relay translations. ITrs are considered as intermediate translations that are not intended for consumption. Meanwhile, support translations involve same-text translations into other target systems and relay translations are intermediate translations meant for a readership (Dollerup, 2000, as cited in Washbourne, 2013). Relay translation involves moving the source from the periphery into relative centrality into a language from which more translations are produced (Washbourne, 2013).

Based on the definition by Kittel and Frank (1991) and by Pym (2011), it can be understood that ITr basically involves: (1) one source text (ST), in one source language (SL)

and one source culture, (2) a first translated text in a second language which is a mediating text (MT) and a mediating language (ML) within a second national culture, and (3) a second translated text in a third language which becomes the ultimate target text (TT) and the ultimate target language (TL) located within a third national culture (Rosa et al., 2017).

Among the main reasons why ITrs occur are the lack of knowledge or lack of translators working in the pair, relative prestige of the languages involved, or even copyright and authorial control (Washbourne, 2013). According to research on Swedish translations done during the period from year 2000 to 2015, 70 of the 5,259 translated novels during this time were ITrs (Allwood, 2021). It was also observed that 48 of the 70 cases of ITr that were identified (or 68.5% of all ITrs) employed English as the ML for the purpose of translating the novels into modern Swedish. French, German, Russian, Spanish, Dutch, and Turkish were other languages that have been employed as mediating languages, listed in decreasing order. Although French and German were the most prevalent MLs after English, other, more peripheral languages might also serve as the ML.

Some researchers assert that the changes that occur during indirect translation, whether in the form of errors carried over from the MT or in the form of changes made by the translator while translating from the MT, point to the fact that changes can happen during the first phase of the transfer, that is, from the ST to the MT, and/or it may also occur in the subsequent phase of the transfer, that is, from the MT to the TT (Haroon, 2022). With regard to literary texts, it was found that more changes are typically made in the first link of the ITr chain, frequently resulting in a situation where the ultimate target text is a fairly faithful rendering of the MT, but the MT is a relatively unfaithful version of the ultimate ST (Pieta, 2019, in Haroon, 2022). Haroon (2022, p. 170) observes that "… when the fidelity of the mediating text to the source text is compromised, this has a spillover effect on the target text in that the target text becomes more dissimilar to the original source text". This could be because of unequal power relations between the languages involved.

In an ITr, the translation would largely depend on the MT that acts as the ST for the target audience. Heavy reliance on the MT is bound to happen when the target translator has near zero knowledge of the source culture and language and only one translation to base his/her version on. This would generally lead the translator to faithfully mirror the translation strategies employed by the producer of the MT.

Methodology

This study focuses on words and phrases from the Malayalam novel *Chemmeen* that express terms of address and reference, used within the family and community including those of abuse and disrespect. All the terms of address from the source text were identified and used for this study. The terms were categorised based on the power and solidarity relationship proposed by Brown and Gilman (1960). Following the approach of Dinçkan (2019), the data for this study were based on the type of interactions between

the characters involved in the novel. The questions that were asked for the purpose of categorisation were:

1. How do the family members address each other?
2. How do general acquaintances address each other?
3. How do strangers address each other?

Based on the questions, the terms of address were categorised as follows:

1. Kinship terms
2. Kinship terms extended to communal relationships
3. Terms of reference/address specific to fisherman dialect
4. Terms that signify a special social standing
5. Disrespectful terms of address
6. Terms of abuse

Following the six categories, the Malayalam terms, their meaning, English and French translations taken from the corresponding texts, and the translation procedures adopted were tabulated. The context of the term, its significance, and implication were explained. The procedures adopted by Menon (1962) to convey an equivalent term in English were explored in the light of Newmark's (1988) list of translation procedures. Next, the same terms of address in the French version were examined to determine whether they have been influenced by the MT or otherwise, that is, to check if the same procedure has been adopted by way of translation in the TT. The effectiveness of the procedure in bringing out the meaning as intended by the ST author is studied both in the MT as well as in the TT. This would indicate the degree to which the MT has influenced the TT given the fact that the French TT is based on the English manuscript as a source. The type of equivalence achieved in the MT and the TT was also discussed, based on Koller's (1979) type of equivalence.

Newmark's (1988) Typology of Translation Procedures

The identification of the translation procedures was carried out with reference to Newmark's (1988, pp. 81-90) typology of translation procedures. Newmark (1988) enumerates a list of translation procedures that are adopted for the translation of sentences and smaller units of language, as follows:

- Transference: This covers processes such as loanword, *emprunt*, transcription and transliteration. It is a general practice that culture-specific words in regional novels are transferred with the objective of adding local flavour, promoting closeness with the text and reader.
- Naturalisation: This is a step beyond transference, and it consists of first adapting the SL word to the normal pronunciation and then to the word form of the TL.
- Cultural equivalent: A cultural word in the SL is translated by a cultural word in the TL.

- Functional equivalent: This deals with a culture-free word to translate a cultural word in the SL with the help of a new specific term. This procedure of deculturalising a cultural word, that is, a cultural componential analysis is the most accurate way of translating a cultural word.
- Descriptive equivalent: This procedure involves giving a description of the word to be translated.
- Synonymy: This is employing the near TL equivalent to an SL word in rare situations where there is no clearcut equivalence in the TL.
- Through-translation: This is the term that Newmark (1988) adopts for calque or loan translation by which names of organisations and common collocations get literally translated.
- Recognised translation: This means that only authorised or generally accepted translation of any institutional term must be used. The translation allows it to be glossed when appropriate.
- Translation label: This procedure allows the term to be within inverted commas and is done through literal translation.
- Compensation: This occurs when loss of meaning in one part is compensated in another part of the sentence.
- Componential analysis: This refers to the procedure of breaking up of a lexical unit into its sense components, one to two, three or four translations.
- Reduction and expansion: These procedures are categorised as imprecise translation procedures that one may use intuitively in some cases and ad hoc in certain other cases.
- Paraphrase: This procedure aims at explaining the meaning of a segment of the text. This is generally used in poorly written texts or texts that have important implications and omissions.

Types of Equivalence

There are five frames of equivalence relations that are used for the current study, based on Koller (1979, as cited in Pym, 2014, p. 17). These are given as follows:

- Denotative (based on extra-linguistic factors)
- Connotative (based on way the source text is expressed)
- Text-normative (respecting or changing textual and linguistic norms)
- Pragmatic (with respect to the receiver of the target text)
- Formal (the formal-aesthetic qualities of the source text)

These categories are utilised by the translator to choose the kind of equivalence best suited for the dominating function in the source text. Pym (2014, p. 46) adds that according to Koller (1979), “the way you translate (the kinds of equivalence you seek) depends on the function of the text or fragment you are translating”. Therefore, if a poem

primarily functions at the level of form, one must look for equivalence primarily at the level of form.

Results and Discussion

Kinship Terms

The Keralite culture, like other Indian states, values familial relationships and hence places a lot of importance on addressing one another in the family using specific forms of address, which considers the age and gender of the addressees. Table 1 shows the forms of address used at the familial level in the ST and their English and French translations.

Table 1
Terms of Kinship, Their Translation, and Procedure Adopted

S.No.	ST	Meaning	MT	TT	Translation procedure
1.	Ichechi	Older sister	Karuthamma	Karuthamma	Cultural equivalent
2.	Chettan	Brother in-law	Palani	Palani	Cultural equivalent
3.	Amma/ Ammaachi	Mother	Mummy	Maman/ Mère	Cultural equivalent
4.	Achan/ Achaan	Father	Father	Père	Cultural equivalent

In the ST, the female protagonist Karuthamma is referred to and addressed by her younger sister as *Ichechi*. *Chechi,* that refers to an older sister, in the fisherman dialect, has been modified as *Ichechi*. *Chettan* in Malayalam language can be used to address an older brother, a brother-in-law, or an older male cousin. Addressing or referring to an older person by his/her name is considered rude in the Keralite tradition. Menon's (1962) English translation of these terms involves using the names of these people, which are Karuthamma and Palani. As the English text serves as the ST for the French version, Balbir too adopts the names in her translation. Likewise, the terms *amma* or *ammachi* used to address one's mother and *Achan* to address father have been translated *as Mummy* and *Father* in the MT and hence they have been reflected in the TT as mère/maman and père respectively.

Menon's (1962) strategy of supplying a cultural equivalent for kinship terms in English creates a sense of "Englishness" to the Malayali (Malayalam-speaking) family and

the relationships involved. The English translation of the kinship terms have achieved denotative equivalence in the sense that they convey the relationship between the speakers of the conversation but the cultural significance that is intertwined with the terms is absent in the TT that has mirrored the MT.

Kinship Terms Extended to Communal Relationships

The Keralites regard the community as an extension of their families, and therefore, it is not unusual to hear a Keralite person addressing a person in public sphere not by their name but *Chetta* or *Chechi* (older brother/older sister) out of respect. This unique cultural form of address may take a westerner by surprise but is considered a polite form to the Keralites. This kind of address is perceived as a means to form good relations with people of the community. Table 2 lists the kinship terms used in communal living found in the ST and their English and French translations.

Table 2

Terms of Communal Living, Their Translation, and Procedure Adopted

S.No.	ST	Meaning	MT	TT	Translation procedure
1.	Chettan	Older brother	Achakunju	Achakounju	Cultural equivalent
2.	Chedathy	Older sister	Chakki	Chakki	Cultural equivalent
3.	Pengal	Older sister	Chakki	Chakki	Cultural equivalent
4.	Kochan	Child	Boy	Garçon	Cultural equivalent
5.	Kochamma	Aunt	Auntie	Tante	Cultural equivalent

An older male, out of respect, is addressed as *Chetta* (*Chettan*) in the Keralite community. Similarly, an older female can be referred to as *Chechi*, *Chedathy,* or *Pengal*. These terms in the novel *Chemmeen* have been replaced by their respective terms in the English MT (Achakunju, Chakki) and therefore, in the French TT too.

Menon (1962) has supplied the cultural equivalents for the address terms that relate to communal living in the MT and consequently, the TT has them too. The translated terms have achieved denotative equivalence as they communicate the content involved in those situations. However, as their connotative and pragmatic equivalents are

not achieved, the cultural significance that is embedded in the usage of the Malayalam terms of address does not get across to the foreign audience. This may affect the context comprehension, which in turn influence the audience's reading pleasure, as the nuances in the story that can be recognised with the appropriate usage of the terms of address in certain contexts have not been captured.

Terms of Reference Specific to Fisherman Dialect

The community in the novel *Chemmeen*, that is, the fisherman community, has their own specific dialect, which Thakazhi employs. These are listed in Table 3.

Table 3

Terms of Fisherman Dialect, Their Translation, and Procedure Adopted

S.No	ST	Meaning	MT	TT	Translation procedure
1.	Marakkan	Fisherman	fisherman	Pêcheur	Cultural equivalent
2.	Marakkathi	Wife/ Fisherwoman	Wife	Femme	Cultural equivalent
3.	Chakki Marakkathi	Chakki	Chakki	Chakki	Cultural equivalent
4.	Ende Marakkan	My husband	My husband	Mon mari	Cultural equivalent
5.	Kadalamma	Sea mother	Goddess of the sea	La déesse de la mer	Functional equivalent
6.	Naalaam Vedhakkaaran	A Muslim person	Not a fisherman	Ce n'est pas un pêcheur	Descriptive equivalent

Marakkan is a term used to refer to a fisherman, more specifically to refer to the class of fishermen who go into the sea to catch fish for their livelihood. The feminine form of this word is *Marakkathi,* which could mean a fisherwoman or the wife of a fisherman. Menon (1962) provides the cultural equivalent of *Marakkan* as *fisherman* and hence the French version calls it *pêcheur* (which means *fisherman*). The term *Marakkathi* too has not been retained in the MT, instead it has been translated as *wife* and the French TT records it as *femme* (which means *wife)*.

A respectful way of referring to a fellow fisherwoman, especially from a man, would be to use the name of the woman before adding *Marakkathi* to it. For instance, Chakki, the mother of Karuthamma, was referred to as *Chakki Marakkathi* by Pareekutty in the original Malayalam novel. It is rendered in the English and French translations as *Chakki*.

The female protagonist refers to her husband as *Ende marakkan* which means *my husband* (literally meaning *my fisherman*). Menon (1962) has translated it as *my husband* and Balbir as *mon mari* (which means *my husband*) in French.

To the fishermen, the sea is their deity and a mother-figure to them because the sea is their provider. They refer to this deity as *Kadalamma*, which literally means *Sea Mother.* This term is translated by Menon (1962) as *goddess of the sea* as the western audience may already be familiar with India's pluralistic religious practices. Menon's *goddess of the sea* and Balbir's *la déesse de la mer* (that means *goddess of the sea*), being functional equivalents, do convey a divine aspect of the sea but do not, however, portray the sea as a mother to the fisherfolk.

The fisherman community refers to Muslims as *Naalaam Vedhakkaaran,* literally meaning the one who embraces the 4th Veda or sacred writing. Although the fishermen, predominantly Hindus, treat Muslims with little sense of belonging and togetherness, this term *Naalaam Vedhakkaaran* is certainly not used with disrespect. Menon (1962) adopts the procedure of providing a descriptive equivalent to this term in the MT as *Not a fisherman* and Balbir translates this term literally as *Ce n'est pas un pêcheur* (which means *that is not a fisherman*). This sort of description is sought for the part when the mother advises Karuthamma about the purity of the women who will safeguard the community against the wrath of *Kadalamma*, their deity. The mother uses discrimination to warn that the Muslims (*Naalaam Vedhakkaaran*) may not be interested in the religious beliefs that the fishermen practise and hence warns her daughter to be "pure", dissuading her from seeing her boyfriend, who is a Muslim. The translations manage to convey a discriminatory term, but the foreign audience are not adequately informed of who the "non fisherman" is in the given context and the reason for discrimination. Besides, the term *Naalaam Vedhakaaran*, that is exclusively used by the Keralite fishing community to refer to Muslims, remains unknown to them.

The SL terms such as *Marakkan, Marakkathi, Chakki Marakkathi,* and *Ende Marakkan* have been given the cultural equivalent in the MT. The SL terms such as *Kadalamma* and *Naalam Vedhakkaaran* have been given the functional and descriptive equivalents respectively in the MT. The translation of all the terms in this category have achieved denotative equivalence but not connotative equivalence. Consequently, the MT is not able to present to the readers the traditional values and beliefs of the fisherman, elements that forms the core of the novel. The French TT, a close representation of the MT, is unable to carry these significant elements to the foreign audience as well.

Terms that Signify a Special Social Standing

The fisherman community recognises certain terms that are used as titles or forms of reference among their people. These terms, shown in Table 4, are attributed to people based on their socio-economic standard, caste, or leadership position.

Table 4

Terms of Social Standing, Their Translation, and Procedure Adopted

S.No	ST	Meaning	MT	TT	Translation procedure
1.	Mothalali	Merchant	Mothalali	Mothalali	Transference
2.	Kochumu thalali	Junior Merchant	Kochumuth alali	Kochoumou thalali	Transference
3.	Achan	Village head	Father	Père	Functional equivalent

Mothalali literally means *owner* but in the fishing community described in the ST, *Mothalali* refers to the merchant who trades fish. *Kochumuthalali* (literally meaning *small* or *junior merchant*) is used to refer to the merchant's son who carries on the business of his father. By way of employing transference (loanword), Menon (1962) has retained both the words *Mothalali* and *Kochumuthalali* in his English translation. This is followed by Balbir as well in her French version as *Mouthalali* and *Kochoumouthalali*. Retaining these terms in both the MT as well as TT help to showcase a dimension of the fisherman culture and contributes to preserving the local colour.

The village head is addressed as *Achan*. This word sounds the same as the one for *father,* but it is different in the Malayalam written form. Menon (1962) translates it as *father,* possibly as *Achan* being their head, the fishermen look up to him and respect him as one would do to their father in a family. The denotative equivalence achieved in the translation of *Achan* to 'father' has been mirrored in the TT as *père.*

This functional equivalent in the French version is also *père*, this being the literal translation of *father*. While the terms *father* and *père* may serve to indicate the village head in the translations, the unique term that the entire community adopts to address their village head, i.e., a culture-specific one, is not conveyed to the non-Malayali readers. Besides, the term does not evoke the respectful sentiment that the fishermen have towards their village head.

Disrespectful Terms of Address

Besides polite terms, the Keralite culture also possesses terms of address that include abuse words and disrespectful terms. These are employed at the familial and community levels. Disrespectful words comprise of ordinary, day-to-day words, and names of animals. Table 5 lists the disrespectful words found in the ST.

Table 5

Terms of Disrespect, Their Translation, and Procedure Adopted

S.No.	ST	Meaning	MT	TT	Translation procedure
1.	Methan	A Muslim person	Pareekutty	Parikoutti	Functional equivalent
2.	Thendigal	Beggars	Vagrants	Mendiant	Literal
3.	Thuppalukudiyan	A Stingy person	Miser	Avare	Functional equivalent
4.	Kaalamaadan	God of death	Father of yours	Ton père	Descriptive equivalent

A Muslim individual is generally referred to as *Naalam vedhakkaran* by the fishing community but the same term changes to *Methan* if the speaker decides to use a disrespectful form. In the novel *Chemmeen*, Palani refers to Pareekutti, a Muslim, as *Methan* in a disrespectful manner as he was his wife's former boyfriend. Menon (1962) translates *Methan* as *Pareekutty*, referring to him just by his name. The French translation, following the MT, calls him *Parikoutti*. *Methan* is a rude term that is offensive and discriminatory and therefore, the foreign reader does not get to know the intensity of the emotions involved and hence their understanding of the story may be altered as well.

The term *Thendi* (the plural form being *Thendigal*) literally means a *beggar*, one who goes from house to house or to people begging for food, clothes, or money. In the ST, the village head chides the bridegroom's people for not being able to pay the set sum of dowry, calling them *Thendigal*. He does not intend its literal meaning but conveys his annoyance and contempt for them through the word. The MT calls it *Vagrants* and the French translator *Mendiants,* both of which amount to poor, homeless people, the original literal meaning. Lowering their standard is the intention of the village head when he uses the term *Thendigal*. The literal translation does convey the village head's anger by the term of insult he employs but the distinct meaning and the intensity of the disrespectful term do not get carried to the foreign readers.

Thuppalukudiyan is a term in Malayalam used to refer to people who are overly stingy or miserly. It literally means *Spit-drinker*, *thuppal* meaning *spit* and *kudiyan* is *one who drinks*. Menon (1962) calls Chembankunju a *miser* and the French translation *avare*, adopting functional equivalence. While the terms "miser" and "avare" inform the foreign readers that Chembankunju is a miser, the translation does not evoke the crudity of the term *Thuppalukudiyan*. The term is unique to the language and culture as it is made of everyday elements and reflects the standard of simple fisherfolk who do not have refined ways of speaking.

Thakazhi uses the word *Kaalamaadan* in his novel to let Chakki express her anger towards her proud and greedy husband. She refers to him as *Kaalamaadan* while speaking to her daughter. The word *Kaalamaadan* literally means the god of death, one who does not let people live on. Menon (1962) renders its descriptive equivalent in his translation as that *father of yours* and Balbir translates it as *ton père* (your father). Menon, as with other crude terms, has chosen to gloss over the term *Kaalamaadan,* too. This is possibly because his translation was mainly meant for a western audience, and to render a suitable context, he chooses to soften the crude-sounding and disrespectful terms. As such, the MT and the TT, in this context, do not adequately portray the scenario to the readers as neither the character's avaricious nature nor the disappointment blended with anger and grief in Chakki's tone are conveyed to them.

In the translation of the terms in this category, the denotative equivalence of the terms has been achieved in the MT and hence in the TT as it follows the MT. However, the absence of connotative equivalence means that the intensity of the sentiments involved in the contexts in question may not be successfully conveyed to the foreign readers.

Terms of Abuse

Keralites' terms of abuse may spell religious discrimination. Metaphors, as well, form offensive interpretations. Therefore, it is common to hear people using figurative language to convey abuse in Malayalam. Table 6 lists the various terms of abuse that have been taken from the ST.

Methan Kazhuveran is a very strong word, abusive in nature, in Malayalam. As *Kazhuveran* is added to a person's name or nick name, it is added to the word *Methan* meaning Muslim. *Kazhu* refers to the tree where people were made to hang from, and therefore, *kazhuveran* means that someone should be sent to the tree to be hanged to their death.

In the ST, Pareekutty is referred to as *Methan Kazhuveran* as Palani, 'his rival', is overwhelmingly distraught by his actions. Menon adopts the procedure of cultural componential analysis that Newmark (1988) describes as "deculturalising a cultural word" (p.83), rendering it as *the devil* and in French *le diable* (The devil). The discriminatory element *Methan* is entirely avoided in this case. *Devil* and *diable* may convey Palani's anger and grief to the foreign readers but the translations do not present the social and

cultural dimensions involved, such as the discrimination based on religions and the uniqueness of the abuse word.

Table 6

Terms of Abuse, Their Translation, and Procedure Adopted

S.No.	ST	Meaning	MT	TT	Translation procedure
1.	Methan kazhuveran	A Muslim person	Devil	Le diable	Componential analysis
2.	Choole	Broom	He swore at her	Il se mit à jurer	Cultural equivalent
3.	Pezhachaval	A defiled woman	A bad woman	Une mauvaise femme	Cultural equivalent
4.	Nayinde mone	Son of a bitch	Dog	Chien	Cultural equivalent

Chool refers to a "broom" in Malayalam, and *Choole* is the term when it is used to call a person. Calling a person *Choole* is considered offensive. It is commonly remarked in the Indian culture that someone holding a broom is a sure sign of bad omen and is believed to bring bad luck if one happens to see it while setting out on a journey or an assignment. *Chembankunju* dismisses his wife's wisdom when she tries to challenge him by calling her *Choole* in the early section of the novel. Through this, Thakazhi sets the stage for the readers to understand the male-dominated society of that era and hence the superiority of the husband over his wife (the wife does not reciprocate his action in the novel). Menon (1962) translates the phrase as *he swore at her* and Balbir translates it as *Il se mit à jurer* (He began to curse) following the MT. The act of swearing is something that the western audience might identify themselves with. The English translator's choice of *He swore at her* and its French translation *Il se mit à jurer* may serve to portray the man's anger but does not fully reflect the superiority of the man over his wife. The crude language of the fisherman who hurls at her words such as *Choole* remains unknown to the foreign readers.

Pezhachaval is a word in the Malayalam language to describe an immoral woman that is packed with crudity. This term gains more currency in the novel *Chemmeen* because the fidelity of a woman to her husband is shown as the sole factor that determines his safe return from the sea and its rough life. This issue of marital faithfulness

is the pivotal issue in the novel, anchoring the entire story. Menon's (1962) translation of *pezhachaval, a bad woman,* referring to Karuthamma*,* presents little derogatory connotation. *A bad woman* is a generic term and could be a blanket term to refer to someone with many vices but not specifically a person with sexual promiscuity. Balbir translates *a bad woman* in French as *une mauvaise femme*, which means the same as in English, and therefore lacks the punch of the original swear word.

Nayinde mone is a term of abuse in the Malayalam language resonating with vulgarity and coarseness as the literal meaning of it is *son of a bitch*. In the novel *Chemmeen*, one of the boatmen, when pushed to the limits, calls Palani *Nayinde mone,* which Menon translates as *dog*. *Dog* and *chien* in the French translation are certainly abusive in nature, aimed at someone to show disgust or other negative feelings, but are far from degrading their mother's moral standards which the term *nayinde mone* strongly evokes.

The lack of connotative equivalence and the formal equivalence in the translation of these terms in the discussed categories would have influenced the readers' appreciation of the story. The translated words sound neutral, and being devoid of crudity, they do not convey the cultural dimension of the fisherman society that Thakazhi portrayed in the ST. Besides, the fine nuances that the terms of address create in the story are missed by the foreign readers.

Conclusion

The analysis sheds light on the type of translation procedures that were used to translate the various terms of address that the characters use in the novel. It was found that Menon (1962), for most part, has chosen not to retain the culture-specific terms of address in his English translation. Instead, he provided cultural or descriptive equivalents of the terms. These have resulted in the loss of cultural significance of Keralites in general and the fishermen more specifically. Consequently, the depth of the sentiments may not be adequately experienced by the target audience. Furthermore, the crude and abusive terms of address that are reflective of the socio-cultural standard of the Keralite fisherman society of the 1960s have been glossed over, resulting in the loss of deeper evoked meanings of the fisherfolk dialect. All of these have been mirrored in the TT as well, following the MT as its ST. In terms of equivalence, for the most part, denotative equivalence of the terms was met, and this was closely followed by the TT as well. This study has made evident that the MT has exerted a strong influence on how the address forms in the French version *Un amour indien* are conveyed. Even though the findings of this study are based on the novel *Chemmeen*, an important overall implication is the crucial role an MT plays in producing subsequent translations. If subsequent translations are to reflect the cultural uniqueness of the source culture, the distinct writing style of the original author, and the impact of the story woven together with various emotions and innuendos, then the MT must first strive to reach these translation heights. In other words, the extent to which the MT of a literary text closely documents the cultural

nuances of the ST would influence the extent of the reflectiveness of the "genius" or strength of the original work, affecting the depth of experience of the foreign culture by the receiving culture. If the MT of a literary text is a gist translation or a "transparent" one, then the readership merely gets a quick read of the narrative with a lot of aesthetics being left out from the storytelling. From the analysis in this study, clearly, terms of address constitute an integral part of cultural aesthetics, and therefore should be treated as a vital part when interpreting a story.

References

Allwood, A. (2021). (Semi)peripheries in contact: Indirect translation of novels into Swedish 2000–2015. *STRIDON: Studies in Translation and Interpreting. 1*(1), 57-77. https://doi.org/10.4312/stridon.1.1.57-77

Balbir, N. (1965). *Chemmeen Un amour indien*. India: Kailash Editions.

Braun, F. (1988). *Terms of address: Problems of patterns and usage in various languages and cultures*. Mouton de Gruyter.

Brown, R., & Gilman, A. (1960). The pronouns of power and solidarity. In T. A. Sebeok (Ed.), *Style in language* (pp. 253-276). MIT press.

Dinckan, Y. (2019). A linguistic analysis of the literary translation of address forms from English into Turkish. *Journal of Translation Studies*, *1*(27), 89-110. https://tinyurl.com/mr2s6cjn

Ethelb, H. (2015). Using address terms in showing politeness with reference to their translation from Arabic into English. *International Journal of Comparative Literature & Translation Studies, 3*(3), 27-37. https://journals.aiac.org.au/index.php/IJCLTS/article/view/1690

Haroon, H. (2022). Indirect translation and the influence of the mediating text: The case of Le Petit Prince in Malay. *3L: Language, Linguistics, Literature, The Southeast Asian Journal of English Language Studies*, *28*(1), 167-180. http://doi.org/10.17576/3L-2022-2801-12 167

Koller, W. (1979). *Introduction into the science of translation*. Quelle and Eyer.

Mansor, N. S. (2018). Understanding the translation of second person address form in the specific context. *International Journal of Foreign Languages, 8*, 65-89. https://tinyurl.com/y5jrwrra

Menon, N. (1962). *Chemmeem*. Jaico Publishing House.

Newmark, P. (1988). *A textbook of translation*. Prentice Hall International (UK) Ltd.

Pym, A. (2014). *Exploring translation theories*. Routledge, New York.

Rosa, A. A., Pieta, H., & Maia, R. B. (2017). Theoretical, methodological and terminological issues regarding indirect translation: An overview. *Translation Studies*, *10*(2), 113-132, doi: 10.1080/14781700.2017.1285247

Thomas, A. J. (2002). *Modern Malayalam fiction and English: An inquiry into the cultural and linguistic problems of translation* [Doctoral thesis, Mahatama Gandhi University]. http://hdl.handle.net/10603/341

Washbourne, K. (2013). Nonlinear narratives: Paths of indirect and relay translation. *Meta*, *58*(3), 607-625. doi:10.7202/1025054ar

JANTUH BEBASA MASYARAKAT MELAYU DI PEDALAMAN KAPUAS HULU, KALIMANTAN BARAT

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Manuscript received 8 December 2022
Manuscript accepted 7 December 2023
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https://doi.org/10.33736/ils.5075.2023

ABSTRAK

Masyarakat Melayu di Riam Panjang adalah sebuah komuniti Melayu di hulu Sungai Kapuas, Kalimantan Barat, Indonesia. Makalah ini membincangkan salah satu aspek sosiolinguistik masyarakat "pedalaman jauh", iaitu *Jantuh Bebasa* atau kesantunan berbahasa. *Jantuh Bebasa* di Riam Panjang diungkapkan melalui penggunaan bahasa verbal dan bukan verbal. Ungkapan melalui bahasa verbal melibatkan pemilihan kata yang menunjukkan tahap kesopanan, manakala *bebasa* melalui bahasa bukan verbal pula berkaitan dengan sikap, lakuan gaya atau budi pekerti seseorang dalam interaksi sosial. Dari segi skop, *Jantuh Bebasa* masyarakat Riam Panjang dihuraikan dari segi pemilihan sesuatu sistem kata panggilan berdasarkan status sosial dan strata institusi kekeluargaan. Keupayaan mereka memanipulasi kata tertentu menjadi kata ganda yang mencerminkan kehalusan dan kesantunan berbahasa turut dibincangkan (iaitu *Jantuh Ingka'*). Kajian yang dilaksanakan melalui kaedah wawancara dan pengalaman ini mendapati bahawa konsep *Jantuh Bebasa* di Riam Panjang berkait rapat dengan aspek etnografi dan kepercayaan masyarakat. Pelanggaran *Jantuh Bebasa* selain dikecam oleh masyarakat, turut dikaitkan dengan pantang larang, iaitu seseorang akan ditimpa musibah, iaitu *busung*. Tambahan lagi, masyarakat juga akan dihukum dengan hukum adat *kesupan* jika melanggar *Jantuh Bebasa*. Sehubungan itu, generasi tua di Riam Panjang amat

menekankan pewarisan budaya *bebasa* dalam kalangan generasi muda, agar nilai budaya pekerti tinggi ini dapat dipertahankan.

Kata Kunci: kesantunan berbahasa; sistem panggilan; tabu; hukum adat; nilai

JANTUH BEBASA IN AN INTERIOR MALAY COMMUNITY OF KAPUAS HULU, WEST KALIMANTAN

Abstract

Riam Panjang Malay is a remote Malay community located upriver of Kapuas, West Kalimantan, Indonesia. This paper discusses a sociolinguistic issue in this inner rural community, namely, the Jantuh Bebasa or language politeness. In Riam Panjang, Jantuh Bebasa is expressed through the use of verbal and non-verbal languages. The use of verbal language for politeness purposes including the choice of appropriate address terms, meanwhile bebasa through non-verbal communication is related to the attitudes or actions performed in social interactions. In terms of scope, the study of Jantuh Bebasa is focused on the choice of proper terms in concordance with social status and family strata. This paper also discusses the compound form of certain words in a politeness discourses (i.e jantuh ingka'). Analysis of face-to-face interviews and obervations of in-situ experiences found that Jantuh Bebasa in Riam Panjang is closely related with the locals' beliefs. The violation of Jantuh Bebasa can be condemned by society and may bring misfortune, that is, busung to those who violates this taboo as well as go againstto kesupan, a customary law. Hence, the older generation demands the transmission of bebasa culture to the younger generation in order to retain this great moral value.

Keywords: *language politeness; address terms; taboo; customary law; values*

Pengenalan

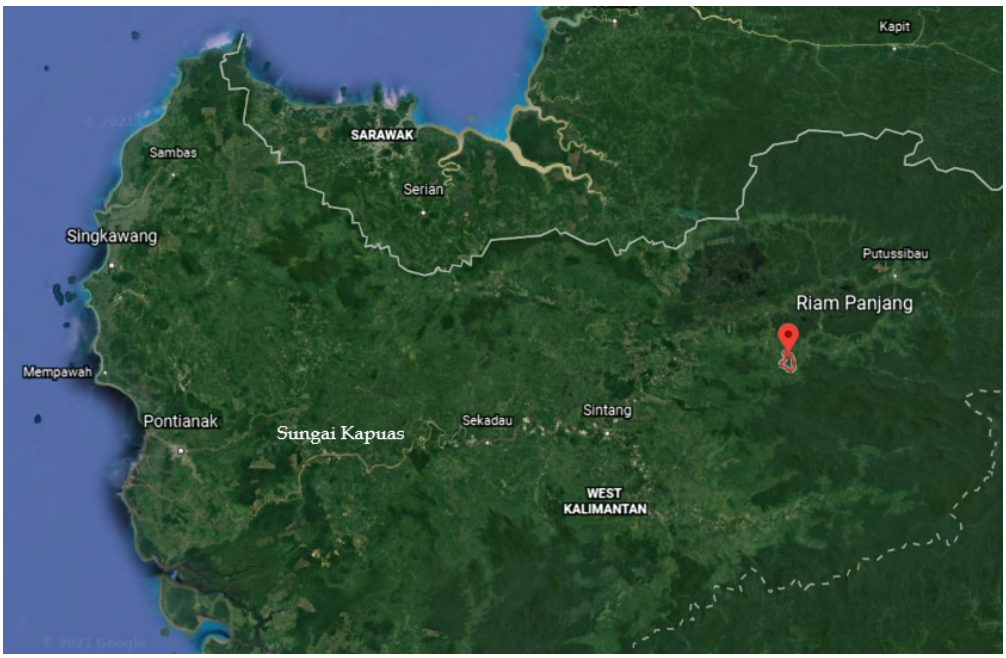
Bahasa selain berfungsi sebagai alat komunikasi, ia juga mendukung makna-makna sosial tertentu. Antara makna sosial yang dicerminkan, iaitu sahsiah, adab dan budi pekerti seseorang individu ataupun masyarakat. Ketepatan dan kesesuaian pilihan kata panggilan akan mengarah kepada kesantunan berkomunikasi, secara langsung membuktikan seseorang penutur telah mematuhi norma-norma masyarakat dan budayanya. Dalam konteks tertentu, kesantunan berbahasa berfungsi sebagai penanda jati diri bagi dua suku etnik yang berkongsikan etnonim yang sama. Sebagai contoh, *nuan* ialah kata ganti nama diri kedua dalam bahasa Iban (Gedat, 2018), namun kata panggilan ini turut digunakan sebagai bahasa halus dalam masyarakat Melayu di pedalaman Kapuas Hulu. Penggunaan kata ganti nama *nuan* ini telah membezakan identiti masyarakat Melayu di kawasan

persisir dengan kelompok “Melayu Ulu”. Sesungguhnya, setakat ini belum ada kajian tuntas tentang komuniti “Melayu Ulu” kerana faktor keterpencilan kawasan. Untuk melengkapi kosa ilmu ini, makalah ini membincangkan hasil kajian sosiolinguistik tentang fenomena *Jantuh Bebasa* dalam kalangan masyarakat Melayu di Riam Panjang, pedalaman Kalimantan Barat, Indonesia.

Sekilas tentang Melayu di Riam Panjang, Pedalaman Borneo

“Melayu” di pedalaman Kalimantan Barat ini merujuk kepada masyarakat Melayu di bahagian hulu Sungai Kapuas. Dalam konteks tempatan, “pedalaman” sinonim dengan wilayah yang terletak jauh di hulu sungai dan jauh dari ibu kota provinsi Kalimantan Barat, iaitu Pontianak. Riam Panjang, adalah sebuah kampung Melayu di pedalaman jauh Kalimantan Barat. Jarak kampung ini dengan Pontianak adalah kira-kira 600 km, atau lebih kurang 12 jam dengan menggunakan pengangkutan bas. Kampung ini terletak di tepi Jalan Lintas Selatan, iaitu sebatang jalan darat utama yang menghubungkan Pontianak dengan Putussibau (ibu kota Kabupaten Kapuas Hulu); lihat Peta 1.

Peta 1
Kedudukan Riam Panjang



(Sumber: Google Map)

Berdasarkan statistik *Kependudukan Kecamatan Pengkadan*, pada awal tahun 2021 penduduk di Riam Panjang ialah seramai 1,198 orang. Dari segi taburan suku etnik,

selain suku Melayu, kampung ini juga dihuni oleh suku Jawa, Madura dan Dayak (Islam). Kehadiran suku-suku ini kerana perkahwinan campur dengan orang tempatan; lihat Yusriadi (2006). Dari segi bahasa, penduduk Melayu di Riam Panjang menuturkan variasi Melayu Ulu Kapuas. Bahasa ini merupakan *lingua franca* di kawasan hulu sungai Kapuas dan juga penduduk di kawasan yang membentang dari Putussibau, Embaloh, Bunut, Jongkong, Selimbau, Nanga Silat, dan sebagainya. Dalam konteks Riam Panjang, meskipun terdapat sebahagian penduduk kampung berasal dari tempat lain, mereka menggunakan bahasa Melayu variasi Riam Panjang sebagai bahasa interaksi dalam kegiatan harian. Bahasa lain, seperti bahasa Indonesia dikuasai oleh hampir semua orang, tetapi bukan bahasa harian.

Konsep Jantuh Bebasa

Berdasarkan definisi dalam dialek Melayu Ulu Kapuas, istilah *jantuh* bermaksud "percakapan". Manakala *bebasa* berasal daripada *be+ba(ha)sa*, yang sinonim dengan "berbudi bahasa" dalam bahasa Melayu (Richardson et al., 2016). *Bebasa*, selain meliputi konsep berbudi bahasa, juga merangkumi pengertian "berbudi pekerti". Dengan itu, *bebasa* merupakan salah satu bentuk budaya khas yang dimiliki oleh masyarakat Melayu di wilayah pedalaman jauh Kalimantan Barat. Dari segi pengertian umum, *bebasa* dikaitkan dengan lakuan berbahasa yang sopan, iaitu kesantunan berbahasa. Kearifan *bebasa* sangat dititikberatkan oleh orang Melayu di pedalaman, malah diterapkan sebagai suatu norma masyarakat. Seseorang itu sama ada *bebasa* atau *tidak bebasa,* dapat dinilai dari segi penggunaan bahasa verbal dan bahasa bukan verbal.

Dari segi penggunaan bahasa verbal, masyarakat Riam Panjang memiliki bentuk pilihan kata yang menunjukkan tahap kesopanan ketika berinteraksi dengan pihak lawan bicara daripada pelbagai kategori sosial seperti umur, jantina, status sosial, situasi formal dan tak formal, keakraban dan sebagainya. *Bebasa* melalui bahasa bukan verbal pula berkait dengan sikap, lakuan gaya, atau budi pekerti seseorang ketika berdepan dengan orang lain ataupun ketika berinteraksi. Penggunaan bahasa bukan verbal ini bergantung kepada keadaan formal dan tidak formal. Dalam keadaan formal, misalnya semasa majlis berlangsung, seseorang yang melalui khalayak di tengah majlis, haruslah berjalan dengan perlahan-lahan, seboleh-bolehnya menjinjit kaki sambil membongkokkan badan dengan tangan kanan menjulur ke hadapan. Menghentak kaki semasa berjalan dianggap tidak *bebasa* atau tidak sopan.

Dalam masyarakat Melayu di Riam Panjang, cara *bebasa* yang diajarkan oleh generasi tua kepada generasi berikutnya, turut diperkukuhkan melalui institusi sosial masyarakat. Sesiapa sahaja dibenarkan menegur seseorang yang didapati tidak *bebasa*. Mereka bahkan mengenakan hukuman sosial terhadap golongan yang tidak *bebasa*. Bagi kes tidak *bebasa* yang ditunjukkan melalui penggunaan bahasa bukan-verbal, pelaku akan dikatakan *gila basa* dan dipandang rendah oleh masyarakat. Dari sisi kepercayaan, orang yang demikian itu dipercayai akan terkena *busung* (iaitu akan mendapat balasan buruk jika melanggar norma budaya ini), seperti sakit, hidup tidak tenteram, harta tidak akan

kekal simpan dan sebagainya. Perlu ditegaskan bahawa sukar untuk menentukan sama ada seseorang itu bakal mendapatkan balasan *busung* ataupun tidak kerana bersifat subjektif dan sukar dibuktikan secara saintifik. Namun demikian, melalui kepercayaan ini, kita dapat mengetahui bahawa adat *bebasa* sesungguhnya merupakan sebahagian warisan tradisi masyarakat Melayu di Riam Panjang kerana diterapkan berserta dengan aspek sosiobudaya, iaitu tabu atau pantang larang masyarakat.

Ulasan Kosa Ilmu

Seperti yang dinyatakan sebelum ini, kajian tentang kesantunan bahasa merupakan bidang yang popular dan skop penelitian biasanya berkait dengan sistem sapaan sesebuah masyarakat. Seimbas lalu, dapat dikatakan bahawa setiap masyarakat menitikberatkan kesantunan berbahasa yang tepat dengan konteks budaya mereka. Melalui pengamalan kesantunan berbahasa, budi pekerti seseorang individu dapat dicerminkan dan ini secara langsung memelihara maruah serta kemuliaan sesuatu bangsa atau komuniti. Kepentingan ini bukan sahaja ditegaskan oleh komuniti bahasa yang majoriti, juga pada kelompok minoriti. Kajian Mohd Zulkepli et al. (2015) telah membuktikan bahawa sistem sapaan suku Bajau di Tuaran, Sabah, hampir sama dengan sistem sapaan Melayu. Sama seperti masyarakat Melayu, pemilihan sistem sapaan Bajau turut dipengaruhi oleh faktor kedudukan, umur, status dan tujuannya, iaitu untuk memuliakan atau menghormati seseorang.

Semua masyarakat amat mementingkan kesantunan berbahasa dan menjadikannya sebagai amalan kebudayaan asas yang sentiasa dipegang, tanpa mengira ruang dan waktu. Contoh ini dapat dirujuk pada kajian Ag Ali Omar et al. (2020) tentang pengekalan kata panggilan kekeluargaan dalam keluarga berkahwin campur dalam kalangan masyarakat Brunei yang berhijrah ke Sabah. Masyarakat ini didapati masih mengamalkan sistem panggilan tempat asal mereka walaupun sebagai kelompok minoriti di Tuaran. Kajian ini telah menunjukkan peri pentingnya warisan ini dijaga dan diperlihara oleh masyarakat penuturnya. Berkenaan warisan dari segi kata sapaan, kajian Reniwata dan Ab. Karim (2015) berkaitan dua komuniti Minangkabau, iaitu di Nagari Batuhampar (Sumatera, Indonesia) dan Rembau (Negeri Sembilan, Malaysia) mendapati bahawa terdapat dua kesan perubahan sistem sapaan apabila sesebuah komuniti terpisah di dua negara yang berbeza. Didapati bahawa perubahan yang ditunjukkan di Nagari Batuhampar tidak sebanyak perubahan bentuk kata sapaan di Daerah Rembau. Salah satu bentuk kata sapaan yang menunjukkan perubahan adalah daerah Rembau tidak memiliki bentuk kata sapaan khas kepada saudara lelaki ibu dan kata panggilan untuk menyapa menantu lelaki. Perubahan ini merupakan tanda-tanda bahawa sistem sosiobudaya masyarakat Daerah Rembau sedang menghadapi cabaran. Sebagai contoh, wujud peralihan dialek kerana generasi muda malu menggunakan dialek setempat. Dalam institusi adat, hieraki paling bawah institusi berkenaan, iaitu *tua kadim* telah hilang sebahagian peranannya dan sistem matrilineal turut menghadapi cabaran.

Dalam pada itu, kaum Melanau yang selalu disalah tafsir sebagai orang Melayu, turut dibezakan afiliasi etnisiti melalui pengkajian sistem sapaan. Dalam kajian Hassan dan Abang Suhai (2007), mendapati bahawa sistem sapaan Melanau memaparkan perbezaan tertentu dengan orang Melayu, misalnya orang Melanau ditegah menyebut nama orang yang disapa atau meletakkan nama di belakang gelaran kerana boleh dianggap sebagai biadap atau tidak menghormati individu yang disapa, terutamanya individu yang lebih berusia dan ada pangkat gelaran dalam sesebuah keluarga. Selain itu, perbahasan kosa ilmu ini turut memfokus kepada masyarakat yang lebih minoriti lagi, misalnya Orang Asli. Melalui kajian yang dilakukan oleh Ma'alip dan Teo (2019), didapati bahawa masyarakat Orang Asli suku Che Wong di Kuala Gundah, Pahang, selain mengekalkan bentuk-bentuk panggilan tradisional, menggunakan bentuk-bentuk panggilan yang diguna pakai oleh masyarakat Melayu setempat. Golongan muda juga didapati mula mengubah bentuk-bentuk kata panggilan tradisional kepada bentuk yang baru.

Ringkasnya, susulan dari peredaran zaman, bidang pengkajian kesantunan berbahasa telah berevolusi dari zaman yang berfokus pada penerokaan ilmu fundamental kepada bidang yang berkaitan dengan pelestarian warisan. Kesemua faktor ini berpunca daripada modenisasi dan urbanisasi masyarakat. Kajian Narawi (2013) tentang sistem panggilan komuniti Kelabit telah menegaskan bahawa sistem panggilan masyarakat Kelabit telah kian hilang akibat modenisasi masyarakat. Keadaan yang sama juga berlaku di Kalimantan Barat. Ekoran daripada perkembangan jaringan pengangkutan dan teknologi komunikasi saban hari, dijangka pada suatu hari nanti, gejala peralihan warisan tradisi berkaitan dengan sistem sapaan akan berlaku ke atas komuniti di kawasan pedalaman. Bertitik tolak daripada permasalahan ini, satu kajian lapangan telah dilakukan di Kampung Riam Panjang, pedalaman Kalimantan Barat dengan tujuan menerokai dan mendokumentasi kesantunan berbahasa ataupun *jantuh bebasa* masyarakat tersebut.

Pendekatan Kajian

Kajian ini menggunakan pendekatan Ervin-Tripp (1972) untuk menyelidiki dan menganalisis *Jantuh Bebasa* yang diamalkan oleh masyarakat Riam Panjang. Pendekatan ini dinilai sesuai kerana turut menekankan isu perbezaan dialek regional ke atas kesantunan berbahasa (Ervin-Tripp, 1972). Bagi kes kesantunan berbahasa dalam "bahasa Melayu", bahasa ini dibahagi kepada pelbagai jenis dialek dan setiap penutur dialek memiliki pola kesantunan berbahasa yang tersendiri. Pendekatan ini juga pernah diaplikasikan oleh Reniwati dan Ab Karim (2015) dalam meneliti penggunaan sistem sapaan dalam kalangan Melayu Minang. Meskipun terdapat pendekatan lain, misalnya teori kesantunan oleh Brown dan Levinson (1987), yang mengatakan bahawa norma penggunaan kata sapaan lebih bersifat universal (umumnya didorong oleh faktor sosial), dan begitu juga dengan sebuah kajian oleh Kroger et al. (1984) berdasarkan teori tersebut yang menemukan bahawa kesantunan negatif (*negative politeness*) lebih santun daripada kesantunan positif, namun demikian, dari segi pragmatik pilihan sistem sapaan, teori ini

dinilai tidak sejajar dengan budaya timur (Al-Duleimi et al., 2016). Penilaian kritis terhadap teori awal Brown (1965) turut dilakukan oleh Dittrich et al. (2011). Hasil kajian mereka menunjukkan bahawa perubahan masyarakat (iaitu interaksi sosial di era IT) menyebabkan teori universaliti menjadi tidak relevan lagi.

Ervin-Tripp (1972) yang melakukan penyelidikan ke atas sistem sapaan masyarakat di Amerika Syarikat telah mengemukakan tiga peraturan dalam penggunaan kata sapaan, iaitu Peraturan Alternasi (*Alternation Rules*), Peraturan Kemunculan Bersama (*Co-Occurance Rules*) dan Peraturan Urutan (*Sequencing Rules*). Dalam Peraturan Alternasi, pilihan bentuk sapaan yang digunakan bergantung kepada kategori faktor sosial pihak lawan bicara, iaitu latar status, pangkat sosial, jenis-jenis gelaran, usia dan keakraban hubungan. Peraturan Kemunculan Bersama berlaku pada situasi, iaitu penggunaan bahasa merentasi variasi bahasa lain ataupun gaya penggunaan bahasa yang mencetuskan kelainan sebutan. Dalam hal ini, ia berkait rapat dengan isu linguistik, misalnya fonologi dan sintaksis yang mencetuskan kelainan sosiolinguistik, dalam konteks yang formal dan tidak formal. Peraturan ketiga, iaitu Peraturan Urutan berkaitan dengan analisis urutan sesuatu ujaran serta sapaan-sapaan yang terlibat, misalnya ketika menyahut panggilan telefon dan sebagainya.

Dari segi korelasi peraturan-peraturan dalam pendekatan Ervin-Tripp (1972) ini dengan kajian di Riam Panjang, penilaian telah mendapati bahawa Peraturan Alternasi sangat berkait rapat dengan topik kajian ini. Ini disusuli dengan peraturan Kemunculan Bersama. Peraturan Urutan sebaliknya tidak mempunyai sebarang hubungan dengan kajian ini. Sehubungan dengan itu, diskusi-diskusi tentang pemilihan kata ganti nama dan sapaan yang sesuai oleh masyarakat Riam Panjang terangkum bawah Peraturan Alternasi yang diusulkan oleh Ervin-Tripp (1972). Dalam pada itu, hubungan persaudaraan dan tahap usia generasi yang menentukan jenis sistem panggilan dalam lingkungan kekeluargaan Riam Panjang juga berkait dengan peraturan ini. Dengan adanya data daripada masyarakat Riam Panjang yang menunjukkan alternasi fonologi sesuatu sebutan kata sapaan, misalnya kata yang berbentuk manja, peraturan yang relevan ialah Peraturan Kemunculan Bersama.

Metodologi Kajian

Kajian ini merupakan sebuah penelitian kualitatif. Dalam penelitian ini, kajian lapangan dilakukan di Riam Panjang, Kapuas Hulu, Kalimantan Barat; lihat Peta 1. Riam Panjang dipilih sebagai titik penelitian kerana komuniti Melayu di kawasan ini ialah komuniti Melayu yang kurang diketahui. Masyarakat Melayu “pedalaman jauh” sangat kurang dikaji kerana faktor kedudukan geografi. Data penelitian ini dikumpul pada tahun 2021 melalui projek penyelidikan Lembaga Penelitian dan Pengabdian kepada Masyarakat (LP2M), Institut Agama Islam Negeri Pontianak.

Data dalam kajian ini dikumpulkan melalui kaedah wawancara bersemuka dan diikuti dengan teknik perakaman. Wawancara dilakukan dengan teknik perbualan bebas dengan topik yang berfokus tentang *jantuh bebasa*. Dari segi prosedur memperoleh data

kajian, sebelum memulakan wawancara, pengkaji terlebih dahulu memaklumkan kepada informan tentang tujuan kajian. Oleh kerana penulis utama merupakan penduduk asal Riam Panjang dan kenal dengan mereka, maka kerjasama penuh telah diberikan oleh mereka. Wawancara dilakukan di rumah informan untuk menghindari pengaruh faktor domain ke atas pilihan penggunaan bahasa. Semasa sesi wawancara, meskipun informan selain menjawab soalan yang ditanyakan, mereka juga akan membekalkan informasi tambahan dan suasana akan bertukar menjadi perbualan santai. Dalam setiap sesi wawancara, dialek Melayu Ulu Kapuas digunakan dengan kesemua informan dalam Jadual 1.

Dari segi kaedah pensampelan, kajian ini menggunakan kaedah pensampelan mudah, iaitu informan dipilih dengan melihat latar belakang sosial, jantina dan peringkat usia. Rincian informan-informan tersebut adalah seperti Jadual 1 berikut. Dalam kajian ini, informan-informan sudi mendedahkan nama mereka, sehubungan dengan itu, tiada konflik etika timbul dari segi ini.

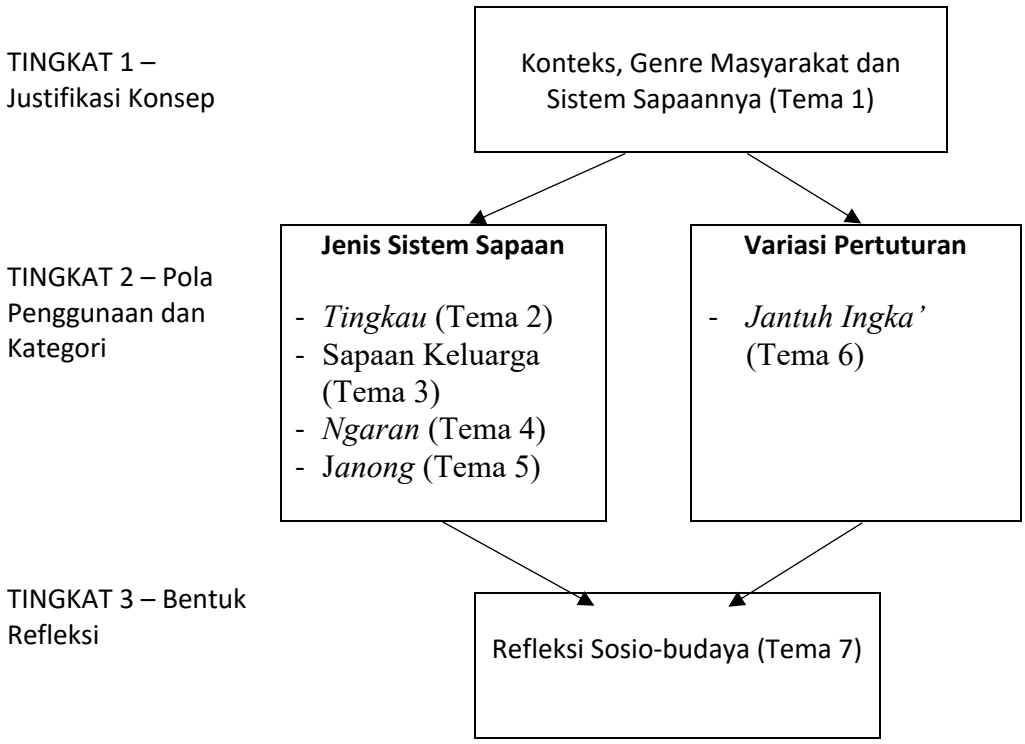
Jadual 1
Latar Belakang Informan

No	Nama	Umur	Jantina/Keterangan
1	Halimah	74	Wanita, suri rumah
2	Sri Buti	45	Wanita, suri rumah
3	Umiyati	53	Wanita, suri rumah
4	Doong	38	Lelaki, tokoh pemuda
5	Adib	16	Lelaki, pelajar
6	Limin	63	Lelaki, bekas guru
7	Sulaiman	66	Lelaki, Penghulu, Tokoh Adat
8	Mustafa	62	Lelaki, Tokoh Agama

Secara keseluruhannya, data yang diperoleh daripada informan dibahagikan kepada tiga jenis, iaitu kosa kata-kosa kata sistem sapaan, dialog perbualan dan sumber daripada cerita lisan, iaitu *Cerita Pelanduk* yang dirakam daripada Halimah. Data yang terkumpul kemudian dianalisis secara tematik sesuai dengan keperluan penelitian ini. Dalam kajian ini, kerangka analisis tematik Braun dan Clarke (2006) telah diaplikasikan. Dari segi bentuk, makalah ini bersifat “data-driven”, iaitu huraian fenomena kesantunan berbahasa melalui data yang diperolehi. Data rakaman kemudian akan ditranskripsikan dan diberi definisi. Kesemua data ini telah dipetakan seperti dalam Rajah 1 (diubah suai daripada kerangka Vallerga dan Zurbriggen (2022)). Setiap tema diasingkan mengikut

tingkat yang mewakilinya. Dalam hal ini, kesemua tingkat ini saling berhubungan. Tingkat 1 memaparkan tema umum, iaitu konteks masyarakat Melayu di pedalaman hulu. Di Tingkat 2, terdapat lima tema pokok yang dibincangkan, iaitu (i) *Tingkau*; (ii) Sapaan Kekeluargaan; (iii) *Ngaran*; (iv) *Janong*; dan (v) *Jantuh Ingka'.* Tingkat 3 pula merupakan tema yang membincangkan refleksi aspek sosio-budaya ke atas penggunaan sistem sapaan, misalnya dikenakan hukum adat, pantang-larang dan *busung*.

Rajah 1
Pemetaan Tematik Berdasarkan Tujuh Tema Kajian



Menerusi validasi data, cara *member checking*, iaitu satu kaedah yang ditafsir oleh Lincoln dan Guba (dirujuk dalam Creswell & Miller 2000, p. 127) sebagai "the most crucial technique for establishing credibility", telah dilakukan. Seorang sarjana dari Riam Panjang, Profesor Dr Ibrahim, dan dari Jongkong, Dr Hermansyah, telah diminta untuk memeriksa data ini. Ibu Nurhiluyah, bekas isteri ketua kampung yang kini tinggal di Pontianak turut membantu mengesahkan beberapa data lapangan. Penyelidikan ini telah diperakui dan diluluskan oleh Jawatankuasa Etika Penyelidikan, Institut Agama Islam Negeri Pontianak, Indonesia (No. Rujukan: B-24/In.15/LP2M/PP.00.9/12/2021).

Dapatan dan Perbincangan

Bahagian ini membentangkan hasil kajian *jantuh bebasa* masyarakat Melayu Riam Panjang. Setelah data diklasifikasi dan dianalisis, terdapat lima tema pokok yang akan dibincangkan, iaitu (1) *Tingkau*; (2) Sapaan Kekeluargaan; (3) *Ngaran*; (4) *Janong*; dan (5) *Jantuh Ingka'.* Oleh kerana data yang digunakan dalam analisis data bukan berbentuk naratif, data daripada informan dibincangkan secara kumulatif bersesuaian dengan kategori tema yang diteliti.

Bentuk "Bebasa" dalam "Tingkau"

Bentuk *tingkau* merujuk kepada penggunaan kata-kata tertentu untuk menyapa seseorang ketika berinteraksi. Berdasarkan budaya masyarakat Riam Panjang, dan juga masyarakat lain dalam budaya Timur, menyapa seseorang itu tanpa dipadankan dengan bentuk sapaan yang sesuai, dianggap tidak mengenal adat sopan santun (Hassan & Abang Suhai, 2007). Pentingnya kesopanan dalam masyarakat dapat dilihat dengan adanya hukum adat "kesupan" di Riam Panjang. Dalam pengertian yang luas, "kesopanan" berkaitan dengan etika dan pelanggaran etika yang boleh mengakibatkan seseorang itu dimalukan. Seseorang yang berasa dia telah dimalukan oleh pihak lawan bicara perihal isu kesopanan, boleh mengadukan kepada mahkamah adat untuk mendapatkan adat "kesupan". Jika pelanggar adat "kesupan" didapati bersalah oleh Mahkamah Adat, dia perlu membayar pampasan berbentuk barangan ataupun wang tunai kepada pengadu (Yusriadi, 2023, p. 43).

Secara terperinci, terdapat banyak bentuk *tingkau* dalam masyarakat Riam Panjang. Berikut dipaparkan *tingkau* untuk diri sendiri (iaitu kata ganti nama diri) dan *tingkau* untuk orang lain. Dari segi *tingkau* untuk diri sendiri, terdapat tiga bentuk kata ganti nama diri pertama, iaitu "aku", "kita" dan "kami". "Aku" dalam masyarakat Riam Panjang membawa makna yang neutral dan bentuk ini digunakan dalam semua keadaan dan pada semua peringkat generasi, tanpa menimbulkan sebarang prasangka positif ataupun negatif. Bagi budaya penggunaan bahasa di Borneo, penggunaan "aku" tidak dianggap sebagai "kasar" atau tidak sopan walaupun dengan orang yang lebih tua ataupun berstatus. Hal ini sangat berbeza dengan penggunaannya dalam bahasa Melayu baku.

Bagi kata ganti nama "kita" dan "kami", "kita" ialah ganti nama dalam subkategori inklusif, manakala "kami" dalam subkategori eksklusif. Seimbas lalu, kedua-dua kata ganti nama ini tidak menimbulkan isu kerana mempunyai subkategori yang jelas. Namun demikian, dalam sesetengah keadaan, penggunaan "kita" dan "kami" bakal berdepan dengan kemelut kesantunan, terutamanya melibatkan orang yang sama etnik tetapi berbeza tempat asal (contohnya antara orang Melayu di hulu dengan orang Melayu di hilir Sungai Kapuas). Dalam hal ini, pemilihan kata ganti nama jamak "kita" perlu berdasarkan tujuan dan makna sosial yang hendak diungkapkan kepada pendengar. Kes ini berlaku dalam satu situasi pertuturan antara dua keluarga Melayu yang

membincangkan hal-hal perkahwinan. Ahli anggota keluarga ini terdiri daripada ahli keluarga Riam Panjang dan Pontianak. Dalam dialek Melayu Riam Panjang dan Pontianak, bentuk kata ganti nama pertama jamak inklusif dan eksklusif, iaitu [kita] dan [kami] adalah sama. Perhatikan dialog berikut:

/atiʔ	talah	adat	upa	kita	biasa	tuʔ	mih/
jika	dapat	adat	serupa	kita	biasa	ini	PART (lah)

Berdasarkan konteks dialog di atas, kata ganti nama "kita" yang bersifat inklusif digunakan oleh penutur kerana pada ketika itu, dia sedang membincangkan hal perkahwinan dengan pendengar. Penggunaan "kita" yang inklusif telah mewujudkan rasa kekitaan yang akrab antara kedua-dua keluarga ini. Namun demikian, dengan kehadiran kata "biasa" dalam ayat ini (yang bermaksud "pada kebiasaannya") telah meluaskan makna konteks ayat tersebut dan sekaligus menambah kerumitan dari segi pentafsiran makna. Dengan kata yang mudah, oleh kerana orang Melayu Pontianak tinggal jauh di kawasan hilir, mereka tidak semestinya berkongsikan sesuatu "kebiasaan" dengan orang Melayu Riam Panjang yang tinggal jauh di hulu. Kedua-dua keluarga Melayu ini mempunyai amalan atau pengalaman yang berbeza dalam adat perkahwinan. Jadi, penggunaan "kita" dalam kes ini sebenarnya mendukung maksud yang eksklusif. Pilihan "kita" oleh penutur didapati lebih sopan dan mencerminkan keakraban daripada menggunakan "kami". Jika "kita" digantikan dengan "kami", akan menyerlahkan maksud yang tidak akrab antara penutur dan pendengar, iaitu seolah-olah penutur sengaja menyisihkan pendengar dari sesuatu konteks.

Bagi bentuk "*tingkau"* untuk orang kedua yang digunakan dalam masyarakat Riam Panjang, jenis-jenisnya ditunjukkan dalam Jadual 2.

Jadual 2
Jenis-Jenis Tingkau di Riam Panjang

Jenis-Jenis *Tingkau*	Kata Ganti Nama Diri Kedua	Penerangan
kula' [kulaʔ]	"kamu"	kata ganti nama diri kedua tunggal
ikau [ikaw]	"kamu"	kata ganti nama diri kedua tunggal, percakapan kasar
nuan [nuan]	"kamu"	kata ganti nama diri kedua tunggal, percakapan halus
diri' [diɣiʔ]	"kamu"	orang kedua, percakapan halus
kian [kian]	"kalian"	orang kedua bentuk jamak
kita' [kitaʔ]	"kalian"	orang kedua bentuk jamak

Bentuk kata ganti nama diri *kula'* [kulaʔ] ditentukan oleh tahap kesantunannya mengikut tahap umur. *Kula'* bermaksud neutral apabila digunakan oleh orang tua kepada

orang muda, manakala akan membawa makna kasar dan tidak sopan jika digunakan oleh yang muda kepada orang yang tua. Bentuk kata ganti nama *ikau* [ikaw]–yang bererti "kamu" merupakan bentuk yang tidak sopan dan kasar. Kata ganti nama ini biasanya digunakan ketika seseorang sedang marah, kurang senang hati atau menjaga jarak. Sebaliknya, *nuan* [nuan] ialah bentuk kata ganti nama yang halus dan sopan. Bentuk ini sama seperti bentuk kata *nuan* dalam bahasa Iban yang juga memperlihatkan aspek kesantunan (Gedat, 2018). Orang yang lebih muda menggunakan *nuan* jika ingin menyapa orang yang lebih tua. Bahkan, dalam beberapa situasi, orang yang lebih tua umurnya pula kadang-kadang menggunakan bentuk *nuan*, ataupun bentuk *diri'* [diɣiʔ] untuk menyapa orang yang lebih muda yang dihormati. Dalam kajian Yusriadi (2020), terdapat penerangan yang lebih lanjut untuk kata *diri'*. Contohnya:

/kulaʔ udah makan?/
Kamu sudah makan?

/ikaw tuʔ kuɣang ajaɣ bonaɣ/
Kamu ini benar-benar kurang ajar

/nuan apa kɣoja?/
Kamu apa kerja?

/diɣiʔ namah nna?/
Kamu ikut tidak?

Bentuk *kian* [kian] "kalian" pula ialah bentuk sapaan untuk orang kedua jamak. Bentuk ini dianggap neutral. Untuk menunjukkan tahap yang lebih sopan lagi, seseorang akan menggunakan *kian+semua*. Bentuk kata ganti nama *kita'* yang bersifat jamak pula membawa maksud yang sama dengan *kian* tetapi bentuk ini dianggap kata ganti yang kurang sopan, atau neutral sekiranya digunakan dalam kalangan sebaya. Dalam masyarakat Riam Panjang, terdapat beberapa bentuk kata ganti nama diri ketiga yang menunjukkan tahap kesopanan yang berbeza-beza (Jadual 3).

Bentuk kata ganti nama "ia" adalah bentuk yang bersifat neutral (maksudnya tidak membawa kesan kasar atau halus). "Ia" boleh menjadi kata sapaan untuk sesiapa pun tanpa mengenal lapisan umur atau talian persaudaraan. Jadi dalam konteks *jantuh bebasa*, penggunaan bentuk ini dianggap cukup *bebasa*. Bagi sapaan *sentua* dan *sanu'* yang bererti "dia", biasanya digunakan mengikut tahap keakraban. *Sentua* digunakan untuk merujuk pada pihak ketiga yang sama-sama dikenali oleh penutur dan pihak lawan bicara. Sementara *sanu'* ialah kata ganti nama untuk orang ketiga yang tidak dikenali oleh kedua-dua pembicara.

Jadual 3
Bentuk Kata Ganti Nama Diri Ketiga

Kata Ganti Nama Diri Ketiga	Penerangan	Tahap Kesopanan
ia [ia]	orang ketiga tunggal	neutral
sida' [sidaʔ]	orang ketiga jamak	neutral
sanu' [sanuʔ]	orang ketiga tunggal, belum dikenal	halus
sentua [sentua]	orang ketiga tunggal, sudah agak dikenal tapi tidak akrab	halus
sami' [samiʔ]	orang ketiga tunggal	halus
urang [uɣaŋ]	orang ketiga	kasar

Kata ganti nama *sami'* ialah kata yang khusus digunakan untuk tujuan bergurau, dan halus. Sebagai contoh, jika penutur A dan B sedang berbual-bual, tiba-tiba terdapat suara orang ketiga yang bersembunyi di sebalik dinding, atau di sebalik pohon mengganggu situasi perbualan, maka kata rujukan untuk orang ketiga tersebut ialah *sami'*. Berikut adalah contoh penggunaan *sami'.*

/oy ada samiʔ diyaʔ/
oi, ada seseorang di situ

Sebenarnya, kata ganti nama *sami'* boleh digantikan dengan kata *nsia* (seperti ayat berikut), namun kata *nsia* dianggap tidak sopan atau tidak bebasa. Bentuk *sami'* dikesani lazim wujud dalam sastera lisan Riam Panjang. Contohnya dalam cerita *Pelanduk* berikut yang mengisahkan pertanyaan pelanduk kepada rusa tentang siapa yang memakan hasil ikannya.

Pelanduk: /sopa samiʔ yang makan ikan kita/
siapa dia yang memakan ikan kita?

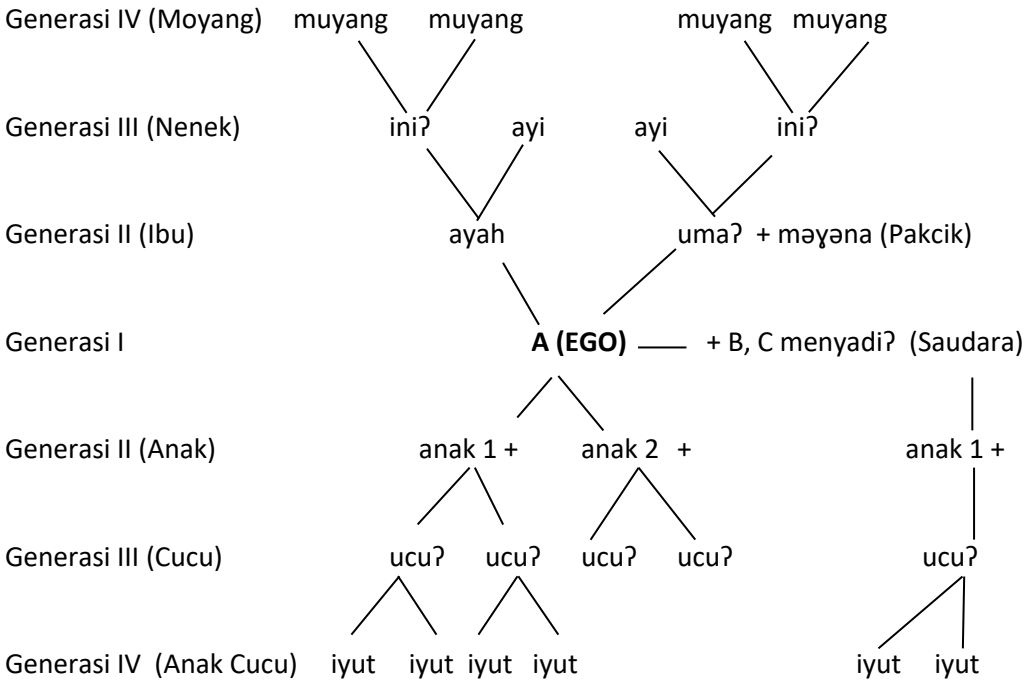
Rusa: /antu paɲaŋ/
Hantu panjang

/puʔ samiʔ laɲuk alam ɣumpuʔ/
Seseorang yang berada di dalam hutan

Sapaan dalam Lingkungan Kekeluargaan

Selain bentuk-bentuk sapaan di atas, terdapat bentuk sapaan yang khas sebagai sebahagian daripada *jantuh bebasa* kepada ahli keluarga dan saudara dalam salasilah keluarga. Jenjang kekerabatan di Riam Panjang adalah seperti Rajah 2.

Rajah 2
Jenjang Kekerabatan Melayu di Riam Panjang



Generasi pertama dalam Rajah 2 ialah A (ego). A memiliki /anak/ “anak”, */ucu/* [ucuʔ] “cucu” dan */iyut/* [iyut] “cicit” pada Generasi II, III dan IV, masing-masing. A juga memiliki adik beradik [məɲadiʔ], iaitu B dan C; B dan C memiliki keturunan yang sama dengan A, iaitu ada anak, cucu dan iyut. Hubungan A, B, C ialah satu pangkat generasi, manakala hubungan A dan anak B dan C ialah hubungan lintas generasi, iaitu hubungan antara *merena* [məɣena] “pakcik” dengan “*anak menyadi*” [anak məɲadiʔ] “anak buah”. Hubungan antara anak A dengan anak B dan C ialah hubungan satu generasi dan kedudukannya ialah *sanak tua* [sanak tua] “sepupu yang sulung”.

Hubungan persaudaraan antara A dan cucu B dan C ialah *ucu’ menyadi’* [ucuʔ menyadiʔ] “cucu saudara”. Kedudukan cucu mereka ialah satu generasi, dan mereka memiliki hubungan sepupu dua kali atau *sanak ini’* [sanak iniʔ], yang boleh diertikan “sama nenek”.

Selanjutnya A dan /iyut/ B dan C ialah anak kepada cucu saudara *iyut menyadi'* [iyut məɲadiʔ]. Kedudukan *iyut* A, B dan C ada dalam satu generasi, dan mereka memiliki hubungan sepupu tiga kali atau *sanak puyang* [sanak puyaŋ], ertinya "sama moyang". Dalam masyarakat Riam Panjang, perkahwinan antara generasi yang sama adalah digalakkan (kecuali antar saudara kandung), sejajar dengan sistem sapaan yang ada. Sebaliknya, perkahwinan lintas generasi tidak dibenarkan kerana akan menyebabkan penggunaan sapaan yang tidak sesuai (*salah tingkau)* dan *salah bebasa*. Dalam situasi tertentu, disebabkan oleh perkahwinan ini seseorang boleh dikenakan denda adat.

Jantuh bebasa juga berkaitan dengan sapaan dalam lingkungan keluarga di Riam Panjang. Bentuk sapaan dalam lingkungan keluarga tertakluk pada pangkat kedudukan seseorang dalam jenjang keluarga (Lihat Rajah 1), iaitu: (1) Anak Sulung, (2) Anak Tengah, (3) Anak Bongsu, (4) Ibu Bapa, dan (5) Keluarga.

Anak Sulung

Dalam keluarga di Riam Panjang, anak sulung ialah anak yang dihormati kerana dianggap dapat mengganti peranan ibu bapa. Justeru, terdapat bentuk sapaan khas untuk anak sulung, iaitu *uwa* [uwa] sejajar dengan bentuk [tua] yang mengalami pengguguran bunyi [t] dan munculnya geluncuran [w] antara bunyi [u] dan [a]. *Uwa* boleh digunakan untuk anak lelaki atau perempuan. Adik beradiknya diwajibkan memanggil abang mereka dengan panggilan *uwa*. Jika tidak, dipercayai akan kena *busung, tulah* atau *kualat.* Jika seseorang *uwa* mempunyai sepupu (sanak tua), maka anak sepupunya akan memanggilnya dengan gelaran *pa' uwa* [paʔ uwa] atau *ma' uwa* [maʔ uwa]. Cucu kepada sepupu tersebut pula akan memanggilnya dengan panggilan *ayi uwa* [ayi uwa] atau *ini' uwa* [iniʔ uwa].

Selain sapaan *uwa*, seseorang anak sulung juga disapa *lung* [luŋ] yang berasal daripada kata *sulung* [suluŋ] (setelah pemenggalan segmen suku kata pertama). Di Riam Panjang, kata sapaan *lung* dapat digunakan sebagai penanda gender mengikut urutan usia seseorang anak sulung. Maksudnya, jika anak pertama berjantina lelaki, maka dia akan disapa dengan *uwa*. Jika anak kedua yang dilahirkan ialah perempuan, maka anak perempuan tersebut boleh disapa *lung*. Bentuk ini bertujuan untuk menunjukkan bahawa dia ialah anak perempuan sulung dalam keluarga. Selain itu, bentuk sapaan untuk anak pertama yang pernah digunakan, iaitu *ayap*. Tetapi, sekarang tiada lagi yang mewariskan sapaan itu. Ayap dianggap sudah tidak sesuai dan ketinggalan zaman.

Anak Tengah

Anak di tengah dalam masyarakat Melayu di Riam Panjang memiliki sapaan yang pelbagai. Setiap anak dalam keluarga akan mendapat sapaan yang menepati konsep *jantuh bebasa*, terdapat beberapa sapaan untuk anak yang tengah ini seperti Jadual 4.

Jadual 4
Bentuk Sapaan untuk Anak yang Tengah

Bentuk Sapaan	Keterangan
ngah [ŋah]	Sapaan untuk perempuan atau lelaki.
anyang [aɲaŋ]	Sapaan untuk lelaki yang badannya tinggi
ulak [ulak]	Sapaan untuk lelaki dan perempuan
mu' [muʔ]	Sapaan untuk perempuan yang bererti 'kakak' yang berada di urutan dekat yang tertua.
aba [aba]	Sapaan untuk lelaki yang bererti 'abang' yang berada di urutan dekat yang tertua.
utih [utih]	Sapaan untuk lelaki dan perempuan yang kulit berwarna cerah
itam [itam]	Sapaan untuk lelaki dan perempuan yang kulit berwarna gelap
ci' [ciʔ]	Sapaan untuk saudara lelaki dan perempuan yang berada di urutan menjelang bongsu.
iyak [iyak]	Sapaan untuk lelaki dan perempuan yang berbadan kecil menjelang bongsu.

Bentuk-bentuk sapaan untuk anak di lingkungan tengah lazimnya ditentukan oleh ibu bapa mereka. Contohnya anak lelaki kedua dalam keluarga boleh dipanggil dengan panggilan *aba*, *anyang*, *itam*, *utih* dan sebagainya, mengikut pilihan ibu bapa.

Anak Bongsu

Dalam keluarga di Riam Panjang, anak bongsu ialah anak yang paling disayangi dan dimanjakan. Justeru, anak ini akan mendapatkan kata panggilan khas yang menunjukkan kesayangan ibu bapa terhadapnya seperti pada Jadual 5.

Jadual 5
Bentuk Sapaan yang Khas untuk Anak Bongsu

Bentuk Sapaan	Keterangan
uju [uju]	Sapaan untuk anak lelaki yang bongsu sesebuah keluarga, atau lelaki bongsu.
usu [usu]	Sapaan untuk anak perempuan yang bongsu. Ibu bapa biasanya akan memanggil atau membuat panggilan manja dengan variasi sebutan yang mempalatalisasikan bunyi /s/ sehingga menjadi [ucu].

Ibu Bapa

Dalam keluarga Melayu di Riam Panjang, dan di pedalaman pada umumnya, terdapat beberapa bentuk sapaan yang digunakan ke atas ibu bapa. Seorang anak tidak dibenarkan menyebut nama ibu bapa mereka. Menyebut nama orang tua adalah satu bentuk tidak *bebasa* dan menyebabkan *busung*. Adapun bentuk sapaan untuk ibu bapa, iaitu:

apa' [apaʔ]
ayah [ayah]
ama [ama]
uwa' [uwaʔ]
apang [apaŋ]

Sapaan untuk bapa

uma' [umaʔ]
umai [umay]
bunda [bunda]
ibu [ibu]
inai [inay]

Sapaan untuk ibu

Antara bentuk sapaan yang disenaraikan di atas, *apa*' dan *uma'* ialah sapaan yang am digunakan dalam keluarga Melayu Riam Panjang pada hari ini. Sedangkan kata sapaan *ama* hanya dijumpai pada golongan yang berusia kira-kira 50 tahun ke atas. Keluarga yang menggunakan sapaan *ayah* sangat terbatas kepada keluarga yang sederhana. Walaupun demikian, pilihan sistem panggilan juga berkaitan dengan faktor ekonomi, selain kelas sosial. Hal ini perlu dikaji lebih lanjut. Kajian ini juga mendapati bahawa bentuk sapaan *uwa'* hanya digunakan oleh satu atau dua keluarga sahaja di Riam Panjang. Informan mengatakan bahawa bentuk *uwa'* bersamaan dengan sapaan dalam kalangan orang Bugis di Pontianak, walaupun bentuk uwa' masih berkaitan dengan *uwa* yang mengalami tambahan bunyi hentian glotis [ʔ] . Kajian Titi (2022) berkenaan suku Bugis di Pontianak telah mengesahkan panggilan *uwa'* digunakan oleh masyarakat ini. Hal ini telah dinyatakan oleh informan dalam kajian tersebut. Selain itu, bentuk *apang* [apaŋ] dan inai [inay] pernah digunakan untuk sapaan dan rujukan. Bentuk *apang, umai* dan *inai* didapati bersamaan dengan bentuk panggilan masyarakat Ibanik (Ningkan et al., 2015). Tetapi, sekarang bentuk itu hanya kekal dalam cerita rakyat manakala dalam interaksi seharian bentuk ini tidak digunakan lagi.

Ngaran

Bentuk panggilan untuk dua orang yang kebetulan bernama sama diatur juga dalam *jantuh bebasa*. Dalam masyarakat Riam Panjang, "pasangan" yang sedemikian dianggap istimewa dan diakui seperti memiliki "ikatan persaudaraan", walaupun tiada pertalian darah. Dalam istilah tempatan, mereka dinamakan sebagai *bengaran* [bəŋaɣan]. Apabila

penutur menyapa orang yang sama nama dengannya, kata *ngaran* [ŋaɣan] akan digunakan tanpa menyebut namanya. Contohnya:

/o, ŋaɣan kulaʔ bila dataŋ/
(PART) Ngaran kamu bila datang?

Jonang

Orang Melayu di Riam Panjang juga mempunyai cara yang khas untuk menyapa orang-orang tertentu. Cara sapaan ini dinamakan sebagai *jonang* [jonaŋ] 'gelaran'. Bentuk ini, dapat dibandingkan dengan kata ganti pronomina dalam masyarakat Jawa, iaitu *panjenengan*. (Sukesti, 2000) Bezanya, di Riam Panjang, sapaan *jonang* dikaitkan dengan nama objek, fizikal dan sebagainya yang ada hubungan dengannya. Sebagai contoh:

a) Seseorang yang memiliki sawah yang luas dibandingkan orang lain, dia akan disapa sebagai *ini' sawah* [iniʔ sawah] 'datuk sawah' .
b) Orang yang gemuk akan disapa sebagai *ayi omu'* [ayi omuʔ] 'datuk gemuk'.
c) Orang yang suka bicara dan suaranya kasar akan disapa sebagai *ini' rukak* [iniʔ ɣukak].

Walaupun begitu, menyapa seseorang dengan sapaan *jonang* boleh menjadi tidak sopan dalam situasi tertentu. Situasi itu berkaitan dengan unsur supresegmental (antara nada lain) dan konteks ayat sebelum dan sesudah sapaan itu.

Jantuh Ingka'

Di Riam Panjang, terdapat sejenis variasi pertuturan yang dinamakan sebagai *Jantuh Ingka'* [jantuh iŋkaʔ]. Bentuk variasi ini sangat berkaitan dengan *jantuh bebasa*. *Jantuh Ingka'* bermaksud percakapan yang bertingkat-tingkat (berlapis-lapis). Gaya bahasa bertingkat ini kadang-kadang dinamakan sebagai *jantuh urang tua bari'* (cakap orang tua dulu-dulu). Dalam konteks linguistik, *Jantuh Ingka*' tergolong dalam bidang kajian sosiolinguistik kerana wujud penggunaan kata-kata yang bertingkat-tingkat atau berpasangan (Fox, (1986). Bahasa *Jantuh Ingka*' juga melibatkan isu releksifikasi dan stilistik. Daripada data yang dikumpulkan, kata-kata yang berunsur *Jantuh Ingka'* sebahagian besar ialah kata yang digunakan sehari-hari, misalnya kata *kroja-gawai* [kɣoja-gaway]. Kata *kroja* [kɣoja] (daripada kata *kerja*) dalam dialek Melayu Ulu Kapuas bererti "mengerjakan sesuatu kerja yang rutin", manakala kata *gawai* bererti 'mengerjakan sesuatu kerja yang baru'. Secara ringkas, *Jantuh Ingka'* terbentuk hasil gabungan daripada dua jenis kata yang sama, misalnya "kata kerja+kata kerja", atau "kata nama+kata nama". Terdapat dua golongan gabungan tersebut, iaitu sesetengahnya terdiri daripada dua kata yang lazim digunakan, dan gabungan daripada dua kata yang salah satunya ialah kata arkaik. Perhatikan Jadual 6 berikut.

Jadual 6
Contoh Jantuh Ingka' di Riam Panjang

Jantuh Ingka'	Bahasa Melayu
bawah doɣuh	Tempat yang lebih rendah
lomah nculay	Lemah, lesu
laut səgaɣaʔ	Laut, lautan
ujuŋ suŋay	Ujung, tempat terpencil
kutuɣ comeʔ	Kotor, tidak bersih
abis loŋis	Habis, tidak ada yang tinggal lagi
malam panan	Malam
aŋat bedoɣu	Hangat
licin li:s	Rapi
panci sai	Cantik, elok rupa
masak bətanak	Memasak
kɣoja gaway	Kerja
məɣapi mpaɣa	Menanak nasi
makan ŋompaʔ	Makan
tiduɣ mansut	Tidur
manis nsigit	Manis
tabar amaɣ	Tawar, tidak terasa apa-apa
lapaɣ ɲcuyuk	Lapar
bəɣubat ntama	Berobat
ketawaʔ ntai	Tertawa

Menurut informan, *Jantuh Ingka*' ialah bentuk yang halus atau berupaya menunjukkan sikap lemah-lembut dan bersopan-santun. Contohnya, dalam sesebuah mesyuarat yang diadakan untuk menentukan tarikh perkahwinan, *Jantuh Ingka*' digunakan tuan rumah ketika memberi maklum balas terhadap perkara yang disampaikan oleh tetamu.

/kalaw petuʔ kita mpokat mih bila kɣoja gaway/
Kalau sudah setuju, kita mufakatkan bila melakukan kerja-kerja (untuk acara selamatan)

/tiʔ kaʔ galay ŋodaŋ nusah aɣal bah/
Jika hendak tidur tidak usah merasa ada halangan

Ungkapan [kɣoja gaway] merupakan usaha yang menunjukkan kesantunan penutur ketika bercakap. Walaupun kata [kɣoja] "kerja" sudah memadai untuk menyampaikan maksud tentang perkara yang perlu disiapkan menjelang kenduri

perkahwinan, tetapi dengan adanya penambahan kata [gaway], ini secara langsung menunjukkan penutur sedang memberitahu pihak lawan bicara dengan rendah diri. Begitu juga dengan kata *galai ngodang* [galay ŋodaŋ] (sebenarnya, kata [galay] sahaja sudah cukup melambangkan makna "tidur").

Jantuh Ingka' didapati juga berkaitan dengan tabu bahasa. Contohnya pada waktu malam, jika seseorang hendak menyebut 'ular', dia akan menggunakan kata *ular lanyuk* [ulaɣ laɲuk] "ular". Selain itu, mereka juga tidak akan menyebut kata "hantu" tetapi digantikan dengan sebutan *ama' unas* [ama'-unas] "sesuatu benda". Bentuk sebutan sedemikian juga digunakan pada haiwan yang akan mengganggu ladang mereka, seperti babi, tikus atau beruk. Penggunaan bentuk ini dipercayai lebih *bebasa* terhadap makhluk ghaib dan haiwan-haiwan perosak.

Variasi pertuturan *Jantuh Ingka'* didapati mengandungi unsur stilistik atau keindahan gaya berbahasa lisan. Penggunaan bentuk ini akan memperindahkan lagi gaya pertuturan. Berikut merupakan contohnya:

> /dah yaʔ todiʔ lalu dibunuh sawaʔ a sidaʔ t:otak t:ukuŋ sawaʔ, dimakan disalay apa. sɣota udah iyaʔ, alu nəlamat-ɲəlaun ŋunaŋ uɣaŋ/
>
> (Setelah itu, lalu dibunuh ular sawa, dipotong ular sawa itu oleh mereka, dimakan, disalai. Sesudah itu, lalu mengadakan kenduri, mengundang orang)

Penggunaan *Jantuh Ingka*' turut berfungsi menjadi penanda identiti sosial orang Riam Panjang. Seorang informan memberitahu pengkaji bahawa ketika berada di Pontianak, mereka juga mengamalkan *Jantuh Ingka*'. Tujuannya adalah untuk menunjukkan kepada masyarakat luar bahawa mereka ialah penduduk yang berasal dari bahagian hulu yang amat menitikberatkan kesopanan berbahasa.

Kesimpulan

Berdasarkan perbincangan di atas, jelas bahawa pengamalan *jantuh bebasa* dalam masyarakat Riam Panjang adalah untuk memastikan masyarakat tersebut dilengkapi dengan budi pekerti dan tatasusila yang tinggi, juga didorong oleh kepercayaan tradisi sebagai orang Melayu. Kepentingan pilihan sapaan yang sesuai dalam masyarakat Riam Panjang penting untuk mengelakkan berlakunya *salah tiŋkaw* atau salah sapaan. Terdapat beberapa faktor penentu *jantuh bebasa* yang tepat, antaranya seperti faktor generasi dalam salasilah keluarga, usia, jenis jantina, konteks situasi dan sebagainya. Sebagai galakan untuk menyemai amalan ini, masyarakat Melayu Riam Panjang melaksanakan strategi dengan memasukkan unsur pantang larang yang bersifat menakutkan ke dalamnya, misalnya pelanggaran terhadap *jantuh bebasa* akan mendapat balasan *busung*. Kajian ini membuktikan bahawa di sebalik persamaan pengamalan sistem sapaan dalam kalangan masyarakat Melayu di Nusantara, setiap masyarakat di daerah yang berbeza turut memiliki bentuk kesantunan berbahasa yang tersendiri. Bagi kes Melayu di

pedalaman jauh Kalimantan Barat, yang budaya tradisi masih belum banyak menerima pengaruh luar, didapati bahawa konsep kesantunan berbahasa selain merupakan skop bidang sosiolinguistik, turut mencakupi bidang etnolinguistik. Dalam hal ini, angkubah kebudayaan dikenal pasti menjadi faktor penentu pilihan sapaan, malahan merupakan elemen penting yang perlu diberi perhatian dalam penelitian berkaitan dengan kesantunan berbahasa masyarakat Melayu di pedalaman jauh Kalimantan Barat.

Rujukan

Ag Ali Omar, M., Hamid, S. A. & Makhtar, R. (2020). Pengekalan kata panggilan kekeluargaan dalam kalangan keluarga kahwin campur masyarakat Brunei di Sabah. *Jurnal Melayu Isu Khas Disember 2020*, 405-419.

Al-Duleimi, H. Y., Rashid, S. M., & Abdullah, A. N. (2016). A critical review of prominent theories of politeness. *Advances in Language and Literary Studies*, *7*(6), 262-270.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology 3*(2), 77–101.

Brown, P., & Levinson, S. C. (1987). *Politeness: Some universals in language use*. Cambridge University Press.

Brown, L. (2022). *Linguistic politeness*. Dalam A. S. Byon & D. O. Pyun (Eds.), *The Routledge handbook of Korean as a second language* (pp. 51-67). Routledge.

Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice 39*(3), 124-130.

Dittrich, W. H., Johansen, T., & Kulinskaya, E. (2011). Norms and situational rules of address in English and Norwegian speakers. *Journal of Pragmatics, 43*(15), 3807-3821.

Ervin-Tripp, S. M. (1972). *Sociolinguistic rules of address*. Dalam J. B. Pride & J. Holmes (Eds.), *Sociolinguistics* (pp. 225-240). Penguin Books.

Fox, J. J. (1986). *Bahasa, sastera dan sejarah: Kumpulan karangan mengenai masyarakat Pulau Roti*. Penerbit Djambatan.

Gedat, R. (2018). *Variasi Bahasa Iban dalam berkomunikasi*. Dewan Bahasa dan Pustaka.

Hassan, S., & Abang Suhai, D. S. (2007). Kata sapaan dan panggilan dalam Bahasa Melanau: Satu kajian preliminary. *Prosiding Konferensi Antaruniversiti seBorneo-Kalimantan ke-3*, Banjarmasin, Kalimantan Selatan Indonesia.

Kroger, R. O., Wood, L. A., & Beam, T. (1984). Are the rules of address universal? II. Greek usage. *Journal of Cross-Cultural Psychology,* 15, 259-272.

Ma'alip, S., & Teo, K. S. (2019). Komunikasi antara keluarga: Bentuk panggilan kekeluargaan masyarakat orang asli Che Wong. *Jurnal Melayu,* 18(2), 100-117.

Mohd Zulkepli, M. A., Zakaria, J., & Yaakob, N. A. (2015). Kata panggilan masyarakat Bajau Tuaran. *Journal of Business and Social Development*, 3(2), 96-102.

Narawi, M.S. (2013). *Kata panggilan masyarakat Kelabit*. (Unpublished doctoral dissertation, Universiti Utara Malaysia).

Ningkan, F., Susilo, F., & Salem, L. (2015). Sapaan dalam Bahasa Dayak Iban di Desa Kumang Jaya Kecamatan Empanang Kabupaten Kapuas Hulu. *Jurnal Pendidikan dan Pembelajaran Khatulistiwa*, 4(8), 1-17.

Reniwati., & Ab. Karim, Ab. R. (2015). Kata sapaan separa rasmi dalam Masyarakat Minangkabau di Kabupaten 50 kota dan daerah Rembau: Suatu kajian perbandingan. *International Journal of the Malay World and Civilisation (Iman) 3*(2), 63-70.

Richardson, C., Yaapar, M. S., & Amir, S. (2016). Budi and Malay workplace ethics. *Journal of Asia Business Studies*, *10*(1), 78-92.

Sukesti, R. (2000). Persona Kedua dalam Bahasa Jawa: Kajian Sosio Inguistik. *Humaniora*, *12*(3), 285-294.

Sunandar, A., Heryana, N., & Syahrani, A. (2018). Leksikon tabu dalam bahasa Dayak Bekaeh. *Jurnal Pendidikan dan Pembelajaran Khatulistiwa*, *7*(4), 1-12.

Titi, S. (2022). *Sapaan dalam bahasa Bugis di Desa Parit Wak Pai'k Kecamatan Segedong Kabupaten Mempawah (Kajian Sosiolingustik)*. (Unpublished doctoral dissertation, IKIP PGRI Pontianak).

Vallerga, M., & Zurbriggen, E. L. (2022). Hegemonic masculinities in the 'Manosphere': A thematic analysis of beliefs about men and women on The Red Pill and Incel. *Analyses of Social Issues and Public Policy*, *22*(2), 602-625.

Yusriadi. (2006). Perkawinan Melayu Embau, Laporan dari Riam Panjang. Dalam Dedy Ari Asfar, Yusriadi, Hermansyah. (2006). *Budaya Melayu di Kalimantan Barat*. (pp. 1-12). STAIN Pontianak Press.

Yusriadi, Y. (2020). "Urang Diri'" and the narrative of brotherhood among the Malays in the Hinterland of Ulu Kapuas. *Journal of Internantional Conference on Religion, Humanity and Development*, *1*(1), 73-82 .

Yusriadi. (2023). *Ensiklopedia budaya Melayu Ulu Kapuas Kalimantan Barat*. TOP Indonesia.

LINGUISTIC COMPLEXITY AND SIMPLIFICATION IN TRANSLATION: COGNITIVELY-GROUNDED PHONOLOGICAL METRICS

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Manuscript received 22 January 2023
Manuscript accepted 7 December 2023
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https://doi.org/10.33736/ils.5356.2023

ABSTRACT

Translated text (TT) is characteristically simpler than non-translated (NTT) authentic text in terms of its lexicon, syntax, and style (Laviosa-Braithwaite, 2001). It is still not entirely clear what causes this phenomenon, and scholars continue to debate the issue. The traditional metrics that are implemented in the simplification literature are often criticised as unreliable and lacking cognitive grounding. This paper addresses this limitation in the literature and proposes a paradigm that uses complexity-based measures adopted from phonology and cognitive psychology. Calculations are run on a corpus of 100 translated and non-translated article abstracts from five academic disciplines. Statistical analyses reveal that TTs use shorter words from dense phonological neighbourhoods. The findings suggest that adopting a cognition-informed approach is essential in elucidating the process of simplification. The results are relevant to the issues of universality and multidimensionality of translation as a form of constrained communication.

Keywords: linguistic complexity; neighbourhood density; phonological complexity; phonotactic probability; simplification

Introduction

Decades-long research into the linguistic features that are postulated to distinguish translated (TTs) and non-translated texts (NTTs) has yielded empirical evidence that TTs

are lexically, syntactically, and stylistically simpler than NTTs (Hu, 2016; Laviosa-Braithwaite, 2001). Linguistic differences between TTs and NTTs exhibit such consistent patterns that they can be detected by machine classification algorithms, resulting in the successful identification of TTs at a high accuracy rate (Rabinovich & Wintner, 2015).

Several corpus-based studies analysing a variety of text genres from different languages have revealed that far more function words appear in TTs than in NTTs, rendering TTs lexically less dense. At the same time, highly frequent lexical items appear more often in TTs than in NTTs (see the next section for references). These features have been taken as diagnostics of simplification, which has been treated in corpus-based translation literature as a translation universal (Baker, 1993, 1996; Laviosa, 2002). As a putative universal, simplification is believed to be "inherent in the translation process itself" (Baker, 1993, p. 243). Simplification is presumed to apply subconsciously and is inaccessible to the translator (Baker, 1996; Olohan & Baker, 2000). However, there is no evidence, to date, supporting this process-inherent automaticity claim.

The standard research paradigm in simplification studies looks for evidence for simplification along lexical parameters that are likely to be under the translator's conscious control. These parameters include sentence length, use of varied lexicon, presence of frequent lexical items, and prevalence of function words. Translation, as a form of mediated writing, involves some form of deliberation while making conscious decisions regarding word choice, register, sentence size, etc. As Roehr-Brackin (2015) puts it, translators make a "conscious effort to analyse the input and control the output" (pp. 118–119). More recently, Wang (2020) writes, "the translation process is a psychological and introspective process, as well as a process of problem solving and decision-making" (p. 1413). The traditionally used metrics indicate that simplification happens, but they do not entail that it happens subconsciously. The current study is an attempt to fill this gap in the literature.

The study aims to explore the issue of simplification using sub-lexical phonological metrics that tap into the cognitive component of the translation process. Unconscious priming (e.g., Bazan et al., 2019) provides evidence that phonology is processed unconsciously. Phonological Complexity, Neighbourhood Density, and Phonotactic Probability are established metrics in phonological and cognitive psychology literature, with documented effects on word recall, processing, and learning. Despite their well-documented utility, these metrics have yet to be incorporated into simplification studies. The research questions that this study seeks to address are as follows:

1. Are translated texts phonologically less complex than non-translated texts?
2. Do translated texts use more words from denser phonological neighbourhoods?
3. Do translated texts use more words with higher phonotactic probabilities?

Literature Review

Simplification in Translation

Simplification is defined as "the idea that translators subconsciously simplify the language or message or both" (Baker, 1996, p. 176). Since its inception as a translation universal in the 1990s, simplification has been firmly associated with a simpler language in TTs. Inspired by the notions put forth in Baker's seminal study (1993), numerous studies have examined monolingual comparable corpora of TTs and NTTs looking for translation universals, including simplification (see Robin, 2017, for a review). Three types of simplification are investigated in the literature: lexical, syntactic, and stylistic (Laviosa-Braithwaite, 2001). However, for scope reasons, the current study focuses on lexical simplification. Table 1 summarises some of the most frequently used measures of lexical simplification.

Table 1
Summary of the Most Frequently Used Measures of Lexical Simplification

Parameter	Description	Expected Difference
Sentence Length	The average number of words in a sentence in a given text.	TTs < NTTs
Lexical Density	The ratio of lexical words to function words in a given text.	TTs < NTTs
Type-token Ratio	The proportion of the number of different words (types) to the total number of running words (tokens) in a given text.	TTs < NTTs

Note. < = less than.

A cross-examination of the relevant literature reveals that sentence length is genre- and language-dependent. For example, it is found to be shorter in translated than non-translated newspaper articles, whereas the opposite pattern is reported for fiction (Laviosa, 1998). Similarly, Liu and Afzaal (2021) reported a genre-based effect, where translated prose and academic writing are less complex, whereas translated fiction is more complex than NTTs. Williams (2005), however, reported mixed results for English and French. Sentences in translated French texts from English were 12% shorter than sentences in non-translated French texts. This difference was statistically significant. In contrast, sentence-length differences were going in the opposite direction for English-translated and non-translated texts by 15% but did not reach statistical significance.

Several studies have examined TT corpora from a variety of languages and reported lower lexical density in TTs than in NTTs. These studies include Laviosa (1998) on translated English from multiple languages, Hu (2016), and Xiao and Dai (2014) on translated Chinese from English, and Williams (2005) on translated English from French. However, the Williams (2005) study also reported a statistically non-significant difference in lexical density between translated and non-translated French texts going in the opposite direction. Similarly, Ferraresi et al. (2019) found no significant differences in lexical density for translated English from French. But their translated English texts from Italian were even lexically denser.

The above studies also examined type-token ratios and reported inconsistent findings. While Laviosa (1998) and Hu (2016) found differences in the expected direction: lower type-token ratios in TTs, Ferraresi et al. (2019) found no significant differences in English texts translated from French or Italian. Likewise, Xiao and Dai (2014) reported no significant differences between Chinese TTs and NTTs. Williams (2005), however, reported the same language-dependent pattern as seen for lexical density above. The type-token ratio in English-translated texts is significantly lower than in English NTTs. The difference, which goes in the opposite direction, between French TTs and NTTs does not reach statistical significance.

The mixed findings enumerated above have been variously attributed to genre, language, and/or modality effects. Some commentators suggest that the incompatible requirements of the genres are responsible for the mixed findings, as more explicitness is desired in some text types than in others (e.g., Kruger & van Rooy, 2012). Other researchers contend that the discrepancies are language-dependent (e.g., Williams, 2005). Simplification is observed in TTs from certain source languages, but not others. Yet a third group of researchers appeal to the modality of the activity, suggesting that simplification is greater in interpreting than in translation (e.g., Sandrelli & Bendazzoli, 2005).

Linguistic Complexity Metrics

Phonological Complexity

In the literature on cognitive linguistics, phonological complexity is often defined quantitatively in terms of the number of sounds or syllables in a word (Mueller et al., 2003). Experiments on verbal working memory show that shorter words are recalled more accurately than longer words (e.g., Baddeley et al., 1975; Longoni et al., 1993). This is known as the word-length effect or short-word advantage (Tehan & Tolan, 2007).

Numerous studies have also demonstrated that words that are less phonologically complex are acquired earlier (Braginsky et al., 2019; Gendler-Shalev et al., 2021). Commenting on short-word advantage in early vocabulary production, Gendler-Shalev et al., (2021) suggest that it “represents a subconscious selection of less complex words” (p. 790). Similarly, Braginsky et al., (2019), who explored consistency and variability in “acquisition trajectories of around 400 words in each of 10 languages” (p. 53)

using data from more than 32,000 children, reported a large effect of phonological complexity on production. Shorter words are more likely to be produced by more children. In reading comprehension, longer words are also said to slow down processing by leading to longer pauses and eye fixations (Rojo López, 2015). Importantly, Edwards et al. (2011) contend that the development of the lexicon goes hand in hand with the development of phonology, and hence, they should not be studied independently of each other.

The present study is the first to bring phonology into the realm of lexical simplification in translation. In this paper, Phonological Complexity represents ontological complexity (Forker, 2021; Rescher, 1998). The more sounds a text has, the more complex it is. So, if simplification obtains, TTs will have words composed of fewer sounds, on average, than in NTTs.

Neighbourhood Density

Neighbourhood Density (ND) is an instantiation of "phonological regularity" in terms of "sound similarity" (Freedman & Barlow, 2012, p. 371). ND generally refers to the cluster of words that are maximally similar to a given word (w), differing by one phone from w (Luce & Pisoni, 1998). Words in such a cluster are called neighbours. For example, "cat", "pat", "rat", and "sat" are neighbours. The larger the size of the cluster, the denser the neighbourhood. Numerous studies have documented the behavioural effects of ND on various aspects of language processing. Participants' performance is traditionally measured in terms of the speed and accuracy of their responses. The exception here is retrieval effort. In pupillometric studies, retrieval effort is indexed by pupil response (e.g., Goldinger & Papesh, 2012; Laeng et al., 2012).

Results from language processing research reveal a high-ND disadvantage in recognition among monolinguals (e.g., Luce & Pisoni, 1998; Marian & Blumenfeld, 2006). Items from dense neighbourhoods are recognised more slowly than items from sparse neighbourhoods. This is expected given that recognition involves deciding among competing alternatives. With bilinguals, high-ND in the non-target language (the language not being tested) is reported to have an inhibitory effect on the recognition of the items presented in the target language (e.g., Chen & Sie, 2019; Dirix et al., 2017). In contrast, high-ND items are recalled more rapidly and accurately than low-ND items (e.g., Allen & Hulme, 2006; Roodenrys et al., 2002; Storkel et al., 2006). ND is also found to have a facilitatory effect on production by monolinguals (e.g., Jones, 2018; Marian & Blumenfeld, 2006; Vitevitch, 2002). This high-ND advantage in production is also reported for bilinguals (e.g., Bradlow & Pisoni, 1999; Stamer & Vitevitch, 2012).

Items from denser neighbourhoods are also learned faster and more accurately by monolinguals and bilinguals than items from sparse neighbourhoods (e.g., de Groot et al., 2002; Jones, 2018; Stamer & Vitevitch, 2012, for monolinguals, and Nair et al., 2017, for bilinguals). Interestingly, the high-ND disadvantage in recognition is also replicated in the pupillometric study by Schmidtke (2014) for both monolinguals and bilinguals.

Schmidtke (2014) reported that words from dense neighbourhoods were retrieved with greater effort.

This paper is the first to utilise Neighbourhood Density to quantify simplification. Neighbourhood Density concerns the functional aspect of linguistic complexity, which involves the notion of cost associated with processing and production. Since high-ND items are easier to recall and produce, TTs are expected to have more words from dense neighbourhoods.

Phonotactic Probability

Phonotactic Probability (PP) is generally defined as the likelihood of the occurrence of a sound or cluster of sounds in a given sequence for a given text (Vitevitch et al., 1999). For example, in English, as a word-initial sequence, [pr] is phonotactically probable; the sequence [pn] is improbable in word-initial positions. Several studies have reported a facilitatory effect of high PP on item recognition and recall in terms of speed and accuracy for both monolinguals and bilinguals. For example, with monolinguals, Luce and Large (2001), Vitevitch et al. (2004), and Vitevitch et al. (1999) found that high-probability sound combinations are recognised faster and more accurately than sound sequences with low PP. For bilinguals, Lee (2011) reported that high-probability sequences elicited faster and more accurate responses. Similarly, the speed and accuracy of non-word recall by monolinguals are reported to be greater for high-PP items (e.g., Thorn & Frankish, 2005). Experimental work with bilinguals reveals a similar effect. For example, Messer et al., (2015) reported a recall advantage for high-PP. High-PP is also reported to have a facilitatory effect on non-word production by monolinguals and bilinguals (e.g., Edwards et al., 2004; Freedman & Barlow, 2012).

In terms of non-word learning, converging evidence points to a low-PP advantage that characterises monolingual and bilingual learning. Low Phonotactic-Probability non-words trigger learning because they sound different from other known words. Hoover et al. (2010), Storkel et al. (2006) and Storkel (2009) reported that their monolingual participants learned a larger number of low-PP non-words. This facilitatory effect on word learning is also reported in experimental studies with bilinguals (e.g., Chen & Sie, 2019; Nair et al., 2017).

This paper is the first to implement Phonotactic Probability in the study of simplification. Phonotactic Probability is a measure of functional complexity, involving processing and production cost. Since high-PP items are easier to recall and produce, more words with frequent sound combinations in TTs would mean simplification.

Theoretical Framework

This study is guided by the concepts and principles originally developed in corpus linguistics and adopted later in corpus-based descriptive translation studies. The corpus-based framework is empirical: it describes and analyses actual language use, rather than

idealised language data (Laviosa, 1998). This framework aims to identify linguistic features that distinguish one form of text from another and to discover linguistic regularities in terms of patterns of repetitions, similarity, and co-occurrence, which underlie the phonology-based metrics proposed in the current study. For more on the corpus-based translation paradigm, see Baker (1993).

The paper analyses monolingual comparable corpora of TTs and NTTs, testing for simplification using phonological metrics that tap into the functional notions of cost and effort which impact human cognition. The principle of least effort (Zipf, 1949) is presumed to be behind the observation that, whenever there is a choice, human activities display a preference for behaviours and paths that require minimal effort. Simplification in translation could be envisaged to follow this cognitive predisposition. Also relevant is the insight from the theory of cognitive economy (Rescher, 1989) regarding the tendency of cognitive processes to minimise cost. Translation as a process that involves recasting a message from one linguistic system into another comes at a cognitive cost in terms of language and message processing, recall, and production. As explained in the previous section, the phonology-based metrics in this study are relevant to these aspects of human cognition.

Methodology

The Corpus

As presented in Table 2, the corpus is made up of abstracts of 100 research articles published between 2018 and 2022 in 10 academic journals. This genre is selected based on the presumption that abstract writing is very constraining and likely to foster a high-fidelity reproduction of the original content into another language. The abstracts are all written in English, with 50 translated from Arabic. Translated abstracts are all from articles written in Arabic, with the abstract being the only section that appears in both Arabic and English. The abstracts come from five academic disciplines selected from the 10 main classes of the Dewey Decimal Classification (Dewey, 1876). Twenty abstracts (10 TTs and 10 NTTs) were extracted from each of these disciplines.

Since the three sub-lexical metrics are calculated over phonological units (sounds), not orthographic characters (letters), the corpus abstracts are converted into phonetically transcribed texts using the International Phonetic Alphabet (The International Phonetic Association, 1999). For phonetic conversion, the web-based edition of the to-Phonetics Converter was utilised (Mu-Sonic Ltd, 2013). Phonetic forms were imported from the open Carnegie Mellon University Pronouncing Dictionary as implemented in to-Phonetics Converter. In the corpus, there are 20523 words spelled with 113414 letters corresponding to 104883 sounds, with 8531 extra letters.

Table 2
Corpus Sources

Class	Division	Journal	Vol. (issue)	Year	Publisher
200 Theology	290 Non-Christian Religion	Journal of Islamic Studies	29 (2, 3) 30 (1, 2, 3) 31 (2, 3) 32 (1)	2018 2019 2020 2021	Oxford University Press
		Journal of Islamic Studies	32 (2, 3)	2020	King Saud University
300 Sociology	370 Education	Journal of Education	200 (3) 201(1)	2020 2021	Sage
		Journal of Educational Sciences	32 (3) 33 (1)	2020 2021	King Saud University
600 Useful Arts	630 Agriculture	Journal of Agriculture and Food Research	7	2022	Elsevier, ScienceDirect
		Scientific Journal of King Faisal University: Basic and Applied Sciences	21 (1, 2)	2020	King Faisal University
700 Fine Arts	720 Architecture	The Journal of Architecture	26 (7, 8)	2021	Taylor & Francis Group
		Journal of Architecture and Planning	33 (3, 4) 34 (2)	2021 2022	King Saud University
900 History	910 Geography	The Geographical Journal	188 (2)	2022	Wiley
		Arab Geographical Journal	53 (78, 79)	2022	Société De Geographie De Egypte

Data Processing

Prior to phonetic conversion, punctuation marks and numbers were removed from the corpus. This was done using a Python script. Next, the corpus was IPA-transcribed. The number of words, characters, and sounds in each text were extracted via a Python script. Phonological-Complexity values were calculated using Formula 1.

Formula 1: $$PC = \frac{\sum sound\ segmenst}{\sum words}$$

Neighbourhood-Density and Phonotactic-Probability values for each of the 100 texts were obtained from Phonological Corpus Tools (PCT), version 1.5.1 (Hall et al., 2022). The query for Neighbourhood Density used Levenshtein Edit Distance as the string similarity algorithm and was run for all words in each text. Pronunciation variants were set to "canonical forms only". Phonotactic Probability calculation was based on the algorithm by Vitevitch and Luce (1998). The query was set to calculate Phonotactic Probability for all words in each text. Again, Pronunciation variants were set to "canonical forms only". Biphone probabilities were computed using token counts. For more information on the method, see Hall et al. (2022) and Vitevitch and Luce (1998).

Statistical Analysis

In this study, Phonological Complexity, Neighbourhood Density, and Phonotactic Probability make the Dependent Variables (DVs) of the study. TextType (TT or NTT) is the Independent Variable (IV). However, given that the 100 texts are drawn from 10 journals that are themselves drawn from five academic disciplines, it is possible to find greater similarity among observations from the same journal and/or discipline, which can lead to clustering effects and non-independence in the data. The dataset has a nested hierarchical structure. The present study comprises a corpus of 100 abstracts, which are distributed among 10 scholarly journals that are classified within five distinct disciplinary fields.

In linguistics and behavioural sciences, the go-to statistical tool to capture the nestedness of datasets is the mixed-effects model (Baayen et al., 2008; Barr et al., 2013). According to Titz (2020), Mixed-effects modelling "is rapidly becoming the gold standard of statistical analysis in the behavioural sciences" (p. 1). However, although translation corpora are intrinsically hierarchical, this type of statistical analysis is still under-reported in translational studies but see De Sutter and Lefer (2020) for an important contribution in this area.

The current study fits mixed-effects models to test for simplification along three DVs. For each of these DVs, a null model with Journals nested within Disciplines is fitted first. The purpose of that is to assess whether there is a need for multilevel modelling. Multilevel modelling can detect and handle any clustering effects among the observations. It is important to ensure that the lack of independence among the observations, if present, is statistically handled. According to Garson (2020), ignoring "heteroskedastic error variance […] will lead to inaccurate standard errors and significance tests" (p. 57). The present study involves an evaluation of the contribution made by the random effects of Journals that are nested within Disciplines, with Disciplines serving as the upper-level units. In mixed models, interclass correlation coefficients (ICCs) are used for this purpose (see Garson, 2013). The ICC gives an indication of the "effect size" of the upper-level

grouping variables, which in turn, determines whether a given DV is independent of the grouping variable. The closer ICC value is to zero, the little effect the grouping has.

Model fitting and statistical analyses were performed in R (R Core Team, 2022) using the lmer4 package (Bates et al., 2015) and the lmerTest package (Kuznetsova et al., 2017). Satterthwaite's (1946) method was used to compute degrees of freedom for significance testing and for the calculation of *p*-values. To select the best-fitting model for each DV, the Akaike Information Criterion (AIC) was used. A lower AIC signifies better fit and less error. The alpha level was set to .05.

Results

The statistical analysis in this study answers these research questions: (1) Are translated texts phonologically less complex than non-translated texts?, (2) Do translated texts use more words from denser phonological neighbourhoods?, and (3) Do translated texts use more words with higher phonotactic probabilities? Results reveal that TTs have smaller phonological-complexity and Phonotactic-Probability mean values, but a higher Phonological Neighbourhood-Density mean value. Table 3 gives the summary statistics of TTs and NTTs pooled across the disciplines.

Table 3

Mean and Standard Deviation (SD) Values of TTs and NTTs along the metrics of the Study

	Non-Translated	Translated
Phonological Complexity	5.41 (0.398)	4.95 (0.352)
Phonological Neighbourhood Density	0.270 (0.0811)	0.308 (0.104)
Phonotactic Probability	0.0316 (0.006)	0.0297 (0.004)

Comparison of Phonological Complexity of Translated Texts and Non-Translated Texts

As can be seen from Table 4, TTs are consistently less phonologically complex than NTTs. On average, words from TTs are composed of fewer sounds than words from NTTs. Education and Agriculture display the highest values in the corpus. This means that TTs and NTTs from these disciplines use, on average, longer words than the rest of the disciplines in the study. To test the statistical significance of these differences, three models were fitted. The empty model with the random effect of Journals nested in Disciplines ran into the Singular Fit problem. This happens when the variances/covariances of one of the random effects are already accounted for by the other random term. This is usually a sign of overfitting. To solve this problem, Barr et al., (2013) recommend simplifying models by dropping random effects with little contribution to model fit. In the current study, the variance of the upper-level variable (DisciplineID) was 0.00, with ICC= 0.00. It was therefore dropped and the model was re-fitted using the nested term, which has an ICC score of 0.49. Now to find out whether Text Type (TTs vs

NTTs) can explain any amount of the variation in the data, a mixed model with this fixed-effect variable was fitted.

Table 4
Mean and (SD) Values of Phonological Complexity of TTs and NTTs

	Non-Translated	Translated
Education	5.78 (0.404)	5.10 (0.390)
Agriculture	5.49 (0.334)	5.17 (0.321)
Religion	4.99 (0.182)	4.65 (0.281)
Geography	5.43 (0.324)	4.97 (0.262)
Architecture	5.33 (0.291)	4.86 (0.280)

As can be seen from Table 5, which gives model fit statistics for both empty and best-fitted models, adding Text Type resulted in a significant improvement of the model fit ($\chi^2(1, N=100) = 7.13$, $p= .007$). This improvement is also seen in a lower AIC (=75.69) than for the empty model (AIC= 80.82). The fixed effect of Text Type is also statistically significant: $t(10)= –3.23$, $p= .009$, *CI* (2.5% – 97.5%)= -0.73 – -0.18. Note that this difference could be due to other factors not investigated here.

Table 5
Model Fit Statistics

	Empty Model PC ~ (1 | JournalID:DisciplineID)	Best-fitted Model PC ~ TextType+(1 | JournalID:DisciplineID)
AIC	80.82	75.69
LogLik	-37.41	-33.84
Deviance	74.82	67.69
N. Parameters	3	4
Model Comparison		
χ2	7.13	
d.f.	1	
p.	0.007	

Neighbourhood Density and Translated Text

Results of Neighbourhood Density show that TTs consistently have words from denser neighbourhoods. This result holds for both pooled data as presented in Table 3 and most discipline-grouped data as provided in Table 6. An empty model with the random effect of Journals nested in Disciplines was fitted. Neither random effect contributed significantly to the model. Their variances and ICC values were close to zero. For this

reason, multilevel modelling was dismissed and a simpler statistical test was used instead. A two-sample t-test found the Neighbourhood-Density difference between TTs and NTTs to be statistically significant at α=.05: *t*(98)= -2.014, *p*=.046, *CI* (2.5%–97.5%)= -0.074– -.0005.

Table 6

Mean and (SD) Values of Phonological Neighbourhood Density of TTs and NTTs

	Non-Translated	Translated
Education	0.239 (0.0842)	0.261 (0.0873)
Agriculture	0.268 (0.0784)	0.279 (0.102)
Religion	0.281 (0.104)	0.393 (0.104)
Geography	0.301 (0.0697)	0.289 (0.0823)
Architecture	0.263 (0.0684)	0.317 (0.109)

Phonotactic Probability and Translated Texts

Results of Phonotactic Probability reveal that TTs have words with lower phonotactic probability as calculated over the pooled data as shown in Table 3 and the disaggregated data for Education, Geography, and Architecture as presented in Table 7. The remaining disciplines (Agriculture and Religion) have the difference in the opposite direction. In the empty model with the random effect of Journals nested in Disciplines, both random effects failed to reach significance. Their variances and ICC values were close to zero. For this reason, multilevel modelling was dismissed, and a simpler statistical test was used instead. A Welch two-sample t-test found no significant Phonotactic-Probability difference between TTs and NTTs at α=.05: *t*(88.95)= 1.7822, *p*= .078, *CI* (2.5% – 97.5%)= -0.0002– 0.004.

Table 7

Mean and (SD) values of Phonotactic Probability of TTs and NTTs

	Non-Translated	Translated
Education	0.0392 (0.0059)	0.0321 (0.0035)
Agriculture	0.0302 (0.0027)	0.0309 (0.0046)
Religion	0.0290 (0.0034)	0.0298 (0.0051)
Geography	0.0301 (0.0077)	0.0282 (0.0050)
Architecture	0.0296 (0.0035)	0.0276 (0.0029)

Discussion

This study has explored the issue of simplification in translation within a paradigm that allows us to examine the automaticity claim, which seems to be tacitly assumed in various

operationalisations of simplification, but for which no conclusive evidence has been reported. Taken together, the results of the study reveal that TTs are indeed simpler than NTTs. On average, TTs have shorter words that come from denser phonological neighbourhoods. TTs are statistically distinguishable from NTTs in terms of their phonological complexity and neighbourhood density. Failure of the phonotactic probability difference between TTs and NTTs to reach statistical significance is unexpected, given the numerous reports in the literature which have documented the high Phonotactic-Probability advantage in recall, recognition, and production.

Since the current study is the first to investigate these phonology-based metrics in the context of simplification, it would be premature to dismiss any potential effect of Phonotactic Probability. To explain this lack of statistical significance, we need more studies tackling Phonotactic Probability in translation corpora. The present study adds to the repertoire of measurement that could be further evaluated within the framework of the revised research agenda for corpus-based translation studies that De Sutter and Lefer (2020) have proposed. It is hoped that the adoption of their revised agenda as a framework for future translation studies will lead to advances in theory, methodology, and analytics that will make it possible to expand the testing grounds for simplification beyond monolingual comparable corpora, as currently is the norm, to include bilingual parallel corpora, with the proviso that any confounding factors that potentially arise as a result of comparing disparate linguistic systems are appropriately controlled for.

The new agenda defines translation as "an inherently multidimensional linguistic activity and product, which is simultaneously constrained by sociocultural, technological and cognitive factors" (De Sutter & Lefer, 2020, p. 1). The cognitively grounded phonological metrics proposed here are in line with De Sutter and Lefer's (2020) call for "exploring new, more sophisticated linguistic indicators" (p. 19). More research is needed to test the validity of these metrics in translation corpora from other languages and other genres.

Relatedly, the need for a better understanding of the structure of translation data cannot be overemphasised. Even in a limited study such as the current one, which implements a basic multilevel model, it is clear that multilevel modelling is useful in identifying and handling a lack of data independence when it is present. In the phonological-complexity data, the model was successful in partitioning the variation that was due to journals nested in disciplines on the one hand, and the variation that was attributable to TextType, on the other. In contrast, when the upper-level grouping effects were absent, as was the case with Neighbourhood Density and Phonotactic Probability data, the mixed model, again, successfully indicated that.

As to the automaticity question, simplification unambiguously manifested itself along the sub-lexical (except for Phonotactic Probability) measures of the study. Unlike many lexical measures of simplification, sub-lexical phonological measures presumably fall beyond the conscious control of translators. Nonetheless, simplification happens along these phonological parameters. This result unveils what must be a genuinely

cognitive component of simplification. Therefore, it seems reasonable to conclude that a cognition-informed account may hold the key to demystifying simplification.

According to De Sutter and Lefer (2020, p. 2), among the "[f]undamental questions" that "remain largely unanswered" is which "cognitive mechanisms shape translation". For scope and space limitations, the current study can only speculate on this unresolved issue. Two hypotheses in the literature seem particularly relevant. These are (1) Rescher's (1989) cognitive economy complemented by the principle of least effort (Zipf, 1949), and (2) Halverson's (2015) cognitive salience. Together, they have good potential to generate useful insights that can account for the simplification effect uncovered here. Perhaps what needs to be investigated in future research that aims to explore the cognitive underpinnings of simplification is the observation that highly frequent, thus salient, words tend to be short and require minimal mental effort to recall and produce.

Another question that remains is whether this effect is translation-specific, i.e., "a product of constraints which are inherent in the translation process itself", in Baker's words (1993, p. 243) or "a universal strategy inherent in the process of language mediation, as practised by language learners, non-professional translators and professional translators alike", as Blum-Kulka (1986, p. 21) puts it. The resemblance that translation bears to other forms of mediated or constrained discourse has been amply highlighted in the literature over the past decades (Bisiada, 2017). Translation has also been likened to non-native language and bilingual communication (Rabinovich et al., 2016).

It would be interesting to see if the paradigm used here would still yield similar conclusions when applied to other forms of mediated or bilingual communication. Clearly, this topic merits further research, as it would (1) improve our understanding of the dynamics of simplification in other forms of text, translated or non-tanslated, and (2) inform our judgement on where to place translation among the various forms of mediated discourse.

Conclusion

The study has taken an interdisciplinary approach to the issue of simplification in translation. Although corpus-based inquiry into simplification dates back to the 1990s, a question mark still hangs on its ontological status. This is partly due to the mixed findings in the literature. The lexical metrics that are traditionally used to quantify simplification are often criticised as lacking robustness and cognitive grounding. The current study has tested for simplification using complexity-based measures adopted from phonology and cognitive psychology. The study supports the simplification hypothesis. The findings reported here imply that simplification is an effect that bears the hallmark of the workings of human cognition. So far, the current study has highlighted a cognitive component of simplification and added a multi-disciplinary twist to the narrative. However, more research is needed to fully understand how and why simplification in translation happens.

References

Allen, R., & Hulme, C. (2006). Speech and language processing mechanisms in verbal serial recall. *Journal of Memory and Language*, *55*(1), 64-88. https://doi.org/10.1016/j.jml.2006.02.002

Baayen, R., Davidson, D., & Bates, D. (2008). Mixed-effects modeling with crossed random effects for subjects and items. *Journal of Memory and Language*, *59*(4), 390-412. https://doi.org/10.1016/j.jml.2007.12.005

Baddeley, A., Thomson, N., & Buchanan, M. (1975). Word length and the structure of short-term memory. *Journal of Verbal Learning and Verbal Behavior*, *14*(6), 575-589. https://doi.org/10.1016/S0022-5371(75)80045-4

Baker, M. (1993). Corpus linguistics and translation studies: Implications and applications. In M. Baker, G. Francis, & E. Tognini-Bonelli (Eds.), *Text and technology: In honour of John Sinclair* (pp. 233-252). John Benjamins.

Baker, M. (1996). Corpus-based translation studies: The challenges that lie ahead. In H. Somers (Ed.), *Terminology, LSP and translation: Studies in language engineering, in honour of Juan Sager* (pp. 175-186). John Benjamins.

Barr, D., Levy, R., Scheepers, C., & Tily, H. (2013). Random effects structure for confirmatory hypothesis testing: Keep it maximal. *Journal of Memory and Language*, *68*(3), 255-278. https://doi.org/10.1016/j.jml.2012.11.001

Bates, D., Mächler, M., Bolker, B., & Walker, S. (2015). Fitting linear mixed-effects models using lme4. *Journal of Statistical Software*, *67*(1), 1-51. https://doi.org/10.18637/jss.v067.i01

Bazan, A., Kushwaha, R., Winer, E., Snodgrass, J., Brakel, L., & Shevrin, H. (2019). Phonological ambiguity detection outside of consciousness and its defensive avoidance. *Frontiers in Human Neuroscience*, *13(1)*, 1-14. https://frontiersin.org/articles/10.3389/fnhum.2019.00077

Bisiada, M. (2017). *Universals of editing and translation*. Language Science Press. http://hdl.handle.net/10230/33522

Blum-Kulka, S. (1986). Shifts of cohesion and coherence in translation. In J. House & S. Blum-Kulka (Eds.), *Interlingual and intercultural communication discourse and cognition in translation and second language acquisition studies* (pp. 17-35). Gunter Narr Verlag Tübingen.

Bradlow, A., & Pisoni, D. (1999). Recognition of spoken words by native and non-native listeners: Talker-, listener-, and item-related factors. *The Journal of the Acoustical Society of America*, *106*(4), 2074-2085. https://doi.org/10.1121/1.427952

Braginsky, M., Yurovsky, D., Marchman, V., & Frank, M. (2019). Consistency and variability in children's word learning across languages. *Open Mind*, *3*, 1-16. https://doi.org/10.1162/opmi_a_00026

Chen, T.-Y., & Sie, Y.-S. (2019). *A reassessment of the effects of neighborhood density and phonotactic probability on L2 English word learning*. *Proceedings of the 11th*

International Conference on Mental Lexicon, 1, 104. https://doi.org/10. 7939/r3-sb0h-jj73

de Groot, A., Borgwaldt, S., Bos, M., & van den Eijnden, E. (2002). Lexical decision and word naming in bilinguals: Language effects and task effects. *Journal of Memory and Language*, *47*(1), 91-124. https://doi.org/10.1006/jmla.2001.2840

De Sutter, G., & Lefer, M. (2020). On the need for a new research agenda for corpus-based translation studies: A multi-methodological, multifactorial and interdisciplinary approach. *Perspectives*, *28*(1), 1-23.

Dewey, M. (1876). *A classification and subject index for cataloguing and arranging the books and pamphlets of a library.* Lockwood & Brainard Company.

Dirix, N., Cop, U., Drieghe, D., & Duyck, W. (2017). Cross-lingual neighborhood effects in generalized lexical decision and natural reading. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *43*(6), 887-915. https://doi.org/10.1037/xlm0000352

Edwards, J., Beckman, M. & Munson, B. (2004). The interaction between vocabulary size and phonotactic probability effects on children's production accuracy and fluency in non-word repetition. *Journal of Speech, Language, and Hearing Research*, *47*(2), 421-436. https://doi.org/10.1044/1092-4388(2004/034)

Edwards, J., Munson, B., & Beckman, M. (2011). Lexicon-phonology relationships and dynamics of early language development. *Journal of Child Language*, *38*(1), 35-40. https://doi.org/10.1017/S0305000910000450

Ferraresi, A., Bernardini, S., Petrović, M., & Lefer, M. (2019). Simplified or not simplified? The different guises of mediated English at the European parliament. *Meta*, *63*(3), 717-738. https://doi.org/10.7202/1060170ar

Forker, D. (2021). Complexity and its relation to variation. *Frontiers in Communication*, *6*(1), 1-11. https://doi.org/632468

Freedman, S., & Barlow, J. (2012). Using whole-word production measures to determine the influence of phonotactic probability and neighborhood density on bilingual speech production. *International Journal of Bilingualism*, *16*(4), 369-387. https://doi.org/10.1177/1367006911425815

Garson, G. (2013). Fundamentals of hierarchical linear and multilevel modeling. In G. Garson (Ed.), *Hierarchical linear modeling: Guide and applications* (pp. 3-26). SAGE. https://doi.org/10.4135/9781483384450.n1

Garson, G. (2020). *Multilevel modeling: Applications in STATA, IBM SPSS, SAS, R, & HLM*. SAGE. https://us.sagepub.com/en-us/nam/multilevel-modeling/book260705

Gendler-Shalev, H., Ben-David, A., & Novogrodsky, R. (2021). The effect of phonological complexity on the order in which words are acquired in early childhood. *First Language*, *41*(6), 779-793. https://doi.org/10.1177/01427237211042997

Goldinger, S., & Papesh, M. (2012). Pupil dilation reflects the creation and retrieval of memories. *Current Directions in Psychological Science*, *21*, 90-95. https://doi.org/10.1177/0963721412436811

Hall, K., Allen, B., Coates, E., Fry, M., Huang, S., Johnson, K., Lo, R., Mackie, S., Nam, S., & McAuliffe, M. (2022). *Phonological CorpusTools Version 1.5.1*. https://corpustools.readthedocs.io/en/latest/about.html

Halverson, S. (2015). Cognitive translation studies and the merging of empirical paradigms: The case of "literal translation". *Translation Spaces*, *4(2)*, 310-340. https://doi.org/10.1075/ts.4.2.07hal

Hoover, J., Storkel, H., & Hogan, T. (2010). A cross-sectional comparison of the effects of phonotactic probability and neighborhood density on word learning by preschool children. *Journal of Memory and Language*, *63*(1), 100-116. https://doi.org/10.1016/j.jml.2010.02.003

Hu, K. (2016). *Introducing corpus-based translation studies*. Springer. https://doi.org/10.1007/978-3-662-48218-6

Jones, S. (2018). Adult word learning as a function of neighborhood density. *Languages*, *3*(1), 1-13. https://doi.org/10.3390/languages3010005

Kruger, H., & van Rooy, B. (2012). Register and the features of translated language. *Across Languages and Cultures*, *13*(1), 33-65. https://doi.org/10.1556/Acr.13.2012.1.3

Kuznetsova, A., Brockhoff, P., & Christensen, R. (2017). lmerTest package: Tests in linear mixed effects models. *Journal of Statistical Software*, *82*(13), 1-26. https://doi.org/10.18637/jss.v082.i13

Laeng, B., Sirois, S., & Gredebäck, G. (2012). Pupillometry: A window to the preconscious? *Perspectives on Psychological Science, 7*(1), 18-27. https://doi.org/10.1177/1745691611427305

Laviosa, S. (1998). The corpus-based approach: A new paradigm in translation studies. *Meta: Journal Des Traducteurs*, *43*, 474-479. https://doi.org/10.7202/003424ar

Laviosa, S. (2002). Core patterns of lexical use in a comparable corpus of English narrative prose. *Meta*, *43*(4), 557-570. https://doi.org/10.7202/003425ar

Laviosa-Braithwaite, S. (2001). Universals of translation. In M. Baker (Ed.), *Routledge encyclopedia of translation studies* (pp. 288-291). Routledge.

Lee, S.-Y. (2011). *Parallel activation in bilingual phonological processing* [Doctoral thesis, University of Kansas]. http://hdl.handle.net/1808/8157

Liu, K., Afzaal, M. (2021). Syntactic complexity in translated and non-translated texts: A corpus-based study of simplification. *PLOS ONE 16*(6), e0253454. https://doi.org/10.1371/journal.pone.0253454

Longoni, A., Richardson, J., & Aiello, A. (1993). Articulatory rehearsal and phonological storage in working memory. *Memory & Cognition*, *21*(1), 11-22. https://doi.org/10.3758/BF03211160

Luce, P., & Large, N. (2001). Phonotactics, density, and entropy in spoken word recognition. *Language and Cognitive Processes*, *16*(5-6), 565-581. https://doi.org/10.1080/01690960143000137

Luce, P., & Pisoni, D. (1998). Recognizing spoken words: The neighborhood activation model. *Ear and Hearing*, *19*(1), 1-36.

Marian, V., & Blumenfeld, H. (2006). Phonological neighbourhood density guides lexical access in native and non-native language production. *Journal of Social and Ecological Boundaries*, *2*, 3-35.

Messer, M., Verhagen, J., Boom, J., Mayo, A., & Leseman, P. (2015). Growth of verbal short-term memory of non-words varying in phonotactic probability: A longitudinal study with monolingual and bilingual children. *Journal of Memory and Language*, *84*(1), 24-36. https://doi.org/10.1016/j.jml.2015.05.001

Mueller, S., Seymour, T., Kieras, D., & Meyer, D. (2003). Theoretical implications of articulatory duration, phonological similarity, and phonological complexity in verbal working memory. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *29*(6), 1353-1380. https://doi.org/10.1037/0278-7393.29.6.1353

Mu-Sonic Ltd. (2013). *ToPhonetics*. https://tophonetics.com/

Nair, V., Biedermann, B., & Nickels, L. (2017). Understanding bilingual word learning: The role of phonotactic probability and phonological neighborhood density. *Journal of Speech, Language, and Hearing Research*, *60*(12), 3551-3560. https://doi.org/10.1044/2017_JSLHR-L-15-0376

Olohan, M., & Baker, M. (2000). Reporting that in translated English. Evidence for subconscious processes of explicitation? *Across Languages and Cultures*, *1*(2), 141-158. https://doi.org/10.1556/Acr.1.2000.2.1

R Core Team. (2022). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. https://www.R-project.org

Rabinovich, E., Nisioi, S., Ordan, N., & Wintner, S. (2016). On the similarities between native, non-native and translated texts. *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics,* 1870-1881. https://doi.org/10.18653/v1/P16-1176

Rabinovich, E., & Wintner, S. (2015). Unsupervised identification of translationese. *Transactions of the Association for Computational Linguistics*, *3*(3), 419-432. https://doi.org/10.1162/tacl_a_00148

Rescher, N. (1989). *Cognitive economy: The economic dimension of the theory of knowledge*. University of Pittsburgh Press.

Rescher, N. (1998). *Complexity: A philosophical overview*. Routledge. https://www.routledge.com/Complexity-A-Philosophical-Overview/Rescher /p/book/ 9781138508378

Robin, E. (2017). Translation universals revisited. *FORUM, 15*(1), 51-66. https://doi.org/10.1075/forum.15.1.03rob

Roehr-Brackin, K. (2015). Explicit knowledge about language in L2 learning: A usage-based perspective. In P. Rebuschat (Ed.), *Implicit and explicit learning of languages* (pp. 117-138). John Benjamins. https://doi.org/10.1075/sibil.48.06roe

Rojo López, A. (2015). Translation meets cognitive science: The imprint of translation on cognitive processing. *Multilingua*, *34*(6), 721-746. https://doi.org/10.1515/multi-2014-0066

Roodenrys, S., Hulme, C., Lethbridge, A., Hinton, M., & Nimmo, L. (2002). Word-frequency and phonological-neighborhood effects on verbal short-term memory. *Journal of Experimental Psychology*. *Learning, Memory, and Cognition*, *28*(6), 1019-1034. https://doi.org/10.1037//0278-7393.28.6.1019

Sandrelli, A., & Bendazzoli, C. (2005). Lexical patterns in simultaneous interpreting: A preliminary investigation of EPIC (European Parliament Interpreting Corpus). *Proceedings from the Corpus Linguistics Conference Series 1*. University of Birmingham. https://www.birmingham.ac.uk/research/activity/corpus/publications/conference-archives/2005-conf-e-journal.aspx

Satterthwaite, F. (1946). An approximate distribution of estimates of variance components. *Biometrics Bulletin, 2*(6), 110–114. https://doi.org/10.2307/3002019

Schmidtke, J. (2014). Second language experience modulates word retrieval effort in bilinguals: Evidence from pupillometry. *Frontiers in Psychology*, *5*(1), 1-16.

Stamer, M., & Vitevitch, M. (2012). Phonological similarity influences word learning in adults learning Spanish as a foreign language. *Bilingualism: Language and Cognition*, *15*(3), 490-502. https://doi.org/10.1017/S1366728911000216

Storkel, H. (2009). Developmental differences in the effects of phonological, lexical, and semantic variables on word learning by infants. *Journal of Child Language*, *36*(2), 291-321. https://doi.org/10.1017/S030500090800891X

Storkel, H., Armbrüster, J., & Hogan, T. (2006). Differentiating phonotactic probability and neighborhood density in adult word learning. *Journal of Speech, Language, and Hearing Research*, *49*(6), 1175-1192. https://doi.org/10.1044/1092-4388(2006/085)

Tehan, G., & Tolan, G. (2007). Word length effects in long-term memory. *Journal of Memory and Language*, *56*(1), 35-48. https://doi.org/10.1016/j.jml.2006.08.015

The International Phonetic Association. (1999). *Handbook of the International Phonetic Association: A guide to the use of the International Phonetic Alphabet*. Cambridge University Press.

Thorn, A., & Frankish, C. (2005). Long-term knowledge effects on serial recall of non-words are not exclusively lexical. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *31*(4), 729-735. https://doi.org/10.1037/0278-7393.31.4.729

Titz, J. (2020). mimosa: A modern graphical user interface for 2-level mixed models. *Journal of Open Source Software*, *5*(49), 1-2. https://doi.org/10.21105/joss.02116

Vitevitch, M. (2002). The influence of phonological similarity neighborhoods on speech production. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *28*, 735-747. https://doi.org/10.1037/0278-7393.28.4.735

Vitevitch, M., Armbrüster, J., & Chu, S. (2004). Sublexical and lexical representations in speech production: Effects of phonotactic probability and onset density. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *30*(2), 514-529. https://doi.org/10.1037/0278-7393.30.2.514

Vitevitch, M., & Luce, P. (1998). When words compete: Levels of processing in perception of spoken words. *Psychological Science*, *9*(4), 325–329. https://doi.org/10.1111/1467-9280.00064

Vitevitch, M., Luce, P., Pisoni, D., & Auer, E. (1999). Phonotactics, neighborhood activation, and lexical access for spoken words. *Brain and Language*, *68*(1–2), 306-311. https://doi.org/10.1006/brln.1999.2116

Wang, F. (2020). Translation process is a psychological and introspective process, as well as a process of problem solving and decision-making. *Revista Argentina de Clínica Psicológica*, *29*(1), 1413-1424.

Williams, D. (2005). *Recurrent features of translation in Canada: A corpus-based study* [Doctoral thesis, University of Ottawa]. Canada. https://doi.org/10.20381/ruor-12864

Xiao, R., & Dai, G. (2014). Lexical and grammatical properties of Translational Chinese: Translation universal hypotheses reevaluated from the Chinese perspective. *Corpus Linguistics and Linguistic Theory*, *10*(1), 11-55. https://doi.org/10.1515/cllt-2013-0016

Zipf, G. (1949). *Human behavior and the principle of least effort*. Addison-Wesley Press.

MULTIPLICATION OF DICTIONARY USES IN THE AGE OF DIGITAL TRANSFORMATION

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Manuscript received 30 January 2023
Manuscript accepted 7 December 2023
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https://doi.org/10.33736/ils.5350.2023

ABSTRACT

Dictionaries have become a ubiquitous tool in academia, extending beyond their common and essential purposes of checking spelling and meanings. This paper investigated the usage of dictionaries by 107 English learners in the Saudi context during their university studies, based on data collected from an opinion poll. Findings showed that learners use electronic and paper-based dictionaries for limited purposes. Besides surveying the dictionary type (online and paper-based), the study argues for a broader approach on their usage beyond checking spelling and meaning. The study considers dictionaries as valuable resources that facilitate second language learning by developing a multitude of skills, including spelling, vocabulary, grammatical usage, pronunciation, and semantic features of the target language (e.g., synonyms, antonyms, polysemy, and collocations). The study recommends that a dictionary should be used not just as a supplementary tool but as essential source for English language programmes, with dictionary-based tasks incorporated across the curriculum to promote sustainable language education.

Keywords: e-dictionary; digital age; EFL learners; language learning; paper-based dictionary

Introduction

The word “dictionary” typically evokes an image of a thick alphabetically arranged book containing the words of a language. However, dictionaries of various types and sizes have become increasingly prevalent across levels of education for teaching and learning English as a second or foreign language (Ana, 2013; Juwita et al., 2020; Knight, 1994; Wolter, 2015; Zhang, 2021). Digital technology has made dictionaries not only affordable but also varied and integrated. These integrated dictionaries are designed for mobile learning and can be installed on hand-held devices, allowing easy, on-the-go access. Modern dictionaries have evolved into valuable learning tools that enable users to explore various aspects of a language beyond spelling or meaning of words.

Despite a significant amount of research on dictionaries in language education (Ana, 2013; Boonmoh, 2021; Juwita et al., 2020; Liu, 2015; Wolter, 2015), there is no clear definition of what a dictionary is in the digital age. Electronic dictionaries, which are now commonplace in academia, offer various uses beyond the traditional spelling and meaning check (Alhaisoni, 2016; Ambarwati & Mandasari, 2020; Ana, 2013; Boonmoh, 2021; Laufer & Hill, 2000; Pothiphoksumphun, 2019). However, previous studies have focused on surveys with limited numbers of participants, often only outlining the differences between monolingual and bilingual dictionaries and mainly reporting uses related to spelling and lexical meaning. Other studies have compared online e-dictionary to paper-based dictionaries (Ambarwati & Mandasari, 2020; Boonmoh, 2021; Karczewska & Sharp, 2018; Wei & Chang, 2022) with little consideration of other dictionary-based linguistic aspects. It is important to recognise the full potential of modern dictionaries and the viability of both paper-based and electronic dictionaries.

The fact is that the potential uses of modern dictionaries exceed the existing research volume, and it is important to identify and explore these in light of the digital affordances and multiliteracies of the twenty-first century (Kalantzis & Cope, 2016; Lankshear & Knobel, 2006). The well-established literacy based on traditional reading and writing has outlived its date now, and there should be multi-uses of modern dictionaries to meet the corresponding recency of multimodal literacies (Kalantzis & Cope, 2016; Kress, 2012; Lankshear & Knobel, 2006; Liu, 2015) that the present study brings to the foreground. An increasing amount of literature devoted to employing dictionaries in learning foreign languages indicates that technology-using learners and teachers are driven by the digital alternatives of many similar products, including electronic dictionaries, encyclopaedias, Google translate, and, now, the ChatGPT. These technology-oriented users tend to discard paper-based dictionaries, and the issue has mounted to a real phenomenon that remains under-researched and deserves further exploration. The increasing uses of dictionaries need to be examined closely rather than merely taking it for granted that dictionaries are in use. It is vital to re-examine the uses of both electronic and paper-based dictionaries and explore how they level up learners’ performance in English learning and linguistic repertoire.

This endeavour goes beyond the scope of prior research to unfold underestimated uses of modern dictionaries, directing attention to more linguistic potential enabled by proper utilisation of various modern dictionaries that Saudi EFL learners tend to employ in their university studies. The study attempts to answer the following research questions:

1. What are the types of dictionaries Saudi EFL learners commonly use in their studies at the university level?
2. What do Saudi EFL learners typically use modern English dictionaries for?
3. Is there any statistically significant difference between students' uses based on gender, major, level of study, grade average, and dictionary type?
4. What are Saudi EFL learners' perceptions of dictionary uses beyond spelling and word meaning?

Review of the Literature

Theoretical Background

The current investigation of new uses of dictionaries takes its theoretical impetus from the new literacies of the twenty-first century, multimodality and digital literacy, which have stimulated new methods of meaning-making (Kalantzis & Cope, 2016; Kress, 2012; Lankshear & Knobel, 2006; Liu, 2015). The emergence of these concepts is intricately linked to meaning-making in the digital age. Advocates of multimodal literacy argue that meaning is not exclusively bound to what lies in the so-called dictionaries but in the mind of modern man. It is a matter of the 21st-century mindset. In the given new literacies, meaning is multiplied in the dimensions of content, form, space and time (Lankshear & Knobel, 2006; Liu, 2015). Darvin and Hafner (2022) contend that "with the evolution of AI, machine learning, big data, speech and facial recognition technologies, we are being read online by both human and nonhuman interactants in ways that are often concealed and thus require new, emergent digital literacies" (p. 865). Dictionaries designed for literacy in the conventional sense attend to words, i.e., alphabetic literacy. Nevertheless, learners with a cyberspatial mindset now approach things differently (Lankshear & Knobel, 2006).

The emerging multiliteracies have given rise to a multitude of dictionaries, including e-versions of the common dictionaries (e.g., Macmillan, Oxford, Longman) and some other forms of dictionaries such as photo dictionaries, encyclopedias, and Google Translate (Boonmoh, 2021; Dziemianko, 2022; Laufer & Hill, 2000; Liu, 2015; Karczewska & Sharp, 2018; Lankshear & Knobel, 2006). The recent advancement of modern life exceeds the ability of one book to contain all the vocabulary in place, so boundless webpages can be a container that accommodates the enormous vocabulary of modern virtual life (online) and its intersection with face-to-face reality.

Successive attempts have yielded valuable insights into the use of dictionaries for vocabulary and meaning (Dziemianko, 2022; Wolter, 2015; Zhang, 2021), which constitute only a subset of the diverse functions of modern dictionaries. A substantial

body of research has examined dictionary uses in various domains, including pronunciation (Juwita et al., 2020; Metruk, 2017), reading (Boonmoh, 2021; Knight, 1994) and spelling, word meaning, and collocations (Alhaisoni, 2016; Wolter, 2015). For instance, Ambarwati and Mandasari (2020) examined possible uses of the Online Cambridge Dictionary (OCD) for pronouncing vocabulary in an Indonesian university (Universitas Teknokrat Indonesia). The study concluded that OCD is reliable in enhancing vocabulary and improving learners' pronunciation in contexts where English is not used natively. Highlighting the multiplication of dictionary uses may draw learners and their teachers' attention to innovative uses beyond conventional uses. It is also important for teachers to guide students to such uses.

To this effect, there is a need to construct a theoretical model for e-lexicography, which remains an urgent yet lacking task in the current digital revolution. The current study discusses meaning from a holistic viewpoint that juxtaposes verbal definitions with complementary multimodal resources endured in Liu's (2015) contention. The study extends its scope to include a dictionary's verbal and nonverbal uses in the current digital era.

Previous Studies

While there have been many studies on the common uses of dictionaries, the potential applications of modern dictionaries have yet to be fully explored. Previous studies provided insightful ideas on the salience of dictionaries in learning English as a second or foreign language, but there is a lot more to discover. In this literature review, some of the most relevant studies on the use of dictionaries in language learning are outlined. Boonmoh (2021) explored how dictionaries and online tools, such as Google Translate, facilitate reading and help learners perform better in reading tasks in the Thai context. The study found that learners frequently use dictionaries for nouns, verbs, and adjectives, with online dictionaries and Google Translate being the most popular options, particularly with learners of the digital generation.

In a similar vein, Ana (2013) explored Gambian EFL learners and their attitudes toward English dictionaries. The results showed that a majority of learners preferred bilingual dictionaries, which was unexpected. Additionally, they stated that they were not taught how to use dictionaries. Instead, they mainly used online dictionaries to learn lexical meanings and spelling, with little attention paid to pronunciation (Laufer & Hill, 2000; Metruk, 2017; Wolter, 2015). Ana's findings are not at odds with other inquiries in similar contexts. For instance, Pothiphoksumphun (2019), reporting from Bangkok, found that dictionary users argued for online dictionaries to check word meanings quickly, a finding endorsed by Wolter (2015), who also reported a preference for online dictionaries over paper-based dictionaries.

Another line of studies published between 2013 and 2016 had similar themes. For instance, Alhaisoni (2016) explored the views of 99 native and non-native speakers regarding their use of dictionaries. The results showed a preference for bilingual dictionaries, online dictionaries, and Google translate platforms (Karczewska & Sharp,

2018). Participants used dictionaries, regardless of their types, mainly for obtaining lexical information, such as word meanings and spellings. Some participants had other interests, such as pronunciations, collocations (Wolter, 2015), and illustrative examples. Fageeh (2014) examined the effectiveness of using online dictionaries to improve vocabulary and students' attitudes toward vocabulary learning. Through an experimental and control group, Fageeh found that students who used online dictionaries learned vocabulary more effectively than those who used traditional dictionaries.

In the Saudi context, however, three relevant studies can be included in this review for their insightful findings. Alhatmi (2019) investigated the dictionary uses, strategies and types of dictionaries preferred by Saudi EFL learners, showing that EFL students use dictionaries mainly to search for new words. They prefer online dictionaries to paper-based ones and bilingual dictionaries to monolingual ones. Similarly, Hamouda (2013) studied how Saudi EFL students use dictionaries and the types of dictionaries they prefer. The study found that Saudi EFL students prefer online dictionaries and use dictionaries mostly to find the meaning of words and neglect the other important uses of dictionaries. Likewise, Al-Darayseh (2013) investigated the uses of dictionaries by Saudi EFL students, the type of dictionaries they use, and the difficulties they face. The study found that students use dictionaries most to find the meaning of words and check their spellings, while they rarely use dictionaries for other purposes.

In summary, the findings of previous studies help to advance research on dictionary uses in the age of digital transformations. The present inquiry builds on the previous findings to uncover more uses that modern dictionaries have made possible based on evidence collected from learners in the Saudi context. This study argues that the prevailing view that dictionaries are meant for spelling and word meaning is now complicated by many more uses of digital dictionaries. In this sense, a dictionary is construed as a mine of information that could be manipulated for English learning and teaching in several ways, and the multi-uses of modern dictionaries can meet the requirements of multimodal literacies. Besides extending previous work on dictionary uses, it unlocks more potential uses that digital dictionaries have made possible. It determines whether EFL learners recognise such potential or retain the common uses of spelling and checking meaning. It examines the types of dictionaries the learners tend to use, justifies their uses, and, more importantly, explores how learners and teachers enlarge the uses of dictionaries to take in morphological and semantic purposes, and much more.

Method

The study set out to unveil the uses of modern dictionaries in EFL learning with a focus on the Saudi setting. The study relied on learners' perceptions and uses collected via a survey of close-ended and open-ended questions to pair the quantitative and qualitative research paradigms, keeping in mind answers from the respondents' standpoint. In a research design of mixed methods, closed-ended questions not only prompt respondents' memory and indicate expected responses but also help the researcher control the scope

of answers. On the other hand, the open-ended questions are infused in a mixed method-based research design (Creswell, 2013; Dörnyei, 2007) to identify issues unanticipated by prompted questions. Because close-ended questions are criticized for being suggestive and leading, open-ended questions are given alongside the prompted questions to reduce the bias of prompted questions and allow the informants to answer in their own words. As Burns (2003) asserted, this "provides opportunities for unforeseen responses obtainable through closed questioning" (p.131).

Data were elicited from 107 learners at two Saudi Universities. They were recruited voluntarily using a convenience sampling technique based on their availability at the time of the study and their willingness to take part in an online survey. The researchers and instructors at the university announced a call for potential participants to take part in an online survey, and 107 participants showed up and filled in the Google Form. Their background information is displayed in Table 1. They are students aged between 19 and 22 pursuing a degree at the Colleges of Arts in two universities in the KSA.

Table 1

Background Information of the Sample (EFL Learners) (N=107)

Variable		Number	Percentage
Gender	Female	60	56.1%
	Male	47	43.9%
Level of Study	1st Year	43	40.2%
	2nd Year	7	6.5%
	3rd Year	26	24.3%
	4th Year	31	29.0%
GPA	Pass	1	0.9%
	Good	18	16.8%
	Very Good	41	38.3%
	Excellent	47	43.9%
Specialization	English	78	72.9%
	Other	29	27.1%
Affiliation	University of Bisha	88	82.2%
	Taibah University	19	17.8%

The primary data collection tool was a questionnaire composed of 28 close-ended items on a five-point Likert scale ranging from strongly agree to strongly disagree. The purpose of the questionnaire was to measure the magnitude of learners' uses of paper-based and electronic online dictionaries. It was developed in light of previous studies on dictionaries (Alhaisoni, 2016; Ana, 2013; Boonmoh, 2021; Dziemianko, 2022; Pothiphoksumphun, 2019), covering some issues on how learners view dictionaries in

their studies and specific uses, particular attention was given to considerations such as the language level of the participants, brevity, and clarity of the questions.

Governed by the nature of the study, this opinion poll consisted of five sections, as shown in Table 2. The first section aimed to discern the different backgrounds of the respondents, including their gender, level of study, academic accumulative score, specialisation and affiliation. The second part focused on the dictionaries they use, such as Oxford, Macmillan, and Cambridge, and whether they prefer paper-based or electronic dictionaries. The third section elicited information about the specific purpose of their uses from the learners' standpoint. It disclosed the informants' perceived benefits, including the linguistics and learning activities they accomplished via dictionaries, whatever their types and size.

The fourth section elicited information about the learners' opinions about dictionaries. It measured the learners' attitudes/opinions on the issue in focus. The last part included four open-ended questions to obtain qualitative data that complemented the previous section's quantitative data. This part probed suggestions/comments on dictionaries.

Table 2

Description of the Questionnaire

	Part I	Part II	Part III	Part IV	Part VI
Part	background information	Types of Dictionaries	Specific use of Dictionary	attitudes towards Dictionary	open-ended questions
Questions	1 – 5	6 -7	8-20	21-28	29-32
Total	5	2	13	8	4

Validity, Reliability, and Piloting

The content and style of the questionnaire were based on general guidelines to produce a simple yet standardised tool and achieve its purpose and avoid drawbacks that downsize its effectiveness. It included, besides the main body, a short introduction requesting the informants to participate in the study, explaining the study's goals and confidentiality. It also provided some instructions on how to move through the questionnaire step by step. Because it was meant for a body of respondents of the digital age, it was designed via Google Form to facilitate and increase the response rate. The introduction was followed by a yes-no consent question "Do you want to complete the questionnaire for research purposes?" If they selected "yes", they would be automatically directed to complete the questionnaire; if they selected "no", they would be directed to close the questionnaire window. The questionnaire items were clustered around themes

using simple language and short and uncluttered items so that respondents were not "overwhelmed with a large daunting document" (Burns, 2003, pp. 129-130).

Prior to administering the questionnaire, validation and piloting measures were taken to ensure its appropriateness, length, and clarity of instructions. This pre-implementation phase involved seeking feedback from five experts to evaluate the content validity, criterion-related validity, and construct validity of the survey. The input obtained from these experts allowed the researchers to refine the instruments and produce near-final versions. Having the expert validation completed, the initial version was piloted to "ensure that questions are interpreted independently, easily and unambiguously" (Burns, 2003, p. 129). It was administered to a group of 25 EFL students at English major students. The feedback from this initial pilot study enabled the researchers to make a final version with no apparent glitches, revamp, and fine-tune the questions. The resultant data at this phase included the reliability of Cronbach's Alpha for the perception scale, which was .88, adequately valid for using the instrument. Hence, a final version was attested for implementation on the ground.

Before conducting the study, the researchers explained the purpose of the investigation in the KSA to the authorities in charge of the College of Arts and the English Language Department and got their approval to conduct the study. The dean of the College of Arts sent the questionnaire to English language instructors to distribute to their students via WhatsApp groups or the Blackboard platform. The instructors sent the Google Form survey to their students and requested them to respond to the questionnaire. The researchers received 107 voluntary responses.

The responses for the close-ended items in the questionnaire were analysed, and the means, standard deviations and percentages were calculated. One-way ANOVA was run using IBM SPSS 23. To gain additional insights, responses to the open-ended questions were subject to deductive content analysis, following Creswell's (2013) content analysis guidelines. All the participants' answers to the open-ended question were synthesized and sorted out, beginning with detailed data on general themes. An initial list of categories ended up with a few focused themes potentially meaningful to the study; they were brought in for interpretation without distorting or misrepresenting the data. Some illustrative quotations were added to the analysis section to reinforce the quantitative findings. They mainly relate to the dictionary concept and use.

Findings

The findings are arranged in this section according to the sequence of the research questions.

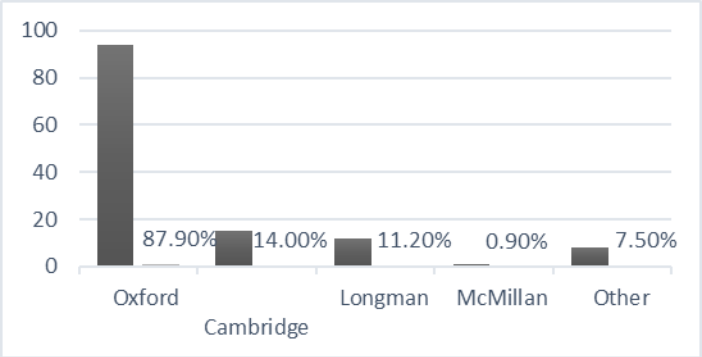
Dictionaries Commonly Used by Saudi EFL Learners

Figure 1 shows that the Oxford dictionary is the most commonly used (88%), followed by Cambridge (14%), Longman (11.20%), and Mcmillian (1%) dictionaries. The participants

listed more than one dictionary at a time. Alongside these dictionaries, about 8% of the participants stated that they referred to other types of modern dictionaries, including Google Translate and encyclopaedias, which serve as modern lexicography of word categorisation, meaning, and definitions.

Figure 1

Dictionaries that EFL Learners Commonly Use



Common Uses of Modern English Dictionaries

As displayed in Table 3, the participants stated that they use dictionary to look for the meaning of words (M=4.65, SD=.64), followed by phonetically transcribed (Mean=4.32, SD=.95). The participants also used dictionaries to check different meanings that a word may have (homonyms) (M=4.28, SD=.82), listen to how words are pronounced (M=4.27, SD=.97) and to check spelling (M=4.12, SD=.88). Other uses were rated lower than these including the American vs. British English words, old usage of words/phrases, grammatical aspects, explanation on idiomatic expressions/proverbs, literary uses of certain words/phrases, formal and informal uses of certain words/phrases. The mean scores of these uses ranged between 3.58 and 3.97, showing that the participants were less conscious of these less-frequently used yet significant merits of dictionary utilisation.

Table 3

The Frequencies of Actual Dictionaries Uses

I use dictionaries to….	N	Mean	SD
check American vs. British English Use or words	107	3.58	1.22
check the old usage of the words/phrases	107	3.64	1.40
check grammatical aspects	107	3.74	1.28
get an explanation of idiomatic expressions/proverbs	107	3.89	1.08
check literary uses of certain words/phrases	107	3.89	1.18

check formal and informal uses of words/phrases	107	3.97	1.16
read examples	107	4.02	1.07
check spelling	107	4.12	.88
listen to how words are pronounced	107	4.27	.97
check different meanings that a word may have	107	4.28	.82
check how words are phonetically transcribed	107	4.32	.95
check the meaning of words.	107	4.65	.64

Note: Scale is 1=Never to 5=Always

Differences Between Students' Uses of Dictionaries

This section presents the results on the differences between students' uses of dictionaries based on gender, major, level of study, grade average, and dictionary type. The results of One-Way ANOVA are arranged in Table 4 through Table 8 in accordance with these variables.

Table 4

Results of One-Way ANOVA regarding Uses of Dictionaries by Gender

Gender	N	Mean	Variance	F	p
Female	60	3.50	1.34	0.01	.93
Male	47	3.48	1.26		

Table 5

Results of One-Way ANOVA Regarding the Uses of Dictionaries by Major

Major	N	Mean	Variance	F	p
English	78	3.40	1.43	1.79	.18
Other	29	3.73	0.89		

As shown in Tables 4, 5, and 6, there were no significant differences by dictionary major (p-value= 0.726). Similarly, there was no significant difference due to gender (F=.01, p=0.93) or major (F=1.79, p=0.18) and gender. Likewise, no significant differences were found for dictionary medium (F=.32, p= .73).

Table 6

Results of One-Way ANOVA Regarding Values of Dictionaries by Dictionary Medium

Medium	N	Mean	Variance	F	p
Online	43	3.41	1.47	0.32	.73
Paper-Based	10	3.34	1.56		
Both	54	3.57	1.14		

Regarding the level and average grade, their corresponding ANOVA results are tabulated in Tables 7 and 8. At this point of analysis, it is to be noted that none of the demographic variables came out significant except for Year in school. Year 4 students had a lower appreciation for dictionaries than less advanced students ($F=4.24$, $p<.02$). Years 1 and 2 were combined because of the small number of year 2 students. Year 4 students had a lower appreciation ($M=3.0$) for dictionaries than less advanced students (Mean (1,2) =3.66, Mean (3) =3.74) ($F=4.24$, $p<.02$).

Table 7

Results of One-Way ANOVA Regarding the Uses of Dictionaries by Level

Year in School	N	Mean	Variance	F	p
Years 1 & 2	50	3.66	0.97	4.24	.016
Year 3	26	3.74	1.35		
Year 4	31	3.00	1.51		

Table 8

Results of One-Way ANOVA Analysis Regarding the Uses of Dictionaries by Average Grade

Grade	N	Mean	Variance	F	p
Good	18	3.37	1.33	0.21	.81
Very Good	41	3.45	1.31		
Excellent	47	3.56	1.56		

Note: One subject was excluded because there was only one to report "Poor" as an average grade.

The last research question elicited perceptional data regarding the dictionary uses beyond the conventional uses – spelling and word meaning. Table 9 shows that the mean scores of the participants' views ranged from 2.25 to 3.66, showing a medium rate. It could be interpreted that they generally view the dictionary as a tool for meaning and spelling checks more than the other uses outlined in the table. Relying on responses outlined in Table 9, the participants generally hold a view that a dictionary is a tool for meaning and spelling checks more than the other uses.

Table 9

Participants Perceptions towards Dictionary Uses

Dictionaries…	N	Mean	St
are good tools to collaborate with other peers	107	3.37	1.40
encourage learning new aspects of the language	107	3.66	1.51

are boring and demotivating	107	2.25	1.19
are helpful to learn words derivations	107	3.51	1.45
are helpful to learn words' synonyms and antonyms.	107	3.51	1.46
help me have self-confidence in using the words/phrases	107	3.32	1.42
sound like personal tutors to me	107	3.29	1.42

Discussion

As seen in Table 3, dictionaries can be used for several purposes. Most uses are skewed towards vocabulary, either by checking spelling or meaning (Wolter, 2015). With reference to the common uses of dictionaries as perceived by the participants, it is to be noted that dictionaries can be used even for some other purposes that the respondents in this study seem to be incognizant with. Juwita et al. (2020) and Metruk (2017) argued for using dictionaries for pronunciation, Boonmoh (2021) and Knight (1994) for reading skills. Still, an advanced learner's dictionary could be used for morphological and semantic aspects beyond the spelling and meaning of certain words.

There are some points to consider in the dataset on which the present inquiry builds its argument. First, the learners hold a positive view towards dictionaries in their studies. Nonetheless, they seem not to use dictionaries to the maximum. In an open-ended question regarding additional information relevant to the survey, Participant 5 commented:

> Going more profoundly in the world of print and online dictionaries, diversification in several research areas to find out about vocabulary and its opposites to gain more information.

This shows that the participant is aware of the neglected purposes of dictionaries other than vocabulary and meaning. For technology-based dictionaries of different types and sizes alongside conventional dictionaries, Participant 53 commented that she learned various uses of dictionaries she was unaware of before answering the questionnaire. It means that the dictionary is known for spelling and vocabulary, but this questionnaire familiarised her with different uses of the dictionary that were unknown to her.

Data from the open-ended question in the survey clarified more on the attitudinal results. Some respondents thought there was no need for paper-based dictionaries because online dictionaries can do the job even better. For instance, Participant 77 commented that

> No need for paper-based dictionaries at this time because Apps and websites are in remarkable and permanent development and have become successful alternatives to dictionaries.

Contrarily, Participant 86 believes that paper-based dictionaries are helpful for accessing the required information, but using them takes time. Some other participants

commented on their preference for online and paper-based dictionaries. Participant 69 preferred online dictionaries because it is fast for searching specific words. However, this participant viewed a paper-based dictionary as good when searching for words in alphabetical order. Participant 10 added that online dictionaries are easier when finding out certain words. Participant 106 referred to printed dictionaries because they are available without the need for the Internet, which is not always accessible.

The results outlined in the tables show that although dictionaries are mines of learning materials, they are hardly used beyond spelling and meaning in the context at hand. The discussion above provides strong convergent evidence for using dictionaries for spelling and meaning, as in the previous studies of Alhaisoni (2016) and Boonmoh (2021). It also extends Knight's (1994) and Boonmoh's (2021) findings on dictionary uses for reading and pronunciation (Juwita et al., 2020).

The attitudinal responses regarding dictionaries illustrate that electronic and paper-based dictionaries lack uniform descriptions. When the participants were first asked about using a dictionary, 38% replied "no". This may be because the concept of a traditional dictionary has changed in the mind of the current generation. As mentioned in the introductory part of this paper, when mentioning the word "dictionary", what comes to the mind of many is the traditional thick page-oriented book in which words are arranged alphabetically. When students were asked about other purposes for using dictionaries beyond those in the questionnaire (Question 1), the participants provided several purposes which were, for the most part, similar to the ones in the questionnaire, such as looking up new words and checking pronunciation). This may be due to confusion on the learners' part regarding the dictionary concept and uses.

With the innovations and increasing multimodal elements that shape digital reading and writing (multiliteracies), the concept of a dictionary has become rather clumsy. Despite variations of usage, there is still a flawed understanding of the concept of meaning-making imposed by the new literacies of the twenty-first century (Darvin & Hafner, 2022; Kalantzis & Cope, 2016; Kress, 2012; Lankshear & Knobel, 2006). According to the emerging literacy concept, meaning is a combination of linguistic and nonlinguistic (semiotic) elements that constitute successful and vivid commutation, mixing words with images and some other elements of meaning-making.

In another question about other tools or Apps, 8% of the participants (see Figure 1) stated that they used dictionaries other than those mentioned in the questionnaire, including the Oxford wordpower, dicbox, Dict plus, Reverso Context, Duolingo, EWA, Farlex, Vocabulary.com, One Look Dictionary, Urban dictionary, which are all technology-based. This shows that Saudi EFL learners are strongly influenced by digital learning and use advanced technology to learn the English language.

For electronic versus paper-based dictionaries, when students were asked if they prefer online dictionaries to printed ones, their responses were divided into three groups: those who prefer both printed and online dictionaries, those who prefer online to print ones and those who prefer printed dictionaries to online ones. Each group has some reasons. Those who prefer online to printed ones believe that online dictionaries are easy

to access and update, find the words easily and thus save time. These features are unattainable in printed ones. Additionally, they are not only available everywhere and every time but also usable again and again very easy to search for many things at a time. Those who prefer the printed ones, despite their weight, believe that they can be used at times of internet outages or power shortages. The third group prefers both. This group was divided into two subgroups. The first subgroup is those who prefer both and see no differences. They stated that when one is available, it suffices. The second subgroup is those who prefer both but think online dictionaries are better than printed ones.

Given the findings, the study supports existing claims that electronic dictionaries are advantageous to the current digital generation (Alhaisoni, 2016; Ambarwati & Mandasari, 2020; Ana, 2013; Boonmoh, 2021; Laufer & Hill, 2000; Pothiphoksumphun, 2019). Nevertheless, the potential of internet-based dictionaries has yet to be fully utilised. The study questioned the concept of a dictionary in the mind of the current generation of learners, directing their attention toward new uses of dictionaries. It lays the foundation for dictionary-based learning, which has been underestimated in numerous EFL contexts. It underpins implications for teachers who may want to use dictionaries for multiple purposes beyond the conventional uses — spelling and word meaning (Alhaisoni, 2016; Boonmoh, 2021).

To span other language aspects, a modern dictionary should be more than a reference book of word meaning and categorisation. Course developers may incorporate tasks and dictionary-based activities in EFL materials and programmes. They could be used to check word usage in terms of formality and informality. Advanced dictionaries are also good for teaching morphemic structures and semantic aspects of words, such as synonyms, antonyms, homophones, homographs, colloquialisms, and idiomaticity.

On a related note, the growing area of multiliteracies and multimodality has aroused new outlooks on how to invigorate conventional literacies and communication that involve not only words but also other modes – videos and images. Perhaps the recent advancement of new literacies exceeds the capacity of a dictionary to contain all the vocabulary in place, so boundless webpages can be a container that accommodates the enormous vocabulary of virtual life and its intersection with face-to-face reality. This is an area that should receive adequate research in light of the findings of the study at hand.

Conclusion

The study sheds light on the significant uses of modern dictionaries in learning and teaching English in the Saudi EFL context, which is in an Arab setting. Besides the commonly used features such as spelling, meaning, and phonetic transcription, the study examines other features such as grammatical, morphological, and semantic aspects that contribute to learners' overall linguistic repertoire. However, these aspects of uses were mostly undervalued in the Saudi context when this study was carried out. Due to the limitations in space and time, the present study could not include all these variables. However, it highlights the need for further research using data from multilingual contexts.

An important topic for further research is capturing the effect of mindful dictionary uses on learners' overall performance. To examine this, a sample of learners could be grouped into heavy, moderate, and light users of dictionaries, and their correlation could be analysed using ANOVA to determine the effects of dictionary uses on learners' success in different aspects of the target language.

Acknowledgement

The authors are thankful to the Deanship of Scientific Research at University of Bisha for supporting this work through the Fast-Track Research Support Program.

References

Al-Darayseh, A. (2013). Activation of using English dictionaries by English majors at Al-Imam University: Uses, difficulties, and types of used dictionaries. *Theory & Practice in Language Studies*, *3*(3), 423-429. https://doi.org/10.4304/tpls.3.3.423-429

Alhaisoni, E. (2016). EFL teachers' and students' perceptions of dictionary use and preferences. *International Journal of Linguistics*, *8*(6), 31-52. https://doi.org/10.5296/ijl.v8i6.10267

Alhatmi, S. (2019). A survey study of the dictionary use sub-strategies of English majors in Saudi Arabia: Dictionary related aspects. *English Language Teaching*, *12*(3), 139-160. https://doi.org/10.5539/elt.v12n3p139

Ambarwati, R., & Mandasari, B. (2020). The influence of online Cambridge Dictionary toward students' pronunciation and vocabulary mastery. *Journal of English Language Teaching and Learning (JELTL), 1*(2), 50-55.

Ana, W. (2013). *The attitudes of students of English Education Program of Jambi University in Using English Dictionary*. https://repository.unja.ac.id/id/eprint/3762

Boonmoh, A. (2021). Use of dictionaries and online tools for reading by Thai EFL learners in a naturalistic setting. *Lexikos, 31*, 240-258. https://doi.org/10.5788/31-1-1645

Burns, A. (2003). *Collaborative action research for English language teachers (2nd ed.).* Cambridge University Press.

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches*. SAGE.

Darvin, R., & Hafner, C. A. (2022). Digital literacies in TESOL: Mapping out the terrain. *TESOL Quarterly, 56*(3), 865-882. https://doi.org/10.1002/tesq.3161

Dörnyei, Z. (2007). Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies. Oxford University Press.

Dziemianko, A. (2022). The usefulness of graphic illustrations in online dictionaries. *ReCALL, 34*(2), 218-234. https://doi.org/10.1017/S0958344021000264

Fageeh, A. I. (2014). Effects of using the online dictionary for etymological analysis on vocabulary development in EFL college students. *Theory and Practice in Language Studies*, *4*(5), 883-890. https://doi.org/10.4304/tpls.4.5.883-890

Hamouda, A. (2013). A study of dictionary use by Saudi EFL students at Qassim University. *Study in English Language Teaching*, *1*(1), 228-257. https://doi.org/10.22158/selt.v1n1p227

Juwita, J., Riadi, A., & Handayani, M. (2020). The students' perception of using U-Dictionary in learning pronunciation at STBA Pontianak. *Jurnal Ilmiah STBA, 6*(1), 41-51. http://dx.doi.org/10.47255/spectral.v6i1.46

Kalantzis, M. & Cope, B. (2016). The nature of writing. Available on 10.1 The Nature of Writing – YouTube. https://www.youtube.com/watch?v=PdEychYiWoE

Karczewska, M., & Sharp, R. (2018). Online dictionaries and translation applications in the L2 classroom: A study of attitude differences between students and educators. *Konin Language Studies, 6*(2), 171-189. https://doi.org/10.5861/ijrsll.2019.4002

Knight, S. (1994). Dictionary: The tool of last resort in foreign language reading? A new perspective. *Modern Language Journal, 78*, 285-299. https://doi.org/10.1111/j.1540-4781.1994.tb02043.x

Kress, G. (2012). Multimodal discourse analysis. In J. P. Gee & M. Handford (Eds.), *The Routledge handbook of discourse analysis* (pp. 35-50). Routledge.

Lankshear, C., & Knobel, M. (2006). *New literacies everyday practices and classroom learning (2nd ed.).* Open University Press.

Laufer, B., & Hill, M. (2000). What lexical information do L2 learners select in a CALL dictionary and how does it affect word retention? *Language Learning and Technology, 3*(2), 58-76.

Liu, X. (2015). Multimodal definition: The multiplication of meaning in electronic dictionaries. *Lexikos, 25*, 210-232. https://doi.org/10.5788/25-1-1296

Metruk, R. (2017). The use of electronic dictionaries for pronunciation practice by university EFL students. *Teaching English with Technology, 17*(4), 38-51, http://www.tewtjournal.org

Pothiphoksumphun, T. (2019). *A survey of electronic-based dictionary usage of English major students* [Master dissertation, Thammasat University]. http://ethesisarchive.library.tu.ac.th/thesis/2019/TU_2019_6121040494_12632_12477.pdf

Rose, H., McKinley, J., & Briggs Baffoe-Djan, J. (2020). *Data collection research methods in applied linguistics*. Bloomsbury Academics.

Wei, L. W., & Chang, C. C. (2022). Self-investigation into Chinese EFL learners' perceptions and habits of online English dictionary use. *Journal of China-ASEAN Studies, 2*(1), 35-46. https://so07.tci-thaijo.org/index.php/JCAS/article/view/1447

Wolter, L. A. (2015). *Dictionary use and preferences of L2 English learners in an intensive English context* [Master dissertation, St. Cloud State University]. https://repository.stcloudstate.edu/engl_etds/14

Zhang, S., Xu, H., & Zhang, X. (2021). The effects of dictionary use on second language vocabulary acquisition: A meta-analysis. *International Journal of Lexicography, 34*(1) 1-38. https://doi.org/10.1093/ijl/ecaa010

RELATIONSHIP BETWEEN TECHNOLOGICAL COMPONENTS AND INVENTIVE SKILLS AMONG MALAY LANGUAGE TEACHERS

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Manuscript received 7 March 2023
Manuscript accepted 8 December 2023
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https://doi.org/10.33736/ils.5511.2023

ABSTRACT

Technology use in classroom can improve teachers' ability to deliver effective and relevant content. Teachers should be more prepared to apply technology to ensure that students will have more fun and have a high interest in continuing to learn in the era of globalisation which is based on the use of these information communication technology elements in the classroom during the teaching and facilitation process. This study identifies the relationship between technological knowledge, technological content knowledge, technological pedagogical knowledge, technological pedagogical content knowledge, and inventive skills for teachers. A total of 400 questionnaires were distributed to teachers who taught Malay language subjects in secondary schools in Malaysia. To test the hypothesis, the structural equation using the PLS-SEM framework was used. The results showed that technological knowledge, technological content knowledge, technological pedagogical knowledge, and technological pedagogical content knowledge have a positive relationship with inventive skills for teachers.

Keywords: technological knowledge; technological content knowledge; technological pedagogical knowledge; technological pedagogical content knowledge; inventive skills

Introduction

New technologies have created new challenges and opportunities for individuals all around the world. To meet the new demands of today's society, teachers need to have the necessary knowledge and skills. Part of this is through a reform of teachers' teaching and learning methods using technology (Oke & Fernandes, 2020). The 4th Industrial Revolution (IR 4.0) demands have become more prevalent in today's classrooms, which means that teachers must adopt new teaching methods that are geared toward the needs of the 21st century. One of the most important factors that teachers should consider is the shift toward Education 4.0, which is a concept that aims to align the human and technology resources to enable new possibilities (Oliveira & de Souza, 2022). The rapid emergence and evolution of new technologies such as artificial intelligence, the Internet of Things, and robotics are expected to have a significant impact on the future employment of humans. This is why it is important that students develop the necessary skills to be successful in the 21st century workforce, and to ensure this, teachers and schools must be well-equipped and continuously train students for the future (Shafie et al., 2019).

However, some teachers are less sensitive to the current development of technology as teaching aids in the classroom. Even though technology equipment are available in schools, some teachers are still not proficient enough to take advantage of the opportunity. This is in line with the views of Cansoy and Parlar (2018) and Joo et al. (2018) who stated that the lack of knowledge of teachers to apply technology is one of the factors that contribute to the weakness of students in skills such as communication, critical thinking, and problem-solving. Although classes have access to and are equipped with technological facilities, ineffective professional development, teachers' self-efficacy, and teachers' perceptions are still affecting effective implementation of the technology (Ravendran & Daud, 2020).

Furthermore, there are others issues that are often raised such as failure of teachers to implement quality teaching and facilitation processes, the absence of a complete basic infrastructure, lack of qualified teachers (options), limited teaching material resources, and drastic curriculum changes (Puspitarini & Hanif, 2019).This shows that the level of skills and knowledge of teachers in applying technology is still at a rather worrying level (Hatlevik & Hatlevik, 2018; Roslee & Tisebio, 2020).

Studies conducted by Spiteri and Chang (2020) further revealed that many teachers have a hard time using technology in their daily work. They cited several factors that prevented them from effectively using technology, such as the lack of knowledge and skills and the time taken to learn new technology. The results of the study revealed that knowledge about the use of technology in the classroom is very important to improve the teaching process.

A study carried out by Md Darus and Hamid (2018) concluded that while 71% of teachers applied technology in school, this application was for their own purpose and not for teaching and facilitation. The teachers applied technology to keep records and to

record student grades. This shows that there is a lack of knowledge and mastery regarding the use of technology in schools, particularly involving teaching and learning (Mohammad Rusdi, 2017). Teachers are more likely to use technology for educational management than for the facilitation of the classroom. They also refrain from using technology for teaching purposes even though it can provide them with various advantages (Md Darus & Hamid, 2018).

To satisfy the needs of the workforce, educational institutions have started to place more emphasis on teaching strategies based on 21st-century skills components (Sulaiman & Ismail, 2020). One of these skills, inventive skill, IS considered as one of the most important criteria in 21st-century skills and is highly pivotal in the development of critical and innovative thinking. Hence, there is a need for teachers to be prepared and ready to try new and fresh solutions concerning inventive skill elements in their teaching. However, research revealed that teachers may not be prepared in this aspect. For instance, Mohd Qhairil (2018) found that Malay language teachers were not able to implement the necessary teaching and facilitation methods that can help improve the learning environment.

In addition, the lack of existing experience, style, interest, and exposure to the elements of inventive skills present obstacles to teachers when it comes to preparing students who are skilled in creative thinking. This is in line with the view of Ngaewkoodrua and Yuenyong (2018) who stated that teachers who have knowledge related to the elements of inventive skills can think positively, dare to take risks, can be creative, and are able to teach effectively and can change students' views. Malay language teachers need to play a role in attracting students' interest and focus more on the process of teaching as well as facilitating Malay language learning based on the 21st-century education (Hasin & Nasir, 2021).

Therefore, there is a need to carry out a study that aims to identify the relationship between technological knowledge, technological content knowledge, technological pedagogical knowledge, technological pedagogical content knowledge, and inventive skills for teachers. The results of this study can help the concerned parties, especially the Ministry of Education and school management, to develop teachers' knowledge in integrating technology. The research findings about the composition of technological pedagogical content knowledge and inventive skills components among Malay language teachers can contribute to the curriculum design and structure of effective teacher professional development training programs, especially in the field of educational technology.

Literature Review

Inventive Skills for Teachers

Inventive skills, one of the skills of the 21st century as stated by NCREL and Metiri Group (2003), can be defined as a cognitive skill that is critical in order to make a task easier and simpler to implement with the help of technology integration. Inventive skills are required for activities that can help teachers apply critical and creative thinking. NCREL and Metiri Group (2003) provided several elements found in inventive skills, namely adaptation and difficulty management, self-regulation, curiosity, creativity, daring to take risks, and high-level thinking and good reasoning.

The six elements found in inventive skills need to be mastered by teachers in school since inventive skills is a current necessity to produce students who are not only mature in their thinking, but capable of thinking creatively, critically, and innovatively. Due to the current educational needs which are more complex and competitive in nature, inventive skills are given focus in the implementation of the teaching process and facilitation of the teachers in the classroom. This is because the elements in inventive skills can mobilise students' potential to deal with upcoming challenges, especially during employment (Saleh et al., 2020).

Technological Knowledge and Inventive Skills for Teachers

Technological knowledge refers to knowledge related to digital technology such as the use of computers, laptops, hardware technology, smart phones, the Internet, and software programs. This knowledge also includes the skills needed to master, operate, and adapt to digital technology (Graham et al., 2011). The technological knowledge in the context of this study refers to the teacher's knowledge to apply basic technology to carry out various tasks at school, especially during the teaching and learning process in the classroom.

Sakdiah and Jamilah (2022) analysed the perceptions of students on various platforms and the use of technology in their studies, and found that 67.5% of students think that Google is the most appropriate tool for learning. The most common use of information technology in the classroom is to improve the efficiency and effectiveness of learning. The study was conducted to provide a comprehensive view of the various factors that influence the development and implementation of information technology in schools. It also aims to provide a basis for the development of effective instructional technology.

Based on the review of literature, hypothesis H1 is developed.

H1: There is a relationship between technological knowledge and inventive skills.

Technological Content Knowledge and Inventive Skills for Teachers

Technological content knowledge relates to the teacher's understanding of how the content of a subject can be changed using technology applications (Graham, 2011). For this study, the technological content knowledge component refers to the teacher's knowledge to apply appropriate educational technology equipment to be used for the purpose of conveying the content of Malay subject. According to Gupta and Jain (2017), the use of technology in the classroom can help improve the learning experience for students. With the help of these technological elements, teachers will be able to create a fun learning environment.

Conceptually, knowledge about technology includes teachers' understanding of basic technologies such as books, chalk, and blackboards and then to more sophisticated technologies such as the Internet and digital video (Mishra & Koehler, 2006). This knowledge also involves the skills needed to operate certain technologies. Teachers must have basic technology skills if they want to prepare their students to be able to use technology. In fact, technological content knowledge and skills are crucial if teachers want to stay relevant on the educational stage. The integration of technology into the teaching process through various forms of media such as video, audio, and graphics can make it easier for instructors to deliver effective and systematic content (Asad et al., 2021), and to be able to do this, teachers need to have a good grasp of technological content knowledge and skills.

Based on the review of literature, hypothesis H2 is developed.

H2: There is a relationship between technological content knowledge and inventive skills

Technological Pedagogical Knowledge and Inventive Skills for Teachers

Technological pedagogical knowledge refers to teachers' knowledge of how the teaching and learning process (pedagogy) can be changed by digital technology and how that technology is used (Graham, 2011). In the context of this study, the technological pedagogical knowledge component is the teacher's knowledge about the application of educational technology that is appropriate to implement teaching strategies (pedagogy) that involve various activities for students in the classroom.

The content of pedagogic technological knowledge is directly related to the teaching process of the 21st-century skills such as learning and innovation skills, media and technology, life and career skills, necessary literacy skills, and information skills (Shafie et al., 2019). Akhwani and Rahayu (2021) found that technological pedagogical knowledge components can have a direct impact on the improvement of teacher inventive skills elements during the teaching and facilitation process in the classroom. A study carried out by Arifin and Yunus (2017) established that with the help of technological tools in the teaching and guidance process in the classroom, effective, interesting, and interactive teacher-teaching practices can be conducted to meet the needs of the students' learning process. In addition, Kusaini et al. (2022) showed that

technological facilities can be adapted for the teaching and facilitation strategies of teachers to make students' learning process more meaningful.

The integration of technology in pedagogy can help students achieve their learning goals as well as motivate and interest them in classroom lessons (Puspitarini & Hanif, 2019). Hence, teachers need to continuously update their technological pedagogical knowledge component, in addition to being prepared to practice more up-to-date, relevant, effective, and systematic teaching methods (Alwaished et al., 2020). The changing times and aspects of current development need to be taken seriously to ensure that the teaching and facilitation process for a subject remains relevant.

Based on the review of literature, hypothesis H3 is developed.

H3: There is a relationship between technological pedagogical knowledge and inventive skills

Technological Pedagogical Content Knowledge and Inventive Skills for Teachers

Technological pedagogical content knowledge refers to the teacher's knowledge about the application of technology that is appropriate for conducting interesting activities and to effectively deliver content based on the Malay subject. A study conducted by Chai et al. (2019) revealed that the use of technological pedagogical knowledge can improve the skills of teachers. It can also create a favourable impact on the students' performance. This approach can be used to develop a more suitable teaching and learning environment. Rachmadtullah et al. (2020) found that using technological tools in classrooms enhanced both teachers' expertise and students' learning. The researchers also recommended using this approach to guide the development of the teachers' abilities to be effective in the 21st-century classroom.

Koh and Chai (2014) analysed the various aspects of the technological pedagogical knowledge component. They found that technological pedagogical knowledge component can help teachers and students improve their skills and knowledge. Although the concept of technological content knowledge has been used in numerous studies related to the teaching of technology, Tanak (2020) explored the relationship between these knowledge frameworks and the development of teachers. The study showed that the various aspects of technical and pedagogical knowledge are related to the use of ICT in the classroom. Furthermore, the results revealed that when the use of technology is implemented in the classroom, teachers are more confident about their ability to develop a technological pedagogical knowledge component. It is easier to build this type of knowledge component when it is based on a teaching design that uses ICT (Malik et al., 2019).

Based on the review of literature, hypothesis H4 is developed.

H4: There is a relationship between technological pedagogical content knowledge and inventive skills.

Method

The study employed questionnaires to identify the level of mastery, influence, and relationship between technological elements with inventive skills among Malay secondary school teachers in Malaysia. In this study, the study population was 46,613 Malay language teachers in Malaysia's national secondary schools. The sample was 400 teachers. A structural equation modelling procedure was then conducted to test our hypotheses. The models use data collected from measures and latent variables, which are consequently used for statistical analysis (Williams et al., 2009). The PLS-SEM approach was chosen after following the accepted procedure for choosing a structural equation model (Ringle et al., 2012). We performed the analysis using the SmartPLS 3.3 software (Ringle et al., 2014), which was developed by Wold (1982). The algorithm used to estimate the parameters were derived from the works from previous researchers in similar studies, such as Susanti and Mukminin (2022), Lai et al. (2022), and Absari et al. (2020).

Results and Discussion

This section presents the results of the measurement and structural model parameters. Figure 1 shows the results of the PLS algorithm.

Measurement Model

To ensure that the research model is correctly measured, several steps are performed. The first step is to determine whether the indicators are reliable. Then, the validity and consistency of the measurement are examined. The reliability analysis is a process that involves evaluating the various factors that affect the reliability of a particular item. It involves examining the difference between the factors that affect the item's reliability and the latent variables that are related to it. An indicator can be considered a standard in the measurement model if it has factor loadings greater than 0.60 (Hair et al., 2017). All the indicators are above 0.60 and therefore meet the requirement.

Scale reliability is a process utilised by researchers to ensure that the various indicators used in measuring concepts are consistent. This is done using composite reliability. For basic research, Hair et al. (2017) recommends 0.70 for small reliability. As shown in Table 1, all the constructs that are related to this concept exceed this value.

Figure 1

Measurement Model

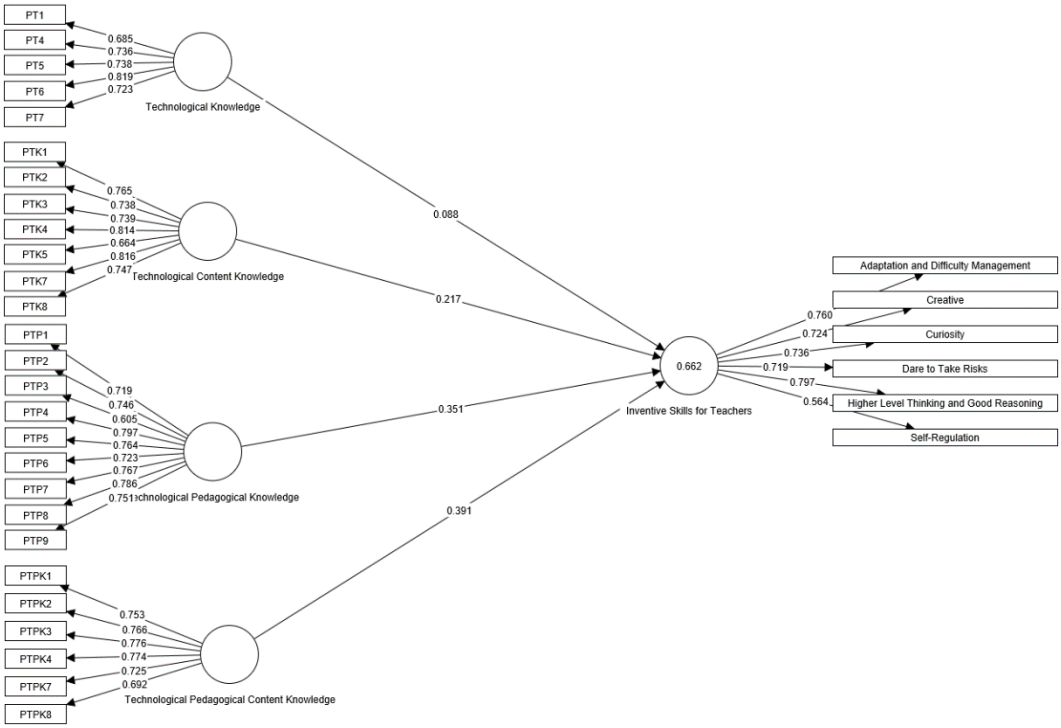

Table 1

Reliability and validity indicators

Indicator	Loading	Composite Reliability (CR)	Average Variance Extracted (AVE)
Technological Knowledge		0.804	0.550
PT1	0.685		
PT4	0.736		
PT5	0.738		
PT6	0.819		
PT7	0.723		
Technological Content Knowledge		0.879	0.572
PTK1	0.765		
PTK2	0.738		

PTK3	0.739		
PTK4	0.814		
PTK5	0.664		
PTK7	0.816		
PTK8	0.747		
Technological Pedagogical Knowledge		0.898	0.550
PTP1	0.719		
PTP2	0.746		
PTP3	0.605		
PTP4	0.797		
PTP5	0.764		
PTP6	0.723		
PTP7	0.767		
PTP8	0.786		
PTP9	0.751		
Technological Pedagogical Content Knowledge		0.844	0.560
PTPK1	0.753		
PTPK2	0.766		
PTPK3	0.776		
PTPK4	0.774		
PTPK7	0.725		
PTPK8	0.692		
Inventive Skills		0.831	0.519
Adaptation and Difficulty Management	0.760		
Creative	0.724		
Curiosity	0.736		
Dare to Take Risks	0.719		
Higher Level Thinking and Good Reasoning	0.797		
Self-Regulation	0.564		

The validity analysis is carried out to evaluate the convergent and divergent validity of a construct. It involves the various indicators that are related to the underlying construct. The AVE, which is a statistical measure of variance, is used to perform this procedure. According to Fornell and Larcker (1981), the AVE should be above 0.5, which means that more than 50% of the variance in a construct can be attributed to its indicators. Table 1 shows that all the major constructs have values exceeding this level.

Discriminant validity is a measure of how different a given construct is from other constructs. This means that a construct's AVE should be greater than its variance with the other constructs. To determine the correlation between the various constructs, we must first show that the AVE is lower than the square root of the variance (bold) (Table 2). Table

2 shows that the square root of the AVE (bold) constructs is of a greater value than the correlations between constructs. Thus, the discriminant validity of the measurement model was established.

Table 2
Discriminant Validity

	Inventive Skills for Teachers	Technological Content Knowledge	Technological Knowledge	Technological Pedagogical Content Knowledge	Technological Pedagogical Knowledge
Inventive Skills for Teachers	**0.720**				
Technological Content Knowledge	0.554	**0.756**			
Technological Knowledge	0.392	0.570	**0.742**		
Technological Pedagogical Content Knowledge	0.705	0.442	0.250	**0.748**	
Technological Pedagogical Knowledge	0.659	0.321	0.235	0.555	**0.742**

Structural Model

After validating the fit of the measurement model by examining its relation between variables, we can then analyse its structural model. This process involves evaluating the significance and strength of the relationships between the variables. The analysis involves the variance explained by the endogenous variables and their path coefficients or beta. The R^2 value of a model is a measure of its predictive power. It indicates the share of variance that the model has explained. Cohen (1988) suggested the following thresholds: From 0.35, “substantial”; from 0.15, “medium”; and from 0.02, “small”. For this study, the R^2 value obtained in this model is substantial for the variable inventive skills (R^2 = 0.662).

The evaluation of the path coefficients significance was carried out using a resampling technique known as the bootstrapping method. The subsamples are produced with 5,000 observations, the subsamples were extracted at random and replaced with the original data. This ensures that the results are consistent and conform to the literature's recommendations (Hair et al., 2017). Table 3 shows the p values results.

Figure 2

Structural Model

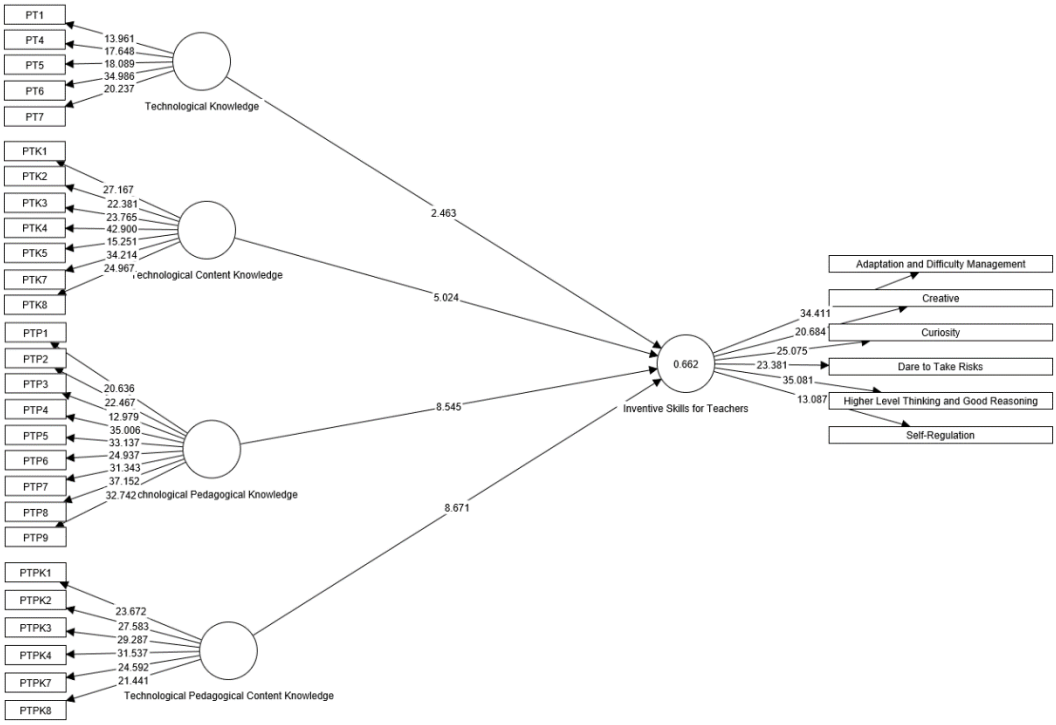

Table 3

Result of Structural Model

	Beta	Standard Deviation	T Statistics	P Values	R^2
H1: Technological Knowledge → Inventive Skills	0.088	0.036	2.463	0.007	
H2: Technological Content Knowledge → Inventive Skills	0.217	0.043	5.024	0.000	
H3: Technological Pedagogical Knowledge → Inventive Skills	0.351	0.041	8.545	0.000	
H4: Technological Pedagogical Content Knowledge → Inventive Skills	0.391	0.045	8.671	0.000	0.662

The results provide support for Hypothesis 1 (ß = 0.088; p-value = 0.007), Hypothesis 2 (ß = 0.217; p-value = 0.000), Hypothesis 3 (ß = 0.351; p-value = 0.000), and

Hypothesis 4 (ß = 0.391; p-value = 0.000). Technological knowledge, technological content knowledge, technological pedagogical knowledge, and technological pedagogical content knowledge increase inventive skills. The most dominant variable with high relation is the technological pedagogical content knowledge whose beta value is 0.391.

This study aims to identify the relationship between technological knowledge, technological content knowledge, technological pedagogical knowledge, and technological pedagogical content knowledge with inventive skills for teachers.

Based on the statistical results for Hypothesis 1, there is a significant relationship between technological knowledge and inventive skills, hence Hypothesis 1 is supported. This finding is consistent with Rahayu (2021), who found that technological knowledge component has a positive effect on teachers' inventive skills. This means that technological knowledge component is one of the aspects that can improve the elements of inventive skills among teachers. In other words, teachers' knowledge of integrating aspects of technology in their lessons is useful in helping them teach effectively and creatively. This knowledge can also create a learning environment that is more focused on students. That said, due to the ever-changing nature of technology in the classroom, teachers must constantly expand their technological expertise, which affect their creative capacities positively.

Findings showed that there was a significant relationship between technological content knowledge and inventive skills, thus Hypothesis 2 is supported. The findings of this study are similar to findings by Chee et al. (2018), who found that technological content knowledge components can assist in the improvement of teachers' inventive skills. According to Gupta and Jain (2017), using technology to aid instruction and classroom management is a valuable strategy for creating a productive learning environment for students. Teachers would be better able to engage their students with the materials that they are teaching if they have access to the technological content knowledge component. The results of this study also generally support Amran and Rosli (2017), whose findings showed that teachers' methods to implement creative and innovative teaching and facilitation process through the incorporation of technology elements in the classroom can support 21st-century education goals. It is thus vital for teachers to master content standards and learning standards, understand students' existing knowledge, and become proficient in technology selection, material preparation, and strategy selection (Arifin & Yunus, 2017).

Hypothesis 3 posits that there is a relationship between technological pedagogical knowledge and inventive skills. Results from the analysis showed significant relationship between the two, thus Hypothesis 3 is supported. This finding is similar to Akhwani and Rahayu (2021), who found that technological pedagogical knowledge components can have a direct impact on the improvement of teachers' inventive skills elements. Moreover, this finding supports the view of Arifin and Yunus (2017), who stated that effective, interesting, and interactive teacher pedagogical practices can be aided by the use of technological tools during the teaching and facilitation process. This means that teachers not only need to master the elements of this technology, but also needs to be

smart to plan various types of interesting activities in the classroom. A study by Hazram and Effandi (2018) also provided evidence that technological facilities can be adapted for enhanced teaching strategies and teacher facilitation. Hence, technological pedagogical knowledge needs to be included in Malay language teachers' repertoire of pedagogy to aid them in creating meaningful, student-centred, and learning-by-doing approach that stimulates students' thinking skills.

Hypothesis 4 posits that there is a significant relationship between technological pedagogical content knowledge and inventive skills. As the findings confirmed this, Hypothesis 4 is supported. This finding is in line with studies carried out by Kamary and Hamzah (2019) who found that the technological pedagogical content knowledge component affects the improvement of teachers' inventive skills where this technological pedagogical content knowledge component is a teaching and facilitation strategy capable of producing a positive effect or impact on the students in the class to form a situation that is more relevant to the 21st century. A crucial turning point for the effective application of 21st-century skills practises has always been the integration of practical knowledge and contextual information by teachers using the method of continuous reflection. Studies conducted on a global scale generally have found encouraging trends in the development of excellent educator competencies (Arbaa et al., 2017). The benefit to students comes from a teacher who is effective. Additionally, educators can assess their use of ICT to raise the calibre of student instruction and learning. In the meantime, the overall findings of this study are also consistent with the findings of Srisawasdi (2014) and Voogt et al. (2013) who found that this technological pedagogical content knowledge model is very suitable to be used as a guide in building the knowledge and skills that must be mastered by teachers to be an effective teacher in the 21st century. Likewise, Koh and Chai (2014) also asserted that technological pedagogical content knowledge component is one of the frameworks of the technology integration model that focuses on the effective integration of technology related to mastery, knowledge, skills, abilities, and competence among trainee teachers and in-service teachers. Teachers who are required to teach technology-related subjects can master the technology pedagogical content knowledge component through specialised training (Chai et al., 2019).

Following this finding, it would be beneficial for Malay language teachers to apply aspects of knowledge that include technology, pedagogy, and content in teaching as found in the Content Pedagogy Technology Knowledge Model (Mishra & Koehler, 2006). The model emphasises the importance of technological knowledge that every teacher needs to have to apply to pedagogy and content. Teachers with technological pedagogical content knowledge have the abilities and expertise to utilise and apply the same technology to offer knowledge content or curriculum for the teaching process and facilitation of subjects taught in school. Similarly, this study discovered that expertise in terms of pedagogical technology, content technology, content pedagogy, and content pedagogical technology assist teachers in teaching more creatively.

Conclusion

This study investigated the relationship between technological knowledge, technological content knowledge, technological pedagogical knowledge, and technological pedagogical content knowledge and inventive skills. The results showed that all four knowledge are related to inventive skill, although the strongest relationship is between technological pedagogical content knowledge and inventive skill. Teachers today have access to a wealth of resources and the ability to adapt their methods of instruction to meet the needs of their students, and an interactive and meaningful learning environment can be fostered using technology. The study also found that Malay language teachers have a good level of mastery of inventive skill elements in implementing teaching and facilitation processes. This involves elements of self-adaptation and difficulty management, self-regulation, curiosity, creativity, daring to take risks and high-level thinking, and good reasoning.

The results from this study can assist the education community, particularly the Ministry of Education and school management, to design programmes or training that develop teachers' competence in the various skills. The research findings about the relationship between technological knowledge, technological content knowledge, technological pedagogical knowledge, technological pedagogical content knowledge, and inventive skills among Malay teachers can contribute to the curriculum design and structure of effective teacher professional development training programs. With the present data, such programmes can be structured to target specific needs rather than generic needs of teachers in schools, especially concerning technological adaptation in teaching and learning. Future research can include teachers of other subjects to determine whether the results of the present study can be extrapolated.

Acknowledgement

The study is funded by the Education Sponsorship Division, Ministry of Education Malaysia (MOE) under the Part-Time/Part-Time Federal Training Prize (HLPS) 2020 program.

References

Absari, N., Priyanto, P., & Muslikhin, M. (2020). The effectiveness of technology, pedagogy and content knowledge (TPACK) in learning. *Jurnal Pendidikan Teknologi dan Kejuruan*, *26*(1), 43-51.

Akhwani, A., & Rahayu, D. W. (2021). Analisis komponen TPACK guru SD sebagai kerangka kompetensi guru profesional di Abad 21. *Jurnal Basicedu, 5*(4), 1918-1925.

Alrwaished, N., Alkandari, A., & Alhashem, F. (2020). Exploring in-and pre-service science and mathematics teachers' technology, pedagogy, and content knowledge (TPACK): What next? *Teknologia Kemian Opetuksessa, 1*(1), 6113-6131.

Amran, N., & Rosli, R. (2017). Kefahaman guru tentang kemahiran abad ke-21 (Teachers' understanding in 21st century skills). http://conference.kuis.edu.my/pasak2017 /images /prosiding /pendidikan/09-Nurzarina.Amran-UKM.pdf.

Arbaa, R., Jamil, H., & Ahmad, M. Z. (2017). Model bersepadu penerapan kemahiran abad ke-21 dalam pengajaran dan pembelajaran. *Jurnal Pendidikan Malaysia, 42*(10), 1-11.

Ariffin, N. A., & Yunus, F. (2017). Kesediaan guru prasekolah dalam melaksanakan KBAT dalam pengajaran dan pembelajaran. *International Journal of Learning, Teaching and Educational Research*, *21*(1), 217-230.

Asad, M. M., Hussain, N., Wadho, M., Khand, Z. H., & Churi, P. P. (2021). Integration of e-learning technologies for interactive teaching and learning process: An empirical study on higher education institutes of Pakistan. *Journal of Applied Research in Higher Education, 13*(3), 649-663.

Cansoy, R., & Parlar, H. (2018). Examining the relationships between the level of schools for being professional learning communities and teacher professionalism. *MOJES: Malaysian Online Journal of Educational Sciences, 5*(3), 13-27.

Chai, C. S., Koh, J. H. L., & Teo, Y. H. (2019). Enhancing and modeling teachers' design beliefs and efficacy of technological pedagogical content knowledge for 21st century quality learning. *Journal of Educational Computing Research, 57*(2), 360-384.

Chai, C. S., Jong, M., Yin, H. B., Chen, M., & Zhou, W. (2019). Validating and modelling teachers' technological pedagogical content knowledge for integrative science, technology, engineering and Mathematics education. *Journal of Educational Technology & Society, 22*(3), 61-73.

Chee, J., Nor, M. M., Othman, A. J., & Rahman, M. N. A. (2018). Isu pengetahuan kandungan, pedagogi dan teknologi dalam kalangan guru prasekolah. *JuKu: Jurnal Kurikulum & Pengajaran Asia Pasifik, 6*(1), 7-21.

Cohen, J. (1988). Set correlation and contingency tables. *Applied Psychological Measurement, 12*(4), 425-434.

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research, 18*(3), 382-388.

Graham, C. R. (2011). Theoretical considerations for understanding technological pedagogical content knowledge (TPACK). *Computers & Education*, *57*(3), 1953-1960.

Gupta, V., & Jain, N. (2017). Harnessing information and communication technologies for effective knowledge creation: Shaping the future of education. *Journal of Enterprise Information Management, 30*(5), 831-855.

Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017). *Advanced issues in partial least squares structural equation modeling*. Sage publications.

Hasin, I., & Nasir, M. K. M. (2021). The effectiveness of the use of information and communication technology (ICT) in rural secondary schools in Malaysia. *Journal of Education and e-Learning Research, 8*(1), 59-64.

Hatlevik, I. K., & Hatlevik, O. E. (2018). Students' evaluation of digital information: The role teachers play and factors that influence variability in teacher behaviour. *Computers in Human Behavior, 83*, 56-63.

Joo, Y. J., Park, S., & Lim, E. (2018). Factors influencing preservice teachers' intention to use technology: TPACK, teacher self-efficacy, and technology acceptance model. *Journal of Educational Technology & Society, 21*(3), 48-59.

Kamary, N. M., & Hamzah, M. B. (2019). Kesediaan guru matematik daerah Kuala Langat dalam melaksanakan pembelajaran abad ke 21. *Seminar Antarabangsa Isu-Isu Pendidikan (ISPEN 2019)* (pp. 110-130). Kolej Universiti Islam Selangor.

Koh, J. H. L., & Chai, C. S. (2014). Teacher clusters and their perceptions of technological pedagogical content knowledge (TPACK) development through ICT lesson design. *Computers & Education, 70*, 222-232.

Kusaini, E. A., Mahamod, Z., & Mohammad, W. M. R. W. (2022). Validation instrumentation and measurement of technological pedagogical content knowledge (TPACK) for teachers. *Open Journal of Social Sciences, 10*(10), 69-98.

Lai, D., Lew, S. L., & Ooi, S. Y. (2022). Mobile interactive system in virtual classroom based on TPACK: A study from students' perspectives. *Journal of Logistics, Informatics and Service Science*, *9*(3), 159-171.

Malik, S., Rohendi, D., & Widiaty, I. (2019). Technological pedagogical content knowledge (TPACK) with information and communication technology (ICT) integration: A literature review. *5th UPI International Conference on Technical and Vocational Education and Training (ICTVET 2018)* (pp. 498-503). Atlantis Press.

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers' college record*, *108*(6), 1017-1054.

Mohammad Rusdi, A. M. (2017). Pengetahuan teknologi pedagogi kandungan dan kreativiti pengajaran dalam kalangan guru bahasa Arab di Malaysia [Doctoral Dissertation, University of Malaya]. https://core.ac.uk/download/pdf/268879483.pdf

Mohd Qhairil, A. A. (2018). *Keberkesanan penggunaan peta pemikiran terhadap aspek penulisan karangan, sikap dan pencapaian bahasa Melayu murid tahun 6*. Universiti Kebangsaan Malaysia. http://journalarticle.ukm.my/9859/

NCREL & Metiri Group. (2003). *enGauge 21st century skills: Literacy in the digital age.* https://www. crel.org/engauge

Ngaewkoodrua, N., & Yuenyong, C. (2018). The teachers' existing ideas of enhancing students' inventive thinking skills. *Turkish Online Journal of Educational Technology-TOJET, 17*(2), 169-175.

Md Darus, N, & A. Hamid, A. H. (2018). Kepimpinan teknologi pengetua dan hubungan terhadap kompetensi ICT guru sekolah menengah kebangsaan daerah Seremban

dan Kuala Pilah. *Prosiding Seminar Kebangsaan Majlis Dekan Pendidikan Universiti Awam 2018* (pp. 451- 466). Universiti Sultan Zainal Abidin.

Oke, A., & Fernandes, F. A. P. (2020). Innovations in teaching and learning: Exploring the perceptions of the education sector on the 4th industrial revolution (4IR). *Journal of Open Innovation: Technology, Market, and Complexity*, *6*(2), 1-22.

Oliveira, K. K. D. S., & de Souza, R. A. (2022). Digital transformation towards education 4.0. *Informatics in Education*, *21*(2), 283-309.

Puspitarini, Y. D., & Hanif, M. (2019). Using learning media to increase learning motivation in elementary school. *Anatolian Journal of Education, 4*(2), 53-60.

Rachmadtullah, R., Yustitia, V., Setiawan, B., Fanny, A. M., Pramulia, P., Susiloningsih, W., & Ardhian, T. (2020). The challenge of elementary school teachers to encounter superior generation in the 4.0 industrial revolution: Study literature. *International Journal of Scientific & Technology Research*, *9*(4), 1879-1882.

Rahayu, I. S., Karana, I., Hardiansyah, M. A., Dewi, D. H., & Elihami, E. (2021). The relationship of online game addiction with learning motivation in school age children on COVID-19 pandemic. *Linguistics and Culture Review, 5*(1), 384-396.

Ravendran, D. R., & Daud, M. Y. (2020). Faktor–faktor yang mempengaruhi guru matematik sekolah rendah dalam mengintegrasikan penggunaan teknologi dalam PdPc. *Jurnal Dunia Pendidikan, 1*(3), 24-33.

Ringle, C. M., Sarstedt, M., & Schlittgen, R. (2014). Genetic algorithm segmentation in partial least squares structural equation modeling. *OR spectrum, 36*(1), 251-276.

Ringle, C. M., Sarstedt, M., & Straub, D. W. (2012). Editor's comments: A critical look at the use of PLS-SEM. *MIS quarterly, 36*(1), 3-14.

Roslee, T., & Tisebio, A. T. (2020). Kesan komitmen organisasi pendidikan sebagai moderator ke atas hubungan kepimpinan teknologi pengetua dalam pengurusan kurikulum dengan efikasi kendiri guru. *Malaysian Journal of Social Sciences and Humanities (MJSSH), 5*(3), 30-46

Sakdiah, H., & Jamilah, M. (2022). Digital literacy students facing to independent learning independent campus curriculum. *Community Medicine and Education Journal, 3*(1), 217-222.

Saleh, S., Muhammad, A., & Abdullah, S. M. S. (2020). STEM project-based approach in enhancing conceptual understanding and inventive thinking skills among secondary school students. *Journal of Nusantara Studies (JONUS)*, *5*(1), 234-254.

Shafie, H., Majid, F. A., & Ismail, I. S. (2019). Technological pedagogical content knowledge (TPACK) in teaching 21st century skills in the 21st century classroom. *Asian Journal of University Education, 15*(3), 24-33.

Spiteri, M., & Chang, R. S. N. (2020). Literature review on the factors affecting primary teachers' use of digital technology. *Technology, Knowledge and Learning*, *25*, 115-128.

Srisawasdi, N. (2014). Developing technological pedagogical content knowledge in using computerized science laboratory environment: An arrangement for science

teacher education program. *Research and Practice in Technology Enhanced Learning, 9*(1), 123-143.

Sulaiman, J., & Ismail, S. N. (2020). Teacher competence and 21st century skills in transformation schools 2025 (TS25). *Universal Journal of Educational Research*, *8*(8), 3536-3544.

Susanti, N., & Mukminin, A. (2022). The effects of TPACK instrument variables on teacher candidates in higher education. *Journal of Higher Education Theory and Practice*, *22*(2), 107-115.

Tanak, A. (2020). Designing TPACK-based course for preparing student teachers to teach science with technological pedagogical content knowledge. *Kasetsart Journal of Social Sciences, 41*(1), 53-59.

Voogt, J., Erstad, O., Dede, C., & Mishra, P. (2013). Challenges to learning and schooling in the digital networked world of the 21st century. *Journal of Computer Assisted Learning, 29*(5), 403-413.

Williams, L. J., Vandenberg, R. J., & Edwards, J. R. (2009). 12 structural equation modeling in management research: A guide for improved analysis. *Academy of Management Annals, 3*(1), 543-604.

Wold, H. O. A. (1982). Soft modeling: The basic design and some extensions. In K. G. Joreskog & H. O. A. Wold (Eds.), *Systems under indirect observations: Part II* (pp. 1-54). North-Holland.

RELATIONSHIP BETWEEN VOCABULARY ACQUISITION AND INDIVIDUAL DIFFERENCES AMONG MIDDLE SCHOOL STUDENTS

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Manuscript received 16 March 2023
Manuscript accepted 8 December 2023
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https://doi.org/10.33736/ils.5531.2023

ABSTRACT

This paper explores the vocabulary acquisition of 143 middle school students from an East Malaysian school, examining its correlation with gender, attitudes, and perceived problems faced in vocabulary learning. Using the Contextualised Word Family (CONTEXTUALISED WORD FAMILY) model, the study tested the effectiveness of explicit vocabulary instruction over 30 sessions. The study utilised a one-group pretest-posttest design, measuring the learners' vocabulary size through the Productive Vocabulary Levels Test (PVLT) and a questionnaire. The results showed an increase in vocabulary size with no significant difference based on gender, a very weak negative correlation with attitudes towards vocabulary learning, and mostly weak positive but significant relationships with three of the learners' perceived problems faced in vocabulary learning. This study provides some important pedagogical implications for teacher practice and recommendations for future research.

Keywords: vocabulary acquisition; Contextualised Word Family; explicit vocabulary instruction; individual differences; middle school students

Introduction

Vocabulary knowledge is important for second language (L2) and foreign language (FL) learners as it affects language growth (Al-Khasawneh, 2019; Lee et al., 2019; Silsüpür, 2017), academic success (Irvin & Blankenship, 2022), and communication skills (Viera, 2017). Tahir et al. (2020) found that the lack of vocabulary can hinder both spoken and written functions of L2 learners as they cannot express their intended meanings effectively. Wong et al. (2019) also argue that Malaysian students generally struggle with vocabulary competency despite many years of learning English in school. We assert that explicit vocabulary instruction is necessary for ESL classrooms to aid in vocabulary acquisition. Hence, a systematic approach with word families is necessary to accelerate vocabulary growth, as teaching individual words limits exposure to comprehensible input. When systematic and direct vocabulary instruction is lacking, it often leads to the teaching and learning of individual words in isolation which may hinder the development of language learners by limiting their vocabulary growth. In an L2 classroom, teachers usually teach students individual words. As a result, learners' vocabulary growth is impeded due to limited exposure to comprehensible input in the target language. By explicitly teaching words in groups or word families, students can accelerate their vocabulary acquisition (Schmitt, 2010). The lack of research on direct vocabulary instruction that utilises word families (Schmitt, 2008) and how to accelerate the vocabulary size of L2 learners in Malaysia (Haris & Yunus, 2018) resulted in the use of Contextualised Word Family Model (Subon, 2016) in this study to boost vocabulary learning and acquisition.

Evidently, individual differences (IDs) also play a crucial role in second language acquisition (SLA), as learners' various characteristics such as attitudes (Dörnyei, 2006), motivation, background knowledge, and gender can affect their ability to acquire the target language (Wilson, 2000). However, there is limited research on the effects of these IDs on L2 vocabulary knowledge and growth, and more studies are needed to examine their contributions (Lee, 2020) and the effects of learner differences on the usage of learning strategies (Halvaei & Ansarin, 2018). Yousefi and Biria (2018) propose future research to examine other prospective mediators, such as L2 learner variables that can affect the efficacy of L2 vocabulary instruction. On that note, this study focuses on three moderator variables, namely gender, attitudes, and perceptions of problems faced in vocabulary learning, to investigate their influence on vocabulary acquisition. These IDs are selected based on their important role in vocabulary acquisition, as gender is considered a relevant feature in SLA and attitudes (Lee & Pulido, 2017) and perceptions affect learners' ability to acquire the target language (Alhamami, 2022).

The study investigated the relationship between vocabulary acquisition and individual differences among middle school students. The specific aspects studied are students' vocabulary size before and after the treatment, gender difference in vocabulary size, and the relationship between learners' vocabulary size and their attitudes towards vocabulary learning. The three research hypotheses tested in this study are as follows:

H1: There is a significant difference in vocabulary size between female and male learners.
H2: There is a significant relationship between learners' vocabulary size and their attitudes towards vocabulary learning.
H3: There are significant relationships between learners' vocabulary size and their perceptions of problems faced in vocabulary learning.

Literature Review

Acquiring a sufficient vocabulary size is crucial for L2 learners to achieve proficiency in their target language. According to Qian and Lin (2020), there is a significant relationship between vocabulary knowledge and overall English language proficiency. To comprehend 93% of a text, a proficient language learner should know at least 10,000 words (Sheehan, 2004). Moreover, Nemati (2010) argues that learners need a minimum of 2,000 high-frequency words to understand 80% of a running text. Adolphs and Schmitt (2003) state that a good knowledge of the most frequent 2,000-3,000-word families is necessary for basic everyday oral communication. However, Malaysian students are still lacking in vocabulary size that is beneficial for their studies. Sulaiman et al. (2018) found that Malaysian university students possess a low level of vocabulary threshold, leading to difficulties in understanding academic texts. Similarly, a study by Wong et al. (2019) involving 85 high school students in East Malaysia found that only half (51%) of the students had mastered the 2000-word level, suggesting that majority of them have not acquired vocabulary beyond the minimum level.

The importance of implementing direct vocabulary instruction in an ESL classroom is widely recognised due to students' limited vocabulary knowledge. Several studies have confirmed the positive effects of explicit instruction on vocabulary acquisition (Blachowicz & Fisher, 2000; Tahir et al., 2021). Explicit vocabulary instruction involves a teacher planning a lesson focused on expanding students' understanding of word meanings by targeting specific words (Blachowicz et al., 2006).

According to Beck et al. (2002), struggling readers and low-achieving students can learn one or two new words per day with explicit vocabulary instruction, while better students can learn as many as seven new words. This means that students can learn about 400 new words directly per year, adding 2,000 to 3,000 new words on average to their reading vocabulary annually. Ahmadi (2017) asserts that intentional vocabulary learning leads to better word memorisation and retention. Intentional learning activities have been shown to be the most effective for acquiring words, resulting in greater and faster gains, higher retention rates, and the ability to achieve productive levels of mastery compared to incidental learning (Webb et al., 2020).

Individual differences among learners have been found to significantly affect their ability to acquire a language input, particularly vocabulary. Wilson (2000) argues that learners' affective attributes can influence the "stickiness" or "penetration" of any comprehensible input. Gardner and MacIntyre (1992) classify learner characteristics into three main types: cognitive variables (e.g., language aptitude and language strategies),

affective variables (e.g., attitudes, motivation, and language anxiety), and other variables that can affect learners' cognition (e.g., age and socio-cultural experiences). This suggests that individual characteristics can be shaped by learners' cognitive, affective, and demographic variables. Additionally, Kidd, Donnelly, and Christiansen (2018) found significant variation among learners at any age and across their lifespan based on their review of recent research in psycholinguistics. Thus, it is evident that learners' individual differences, influenced by their cognitive, affective, and demographic variables, can impact the effectiveness of their vocabulary learning and acquisition.

According to Gu (2003), learners' individual characteristics greatly influence their choice of vocabulary learning strategies, rather than the task itself. This suggests a correlation between vocabulary learning strategies and individual differences such as personality, gender, motivation, self-efficacy, language aptitude, learning background, and learning styles. Mohseni-Far (2007) supports this idea, stating that the effectiveness of learning strategies is heavily dependent on individual learners and their attitudes, motivation, prior knowledge, and familiarity with the topic. Indeed, one's attitudes and perceptions towards the target language can contribute to their ability to acquire it (Alhamami, 2022). These findings highlight the significant roles of individual characteristics in both second language acquisition and vocabulary acquisition.

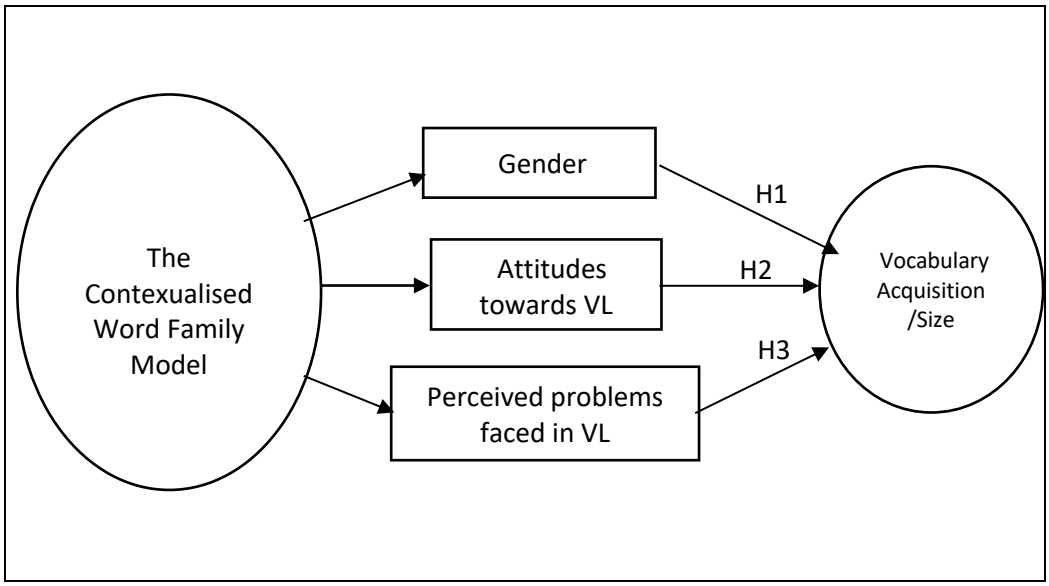
Research on vocabulary acquisition in Malaysia has mainly focused on the tertiary and elementary levels, neglecting the vocabulary proficiency of high school students (Chan & Aziz, 2021; Linda & Shah, 2020). Therefore, it is beneficial to conduct more vocabulary acquisition research involving middle school or high school students because they need to gain ample vocabulary size as a foundation for their future tertiary education. Moreover, there are limited studies examining the relationships between vocabulary acquisition or instruction type and learners' characteristics (Li et al., 2022; Mohseni-Far, 2007). Thus, it is essential to consider these individual differences when investigating learners' vocabulary acquisition, as they may significantly impact the effectiveness of a particular strategy employed (Li et al., 2022; Mohseni-Far, 2007).

Theoretical Framework

The theoretical framework of the study is the Contextualised Word Family Model which consists of seven steps for explicit vocabulary instruction (Figure 2) to help learners gain ample vocabulary size of at least a minimum of 2000 words. Earlier Vocabulary learning models such as Graves' Visionary Model (Graves, 2000), Frayer Model (Frayer et al., 1969) and the STAR Model (Blachowicz, 2005) only involved learning words in separation or individual words. Therefore, the present model integrates the important concept of word family with language learning contexts to form a new concept known as the contextualised word family (Figure 1).

Figure 1

Contextualised Word Family Model



Adapted from "Direct Vocabulary Instruction: The effects of contextualised word families on students' vocabulary acquisition" by Subon (2017)

This study involves three main types of variables, namely, the independent, moderating, and dependent variables. The independent variable is the Contextualised Word Family Model (Subon, 2016) which was used to administer the direct vocabulary instruction of word families. The dependent variable is the output in the form of vocabulary acquisition or size or scores the students obtained in the vocabulary tests before and after the treatment. The vocabulary size was also evaluated in terms of the influence of three moderating variables (learners' individual differences) namely gender, attitudes, and perceptions of problems faced in vocabulary learning. The purpose is to examine whether significant relationships exist between learners' vocabulary size and their individual differences or characteristics.

Methodology

Research Design

This study employed a one-group quasi-experimental design to investigate the research questions. Additionally, it utilised a quantitative method for its data collection process which was conducted in regular classroom settings. By employing a purposive sampling method, students from four classes (out of nine Form 2 classes) at a middle school or high school in Samarahan Division in East Malaysia were purposely selected as the participants of this study. Altogether, 143 students (62 males and 81 females) participated in the study and their ages ranged from 14 to 15 years old. Based on the criterion of the study design, they remained in their respective classrooms during the vocabulary learning treatment.

Instruments

Tests and questionnaires were used to collect data. The Productive Vocabulary Levels Test (PVLT) by Laufer and Nation (1999) at 2000-word levels was adapted and administered during the Pre-test (Test 1) and Post-test (Test 2) to determine the students' vocabulary size. This test, which requires learners to complete the words used in sentences or checklists, has been found to be a reliable measure of vocabulary level (Zimmerman, 2005). It can provide reliable scores for students' mastery of vocabulary at various levels, including 2000, 3000, UWL, 5000, and 10,000-word levels. A pilot study involving 30 participants was conducted a week before the actual study, and the reliability test revealed that the two tests had a high reliability with a Cronbach's alpha of .85 (Hunt & Beglar, 1998).

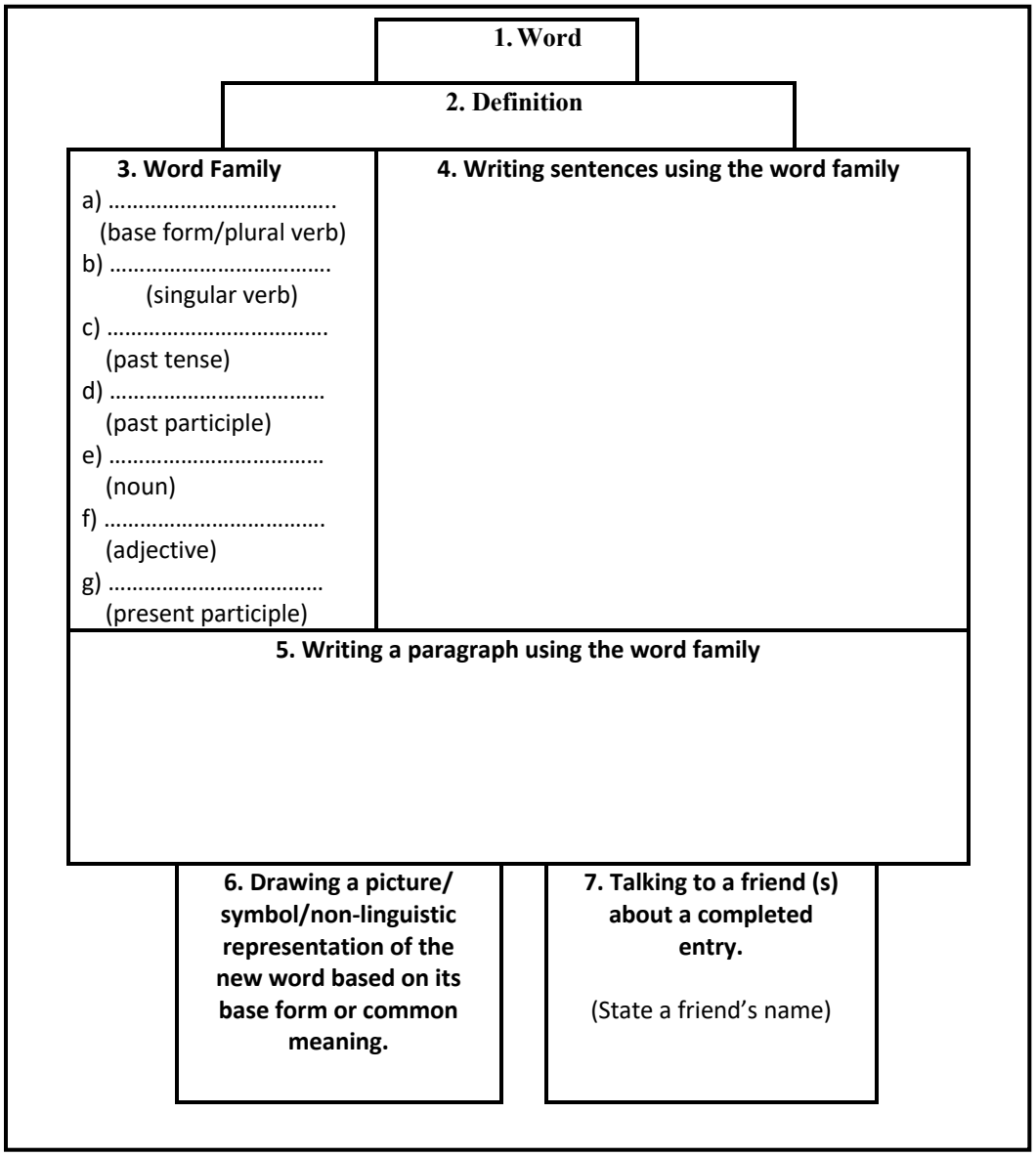
The Contextualised Word Family Model developed by Subon (2016) was used for explicit vocabulary instruction. This model was chosen for several reasons. Firstly, it is believed that by learning new words in word families, learners can acquire more vocabulary (Schmitt, 2000). Word families consist of related words based on their parts of speech, such as plural, singular, past tense, past participle, noun, adjective and present participle forms of a word. For example, the word "observe" has seven-word family members which include observe (plural), observes (singular), observed (past tense), observed (past participle), observer (noun), observable (adjective) and observing (present participle). Therefore, learning vocabulary in word families allows learners to acquire more words than learning individual words in isolation.

Furthermore, the Contextualised Word Family Model focuses on teaching tier two words, such as "respect", "occur", "serve", "accumulate", and "measure" which are considered high-utility words suitable for literate language users (McKeown & Beck, 2011). These words are essential to teaching as they convey important meanings to a text and are used in various kinds of texts (Nation, 2001). During the intervention, students were given a graphic organiser of the Contextualised Word Family Model, as shown in Figure 2, to help them learn the new vocabulary.

A questionnaire adapted from Ming (2007) was used to obtain the students' demographic details (Section A), their attitudes towards vocabulary learning, and perceptions of problems faced in vocabulary learning (Section B). To identify the learners' attitudes towards vocabulary learning, they were required to rate their attitudes based on a five-point Likert scales: 1 – "I dislike it very much", 2 – "I dislike it", 3 – "Neutral", 4 – "I like it" and 5 – "I like it very much". Next, to identify the students' perceptions of problems faced in vocabulary learning, they were also required to rate their perceived problems along a five-point Likert scales: 1 – "A major problem", 2 – "A problem", 3 – "Neutral", 4 – "Quite a problem" and 5 – "Not a problem". The questionnaire was tested for a reliability test, and it was proven to have a good reliability of .79.

Figure 2

The Contextualised Word Family Model of Direct Vocabulary Instruction



Taken from The Contextualised Word Family Model of Direct Vocabulary Instruction by Frankie Subon (2018).

Data Collection and Analysis Procedures

This research was conducted in accordance with the regulations for doctoral research as approved by the Institute of Graduate Studies and Research Ethics Committee of the

university. Before the data collection, informed consent was obtained from relevant parties, such as the education department, school principal, and parents of participating students. In addition, four English teachers from the school volunteered to deliver the lessons during the 30-day treatment period and were briefed by the researcher beforehand on the steps to follow. To facilitate the instruction process, each teacher was provided with a sample lesson plan as well as a completed entry for each word family to use as a guide during instruction.

Before the actual study began, a pilot study was conducted a week earlier. The experiment commenced with a pre-test, which was followed by a treatment that was conducted for thirty sessions. All 143 participants participated in the 30-day treatment period. They answered the pre-test and post-test prior to and after the treatment period and responded to the questionnaire. Each lesson lasted 30-35 minutes, during which the participants completed one entry of the Contextualised Word Family model (Figure 1) and were allowed to use a dictionary if necessary. In total, 30 sets of word families were taught by four teachers. The treatment was conducted three times a week during English lessons, and the teachers assigned take-home tasks to the students to continue with the mainstream syllabus. The post-test and questionnaire were administered immediately after the treatment period ended.

To analyse the data, both descriptive and inferential statistics were used. The students' vocabulary scores from the pre-test and post-test were converted into percentages. To estimate the students' vocabulary size, Schmitt and Meara's (1997) method was used, where a score out of a total score at each level represents the number of words a learner knows. For example, if a student scored 9 out of 18 at the 2000 level, this suggests that the student's vocabulary size was 1000 ($9 \times 2000/18$). A weak score at any level is defined as knowing fewer than 15 out of 18 items, or less than 83%, according to Nation (1990). To indicate a satisfactory mastery of the 2000-word level, a score of 15 out of 18 correct answers or 83.3% is considered the minimum score. The raw data from the pre-test and post-test were then analysed using SPSS version 22.0 to generate the statistical data analyses.

The students' vocabulary size scores before and after treatment were analysed and reported as frequencies and percentages. The significance of differences in vocabulary size test scores between genders was tested using an independent samples t-test. Frequencies, means, and standard deviations were computed to gain insight into students' attitudes towards vocabulary learning and any perceived difficulties they may have faced. Lastly, Spearman's rho correlation test was run to investigate whether any significant correlations existed between learners' vocabulary size and their attitudes towards vocabulary learning, as well as their perceptions of problems encountered.

Results

The results are reported for learners' vocabulary size, and its relationships with gender, attitudes towards vocabulary learning, and the perceptions of problems faced in vocabulary learning.

The Students' Vocabulary Size

The PVLT 2000-word levels tests (Test 1 and Test 2) were administered for the pre-test and post-test to evaluate the students' vocabulary size prior to and after the treatment period. The Post-test was administered immediately after the 30-day of treatment.

Table 1
The Students' Vocabulary Size

Vocabulary Size	Frequency (Pre-test)	Percent (Pre-Test)	Frequency (Post-test)	Percent (Post-test)
0-<500	23	16.1	13	9.1
500-<1000	56	39.2	24	16.8
1000-<1500	46	32.2	62	43.4
1500-<2000	10	7.0	12	8.4
2000 L Mastery	8	5.6	32	22.4
Total	143	100.0	143	100.0

Table 1 shows that there was a slight increase in the students' vocabulary size. In the post-test, 32 or 22.4% students had mastered the 2000-word level (scored 83.3% and above) compared to only 8 or 5.6% students in the pre-test, an increase by 16.8% after the treatment. Although most of the students were unable to obtain 83.3% (2000-word level of vocabulary size), a majority of 106 (62+12+32) or 74.2% students had gained between 1000 and 2000 words (scored between 50% and 100%) than 64 or 44.8% students in the pre-test, an increase by 29.4%. Thus, there was a slight increase in the number or percentage of students who obtained a vocabulary size of between 1000 and 2000 words, and more students had acquired the 2000-word level after the treatment.

Vocabulary Size and Gender

There were 62 male and 81 female participants in this study. Table 2 shows the mean and standard deviation of the test scores. Male students scored slightly higher in both the pre-test (M = 46.59, SD = 22.66) and the post-test (M = 62.72, SD = 19.39) than female students (M= 45.47, SD = 20.86) and (M = 59.32, SD = 21.75)

However, the independent-samples t-test (Table 3) showed that there was no significant gender difference in the vocabulary size in both the pre-test, M = 1.12, 95% CI

[-6.19, 8.43], *t*(125.55) = 0.30, *p* = .762 and the post-test, *M* = 3.40, 95% CI [-3.42, 10.21], *t*(137.69) = 0.99, *p* = .327.

Table 2

Descriptive Statistics of Test Scores Between Genders

	Gender	N	Mean	Std. Deviation	Std. Error Mean
PVLT 2000 Level (Test 1)	Male	62	46.59	22.66	2.88
	Female	81	45.47	20.86	2.32
PVLT 2000 Level (Test 2)	Male	62	62.72	19.39	2.46
	Female	81	59.32	21.75	2.42

Table 3

The Independent Samples Test of the Comparison of Vocabulary Size Between Genders

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
PVLT 2000 Level (Test 1)	Equal variances assumed	.85	.36	.31	141	.759	1.12	3.65	-6.10	8.35
	Equal variances not assumed			.30	125.55	.762	1.12	3.69	-6.19	8.43
PVLT 2000 Level (Test 2)	Equal variances assumed	1.96	.16	.97	141	.334	3.40	3.50	-3.53	10.32
	Equal variances not assumed			.99	137.69	.327	3.40	3.45	-3.42	10.22

Relationship Between Learners' Vocabulary Size and Attitudes Towards Vocabulary Learning

Table 4 shows the frequency of the students' attitudes towards vocabulary learning. It shows that majority of the respondents rated their attitude as neutral (57 students or 39.9%), followed by "I like it" (55 students or 38.5%), "I like it very much" (13 students or 9.1%), "I dislike it" (11 students or 7.7%) and "I dislike it very much" (7 students or 4.9%).

Table 4

Frequency of Students' Attitudes Towards Vocabulary Learning

		Frequency	Percent
Valid	I dislike it very much	7	4.9
	I dislike it	11	7.7
	Neutral	57	39.9
	I like it	55	38.5
	I like it very much	13	9.1
	Total	143	100.0

Notes: 1 –"I dislike it very much", 2 – "I dislike it", 3 – "Neutral", 4 – "I like it", 5 – "I like it very much"

Table 5

Correlation Between Vocabulary Size and Learners' Attitudes Towards Vocabulary Learning

			Attitudes towards VL
Spearman's rho	PVLT 2000 Level (Test 1)	Correlation Coefficient	-.095
		Sig. (2-tailed)	.261
		N	143
	PVLT 2000 Level (Test 2)	Correlation Coefficient	-.142
		Sig. (2-tailed)	.091
		N	143

Table 5 displays the Spearman's rank-order correlation that was generated to assess the relationship between vocabulary size and learners' attitudes towards vocabulary learning. The analysis shows no significant correlation between vocabulary size and learners' attitudes towards vocabulary learning in both the pre-test, r (141) = -.095, p = .261 and the post-test, r (141) = -.142, p = .091. Vocabulary size is not associated with the learners' attitudes towards vocabulary learning.

Relationship Between Learners' Vocabulary Size and Perceptions of Problems Faced in Vocabulary Learning

Table 6

The Correlation Between the Learners' Vocabulary Size and Perceptions of Problems Faced in Vocabulary Learning

	P1 – I've difficulties increasing my vocabulary	P2 – I forget words I've learnt	P3 – I cannot use words properly	P4 – I cannot handle multiple meanings of words	P5 – I cannot remember new words

Spearman's rho	PVLT 2000 Level (Test 1)	Correlation Coefficient	.140	.109	.247**	.136	.268**
		Sig. (2-tailed)	.095	.194	.003	.105	.001
		N	143	143	143	143	143
	PVLT 2000 Level (Test 2)	Correlation Coefficient	.139	.117	.203*	.184*	.179*
		Sig. (2-tailed)	.098	.165	.015	.028	.033
		N	143	143	143	143	143

Notes: *Significant at the 0.05 level (2-tailed). **Significant at the 0.01 level (2-tailed).

Table 6 shows that there are some significant relationships between learners' vocabulary size and perceptions of problems faced in vocabulary learning. In the pre-test, there were weak positive and statistically significant correlations between the vocabulary size and perception 3 – "I cannot use words properly" (r (141) =.247, p = .003), and perception 5 – "I cannot remember new words" (r (141) =.268, p = .001). In contrast, in the post-test, there was a weak positive and statistically significant correlation between the vocabulary size and perception 3 (r (141) = .203, p = .015). In addition, there was a very weak positive and statistically significant correlation between vocabulary size and perception 4 – "I cannot handle multiple meanings of words" (r (141) = .184, p = .028), and perception 5 – "I cannot remember new words" (r (141) = .179, p = .033). There were statistically significant relationships between learners' vocabulary size and three perceptions of problems faced in vocabulary learning, but the relationships were weak.

Discussion

The results show that there is a weak and non-significant relationship between learners' vocabulary acquisition and their individual differences. The results showing that there is no significant difference in vocabulary size between genders is consistent with Walker et al. (2020). However, this contrasts with other researchers who found significant gender differences. Llach and Gallego (2012) found significant differences in the receptive vocabulary acquisition among female and male Spanish students. The results of the present study also contradict the significant relationship between learning strategy employment and gender found by Mutua and Oyoo (2020) and Lee (2020).

The results of this study suggest that learners' attitudes towards vocabulary learning have no significant correlations with vocabulary size. This finding contrasts with other studies which found significant correlations. Bai (2020) study found a positive and significant relationship between positive attitudes and academic achievement. Moreover, previous research has found that vocabulary learning strategies are closely related to individual differences such as gender, motivation, self-efficacy, personality, language aptitude, learning background, and learning styles (Kidd et al., 2018). Mohseni-Far (2007) also argues that learners' characteristics, such as attitudes, motivation, prior knowledge, and topic familiarity, greatly influence the strategies employed and their effectiveness. Additionally, Thompson (2021) maintains that learners' attitudes can affect their success or failure in language learning. The results may be influenced by the method of study.

The present study shows weak and significant positive relationships between students' vocabulary size and their perceived problems in vocabulary learning. This finding is new since past studies have not specifically examined the relationships between these variables. In the pre-test, the students perceived that they had difficulty using words properly and remembering new words, while in the post-test, they also had difficulty handling multiple meanings of words. Although the relationships established were weak, they support recent claims that learners' attitudes and perceptions towards the target language influence their ability to acquire it (Alhamami, 2022). Furthermore, this finding is consistent with previous studies that found students encounter various problems in learning vocabulary, such as difficulty in pronunciation, correct usage, spelling, and understanding the meanings of new words (Afzal, 2019).

The use of tier 2 words for explicit instruction of contextualised word families in this study may have contributed to the finding that students had difficulty handling words with multiple meanings and using new words correctly. Thus, it is beneficial for teachers to choose suitable words for direct vocabulary instruction based on students' L2 acquisition abilities. While advanced learners can be taught high-frequency tier 2 words to improve their language ability (Beck et al., 2002), beginners and intermediate students may still need to be taught basic vocabulary (Chung, 2012). Overall, the weak relationships between learners' vocabulary size and perceptions of problems faced in vocabulary learning provide opportunities for further research in this area. It is essential to continue examining the relationship between these variables to gain a better understanding of vocabulary acquisition and the factors that influence it.

This study has shown that the use of the Contextualised Word Family Model (Subon, 2016) for explicit vocabulary instruction has resulted in a slight improvement in the participants' vocabulary growth. The treatment has led to an increase in vocabulary size among the participants, with more students reaching the 1000-word level and above, and more students being able to acquire the 2000-word level than before the treatment. This finding is consistent with previous research that emphasises the importance of explicit vocabulary instruction (Schmitt, 2008; Tahir et al., 2021).

Systematic vocabulary instruction such as the Contextualised Word Family Model, which includes integration, repetition, and meaningful use (Nagy, 1988), is more effective in providing students with a richer word knowledge. This approach is also consistent with the idea that observing and paying attention to second language features is critical to learning a new language (Karami & Bowles, 2019). Hadi (2017) suggests that presenting semantically related words as a "central concept" is the best method to teach vocabulary. Tahir et al. (2021) also found that the explicit method is effective in helping learners acquire new words. However, further research is needed to support and validate these findings, as Curtis (1987) suggests that methods may vary in their effectiveness for different groups of students. Therefore, more studies are necessary to determine the consistency of these findings and their generalizability to different groups of learners.

The findings of this study have significant pedagogical implications for English as a Second Language (ESL) classrooms in Malaysia. Despite individual differences, the use

of the Contextualised Word Family model can benefit all learners in vocabulary acquisition (Subon, 2016). However, teachers should also take into consideration the specific problems faced by students in vocabulary learning and provide explicit instruction on appropriate words (Afzal, 2019). It is crucial to prioritise increasing students' vocabulary size, as it is fundamental to acquiring the English language (Haris & Yunus, 2018). Given that most students in this study had a vocabulary size below the minimum of 2000 words, teachers should aim to accelerate their vocabulary growth. Finally, effective vocabulary instruction should not only focus on learning individual words but also on learning word families, grammar, syntax, and contexts (Nation, 2001). This integrated approach to vocabulary learning will provide richer word knowledge and improve overall language proficiency.

Conclusion

This study investigated the influence of individual differences, such as gender, attitudes, and perceived problems faced in vocabulary learning on L2 learners' vocabulary acquisition using the Contextualised Word Family model. This rich, structured, and systematic model of explicit vocabulary instruction can be adopted for vocabulary acquisition. The findings revealed that these factors did not significantly affect learners' vocabulary acquisition, although some weak positive correlations were identified between learners' vocabulary size and their perceptions of problems faced in vocabulary learning. However, the explicit vocabulary instruction model used in the study resulted in promising growth in students' vocabulary size, although most students still had a vocabulary size below the 2000-word level. As a result, the study recommends the implementation of a Vocabulary Intervention using the Contextualised Word Family model, which could help students gain 400 new words a year and over 2000 words throughout their secondary school education. Considering the study's limitations, such as a small sample size and limited variables, it is suggested that future studies should employ a mixed-methods research design to obtain a more in-depth understanding of the factors that influence L2 learners' vocabulary acquisition and improve the effectiveness of vocabulary instruction.

Acknowledgement

We would like to express our heartiest gratitude to all parties who had participated in this research – the Form 2 students and English teachers at the selected school in Samarahan Division, East Malaysia.

References

Adolps, S., & Schmitt, N. (2003). Lexical coverage of spoken discourse. *Applied Linguistics*, *24*(4), 425-438. https://doi.org/10.1093/applin/24.4.425

Afzal, N. (2019). A Study on vocabulary learning problems encountered by BA English majors at the university level of education. *Arab World English Journal*, *10*(3) 81-98. https://dx.doi.org/10.24093/awej/vol10no3.6

Ahmadi, S. R. M. (2017). The impact of incidental and intentional L2 vocabulary learning on depths and breadth dimensions of vocabulary knowledge. *The Buckingham Journal of Language and Linguistics*, *10*, 1-17. https://doi.org/10.5750/bjll.v10i0.1270

Alhamami, M. (2022). Language learners' attitudes toward online and face-to-face language environments. *Front Psychol, 13*, 1-12. https://doi.org/10.3389/fpsyg.2022.926310

Al-Khasawneh, F. (2019). The impact of vocabulary knowledge on the reading comprehension of Saudi EFL learners. *Journal of Language and Education*, *5*(3), 24-34. https://doi.org/10.17323/jle.2019.8822.

Bai, Y. (2020). The relationship of test takers' learning motivation, attitudes towards the actual test use, and test performance of the college English test in China. *Lang Test Asia*, *10*, 1-18. https://doi.org/10.1186/s40468-020-00108-z

Beck, I. L., McKeown, M. G., & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction.* Guilford Press.

Blachowicz, C. L. Z. (2005). *Vocabulary essentials: From research to practice for improved instruction*. Scott Foresman and Co.

Blachowicz, C. L. Z., & Fisher, P. (2000). Vocabulary instruction. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (pp. 503-523). Lawrence Erlbaum Associates.

Blachowicz, C. L. Z., Fisher, P. J. L., Ogle, D., & Watts-Taffe, S. (2006). Vocabulary: Questions from the classroom. *Reading Research Quarterly, 41*, 524-539. https://doi.org/10.1598/RRQ.41.4.5

Chan, C. H., & Aziz, A. A. (2021). Employment of language learning strategies by Chinese school learners in learning ESL vocabulary. *Malaysian Journal of Social Sciences and Humanities (MJSSH), 6*(3), 330-339. https://doi.org/10.47405/mjssh.v6i3.707.

Chung, S. F. (2012). Research–based vocabulary instruction for English language learners. *Reading Matrix: An International Online Journal, 12*(2), 105-120. https://www.readingmatrix.com/articles/september_2012/chung.pdf

Curtis, M. E. (1987). Vocabulary testing and vocabulary instruction. In M. G. McKeown & M. E. Curtis (Eds.), *The nature of vocabulary acquisition* (pp. 37-52). Erlbaum.

Dörnyei, Z. (2006). Individual differences in second language acquisition. *AILA Review*, *19*(1), 42-68. https://doi.org/10.1075/aila.19.05dor

Frayer, D. A., Frederick, W. C., & Kalausmeier, H. J. (1969). *A schema for testing the level of concept mastery*. Technical Report No. 16. University of Winconsin Research and Development Centre for Cognitive Learning.

Gardner, R. C., & MacIntyre, P. D. (1992). A student's contribution to second-language learning. Part I: Cognitive variables. *Language Teaching*, *25*, 211-220. https://doi.org/10.1017/S026144480000700X

Graves, M. F. (2000). A vocabulary programme to compliment and bolster a middle grade comprehension programme. In B. M. Taylor, M. F. Graves, & P. van den Broek (Eds.), *Reading for meaning: Fostering comprehension in the middle grades* (pp.116-135). International Reading Association.

Gu, P. Y. (2003). Vocabulary learning in a second language: Person, task, context and strategies. *TESL-EJ Journal,* 7, 1-25. http://www-writing.berkeley.edu/TESl-EJ/ej26/a4.html#top

Hadi, A. S. A. (2017). Significance of vocabulary in achieving efficient learning. *American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS). 29*(1), 271-285. http://asrjetsjournal.org

Halvaei, M., & Ansarin, A. (2018). Learner effectiveness: A cause of learner strategy use? *International Journal of Education and Literacy Studies, 6*(4), 1-6. https://doi.org/10.7575/aiac.ijels.v.6n.4p.1

Haris, M., & Yunus, M. M. (2018). Vocabulary size of ESL IGCSE students. *International Journal of Advanced Research (IJAR), 6*(8), 263-267. http://dx.doi.org/10.21474/IJAR01/7518

Hunt, A., & Beglar, D. (1998). Current research and practice in teaching vocabulary. *JALT*, *22*(1), 7-11. https://jalt-publications.org/tlt/articles/1914-current-research-and-practice-teaching-vocabulary

Irvin, S., & Blankenship, K. G. (2022). Vocabulary & academic success in university undergraduate students. *Teaching and Learning in Communication Sciences & Disorders, 6*(2), 10-18. https://doi.org/10.30707/TLCSD6.2.1660595992.600476

Karami, A., & Bowles, F. A. (2019). Which strategy promotes retention? Intentional vocabulary learning, incidental vocabulary learning, or a mixture of both? *Australian Journal of Teacher Education*, *44*(9), 25-43. http://dx.doi.org/10.14221/ajte.2019v44.n9.2

Kidd, E., Donnelly, S. & Christiansen, M. H. (2018). Individual differences in language acquisition and processing. *Trends in Cognitive Sciences*, *22*(2), 154-169. https://doi.org/10.1016/j.tics.2017.11.006.

Laufer, B. & Nation, I. S. P. (1999). A vocabulary size test of controlled productive ability. *Language Testing 16*(1), 33-51. https://doi.org/10.1191/026553299672614616

Lee, B. C., Pandian, A., Rethinasamy, S., & Tan, D. A. L. (2019). Effects of PWIM in the ESL classroom: Vocabulary knowledge development among primary Malaysian learners. 3*L: Language, Linguistics, Literature, 25*(4), 179-197. http://ejournals.ukm.my/3l/issue/view/1230

Lee, S., & Pulido, D. (2017). The impact of topic interest, L2 proficiency, and gender on EFL incidental vocabulary acquisition through reading. *Language Teaching Research, 21,* 118-135. https://doi.org/10.1177/1362168816637381

Lee, S. (2020). Examining the roles of aptitude, motivation, strategy use, language processing experience, and gender in the development of the breadth and depth of EFL learners' vocabulary knowledge. *SAGE Open*, *10*(4), 1-15. https://doi.org/10.1177/2158244020977883

Li, S., Hiver, P., & Papi, M. (2022). *The Routledge handbook of second language acquisition and individual differences* (1st ed.). Routledge. https://doi.org/10.4324/9781003270546

Linda, A., & Shah, P. M. (2020). Vocabulary acquisition style in the ESL classroom: A survey on the use of vocabulary learning strategies by the primary 3 learners. *Creative Education*, *11,* 1973-1987. https://doi.org/10.4236/ce.2020.1110144

Llach, M. P. A., & Gallego, M. T. (2012). Vocabulary knowledge development and gender differences in a second language. *ELIA: Estudios De Lingüística Inglesa Aplicada*, *12*, 45-75.

Mckeown, M. G., & Beck, I. L. (2011). Making vocabulary interventions engaging and effective. In R. E. O'Connor & P. F. Vadasy (Eds.), *Handbook of reading interventions* (pp. 138-168). Guilford Press.

Ming, W. (2007). An examination of vocabulary learning of college-level learners of English in China. *The Asian Journal, 9*(2), 93-114. https://www.asian-efl-journal.com/main-editions-new/an-examination-of-vocabulary-learning-of-college-level-learners-of-english-in-china/index.htm

Mohseni-Far, M. (2007). Techniques and strategies utilized for vocabulary acquisition: The necessity to design a multifaceted framework with an instructionally wise equilibrium. *Porta Linguarum*, *8*, 137-152. https://www.ugr.es/~portalin/articulos/PL_numero8/8-MOHAMMAD.pdf

Mutua, J., & Oyoo, S. (2020). Gender differences in learning strategies and academic achievement among form three secondary school students in Nairobi County, Kenya. *International Journal of Applied Psychology, 10*(1), 1-7. http://kerd.ku.ac.ke/123456789/327

Nagy, W. E. (1988). *Teaching vocabulary to improve reading comprehension.* International Reading Association.

Nation, I. S. P. (1990). *Teaching and learning vocabulary.* Heinle & Heinle Publishers.

Nation, P. (2001). *Learning vocabulary in another language.* Cambridge University Press.

Nemati, A. (2010). Proficiency and size of receptive vocabulary: Comparing EFL and ESL environments. *International Journal of Educational Research and Technology, 1*(1), 46-53. https://soeagra.com/ijert/vol1/ijert6.pdf

Qian, D. D., & Lin, L. H. F. (2020). The relationship between vocabulary knowledge and language proficiency. In S. Webb (Ed.), *The Routledge handbook of vocabulary studies* (pp. 66-80). Taylor & Francis.

Schmitt, N. (2010). *Researching vocabulary: A vocabulary research manual.* Palgrave Macmillan.

Schmitt, N. (2008). *Teaching vocabulary.* Pearson Education.

Schmitt, N. (2000). *Vocabulary in language teaching*. Cambridge University Press.

Schmitt, N., & Meara, P. (1997). Researching vocabulary through a word knowledge framework: Word associations and verbal suffixes. *Studies in Second Language Acquisition, 19*(1), 17-36. https://doi.org/10.1017/S0272263197001022

Sheehan, A. (2004). *Making sense of words*. Bureau of Educational and Cultural Affairs, Office of English Language Programs. http://forum.state.gov/vols/vol42/no1/p02.htm

Silsüpür, B. (2017). Does using language games affect vocabulary learning in EFL Classes? *Journal of Foreign Language Education and Technology*, *2*(1), 83-104. https://www.jflet.com/articles/does-using-language-games-affect-vocabulary-learning-in-efl-classes.pdf

Subon, F. (2016). Direct vocabulary instruction: The effects of contextualised word families on learners' vocabulary acquisition. *Procedia - Social and Behavioral Sciences*, *224*, 284-291. https://doi.org/10.1016/j. sbspro.2016.05.461

Subon, F. (2017). *Direct vocabulary instruction: The effects of contextualised word families on students' vocabulary acquisition* [Doctoral dissertation, Universiti Teknologi MARA].

Subon, F. (2018). The contextualized word family model of direct vocabulary instruction. *IOSR Journal of Humanities and Social Science*, *23,* 57-70. https://doi.org/10.9790/0837-2303035770

Sulaiman, N. A., Salehuddin, K., & Khairuddin, R. (2018). Academic word list knowledge of Malaysian ESL undergraduates. *GEMA Online® Journal of Language Studies*, *18*(4), 1-14. http://doi.org/10.17576/gema-2018-1804-01

Tahir, M. H. M., Albakri, I. S. M. A., Adnan, A. H. M., & Karim, A. R. (2020). The effects of explicit vocabulary instructions on secondary ESL students' vocabulary learning. *3L: Language, Linguistics, Literature*, *26*(2). http://journalarticle.ukm.my/15156/

Tahir, M. H. M., Shah, D. S. M., Shak, M. S. Y., Albakri, I. S. M. A., & Adnan, A. H. M. (2021). Explicit vocabulary instruction: Effects of vocabulary learning on Form Two ESL learners. *Studies in English Language and Education*, *8*(3), 1227-1247. https://doi.org/10.24815/siele.v8i3.19539

Thompson, A. S. (2021). Attitudes and beliefs. In T. Gregersen & S. Mercer (Ed.), *The Routledge handbook of the psychology of language learning and teaching (pp.* 149-160). Routledge. https://doi.org/10.4324/9780429321498

Viera, R. T. (2017). Vocabulary knowledge in the production of written texts: A case study on EFL language learners. *Technological Magazine - ESPOL*, *30*(3), 89-105. http://www.rte.espol.edu.ec/index.php/tecnologica/article/view/628

Walker, N., Monaghan, P., Schoetensack, C., & Rebuschat, P. (2020). Distinctions in the acquisition of vocabulary and grammar: An individual differences approach. *Language Learning*, *70*(S2), 221–254. https://doi.org/10.1111/lang.12395

Webb, S., Yanagisawa, A., & Uchihara, T. (2020). How effective are intentional vocabulary-learning activities? A meta-analysis. *The Modern Language Journal*, *104*(4), 715-738. https://doi.org/10.1111/modl.12671

Wilson, R. (2000). *A summary of Stephen Krashen's "principles and practice in second language acquisition*". SCIRBD. https://www.scribd.com/document/333908817/Krashen-s-Second-Language-Acquisition-Theory-summary-docx

Wong, A. S. C., Lee, J. Y. V., Fung, M., & Willibrord, O. (2019). Vocabulary size of Malaysian secondary school students. *International Journal of Modern Languages and Applied Linguistics, 3*(4), 27-34. https://doi.org/10.24191/ijmal.v3i2.7364

Yousefi, M. H., & Biria, R. (2018). The effectiveness of L2 vocabulary instruction: A meta-analysis. *Asian-Pacific Journal of Second and Foreign Language Education, 3*(21), 1-19. https://doi.org/10.1186/s40862-018-0062-2

Zimmerman, K. (2005). Newly placed versus continuing students: Comparing vocabulary size. *ESL Reporter, 38*(1), 52-60. http://ojsdev.byuh.edu/index.php/Issue1/article/download/1248/1198

ROLE OF COLLABORATIVE STRATEGIC READING IN POST-PANDEMIC EFL READING CLASS: A QUASI-EXPERIMENTAL STUDY

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Manuscript received 1 March 2023
Manuscript accepted 8 December 2023
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https://doi.org/10.33736/ils.5491.2023

ABSTRACT

The transition of learning mode from online to offline in this post-pandemic era affects the EFL struggling students' achievement in the reading context. This quasi-experimental study with a One-Group Pretest-Posttest design was intended to know the significant difference between the mean scores of the pretest and the posttest in reading obtained using Collaborative Strategic Reading (CSR) and reveal students' reflections on using CSR in the reading classroom. Sixty-eight students in a senior high school in Indonesia were involved as participants. Data were collected through pretest-posttest and a questionnaire. The pretest and posttest results indicated that using CSR as a reading strategy significantly improved students' reading skills in collaborative nuance. The students' perspectives on using CSR were positive since they felt highly motivated to practice reading collaboratively, where each reading phase has a relevant strategy, namely, Preview, Click and Clunk, Get the Gist, and Wrap up. Integrating CSR into reading may have positive pedagogical impacts for EFL teachers who want to try CSR in teaching reading in this post-pandemic nuance since it eliminates students' anxiety in the transition of learning mode after the COVID-19 outbreak.

Keywords: collaborative reading; collaborative strategic reading; reading proficiency; reading comprehension; post-pandemic learning

Introduction

In a post-pandemic atmosphere, multifaceted issues in teaching learning reading arise. One of the issues is the students' adaptation to the transition of learning mode. The gloom and doom of the spread of COVID-19 affected the style of students and teachers in the EFL reading classes. For an extended period, the students stayed at home. They joined learning activities through online learning platforms that forced them to rapidly adapt to the situation and complexity of using technology tools and platforms (Su, 2020; Sumardi & Nugrahani, 2021). Since remote learning should be conducted, most teachers use technology to integrate the reading class with a simpler hybrid distance learning format (Kasim et al., 2022; Masalimova, 2021; Su, 2020). Yet, the tasks given were dominated by multiple-choice questions, which may be less effective in assessing and monitoring students' reading competence. In this case, improving the learning loss of EFL students in the post-pandemic era becomes "homework" for teachers and stakeholders.

In the post-pandemic era, students have returned to school to learn face-to-face. They attend physically in the actual classroom nuance by obeying the health protocol. Again, they should adapt the learning transition mode from online to offline. Dealing with a problematic situation, students need assistance from teachers to decrease their stress in reading English texts. Thus, choosing reading material and strategy is essential in this case. Teachers should be intelligent and selective in choosing or determining the English reading materials that benefit students. Most importantly, reading material can eliminate students' anxiety in reading English text (Namaziandost, 2022; Rao, 2019; Ross, 2000).

Besides, the appropriate reading material selection can be familiar and authentic in students' daily lives. The more they are familiar with the material, the more they get used to it. The more they get used to it, the more they engage in the reading context. Nevertheless, as stated by Limeranto and Subekti (2021), EFL students still pose reading difficulty in English as second language (L2) since their proficiency is also affected by their native language (L1). The statement aligns with Ke and Chan's (2017) perspective, where the students have metacognitive knowledge in reading based on their literacy experiences in learning their L1. Still, they have linguistic knowledge limitations of L2. The teacher should be brave enough to use authentic material in teaching reading (Herda et al., 2022), supported by an appropriate strategy to enhance students' reading proficiency. Therefore, teachers should be ready to arrange fun and challenging activities simultaneously that make students comfortable learning English. As it is, in 21st-century learning, students should get used to the English context, especially in their EFL reading classroom, since they need to become lifelong readers (Moreillon, 2007; Whidden, 2022) who are challenged to face reading activities for academic and global demands. It means they should be assisted in solving classroom reading problems.

This situation influences their motivation to absorb knowledge in every activity. They need treatment to recover their reading proficiency in this new normal era in the post-pandemic to lessen their stress level in the EFL context. It cannot be denied that students feel alone and struggle when they face reading texts. In the EFL context, the term struggling lingers in the learning process identical to those who are less experienced, complicated, and unmotivated to solve the reading problem (Kamal, 2019). Furthermore, the transition from online to offline learning makes them reluctant to face the real reading class. The researchers opined that to recover their reading proficiency in this post-pandemic pedagogy, collaboration, as one of the 4Cs core skills in this 21-st century learning (Fadel, 2008), is demanding and should be involved in responding to this crucial situation (Kasim et al., 2022).

Indeed, the collaboration here is not merely sitting in a small group to answer the reading comprehension questions. It is beyond that point since the collaboration needed by students is a collaboration that covers strategy for each reading phase (before, during, and after reading). As Klingner and Vaugn (1988) stated, improving reading comprehension, conceptual learning, and student involvement in the classrooms becomes the aim of CSR. One of the reasons that CSR is considered appropriate for collaborative reading is that several phases can be used as guidelines for students in carrying out activities. The students practise the CSR four comprehension strategies (before, during, and after reading), namely, (1) Preview, (2) Click and Clunk, (3) Get the gist, and (4) Wrap up (Klingner & Vaughn, 1988; Vaughn et al., 2011). At this point, students gain knowledge and develop their communication and social skills within teamwork.

Furthermore, the previous study on CSR conducted by Babapour et al. (2018) investigated the effect of two strategies on 144 Iranian EFL students' reading comprehension that involved two proficiency levels (elementary and intermediate). One of the strategies was CSR. The study showed that CSR became the most effective strategy for EFL students' reading proficiency. The other experimental study, *Progressive Outcomes of Collaborative Strategic Reading to EFL Learners* by Gani et al. (2016), involved 67 participants. It revealed that the experimental group taught using CSR achieved better scores than those taught using the non-CSR in the control group. Besides that, the implementation improved their reading skills and produced positive outcomes in their social relationships and interactions in the classroom. These previous studies indicate that CSR is an appropriate strategy for collaborative reading classes that can enhance EFL students' reading comprehension skills and social relationships. The change of learning mode from online to face-to-face nuance is categorised as a new learning environment that may provide students with abilities and visual perception of challenges and perceived skills (Myhre et al., 2023) in this post-pandemic situation.

The quasi-experimental study examined the role of collaborative strategic reading in post pandemic EFL classroom. The research questions are:

(1) Is there a significant difference between the mean scores of the pretest and the posttest in reading performance obtained by the experimental group using CSR?

(2) What are the students' reflections on using CSR in the reading classroom? The results of this study give insight into EFL teachers who want to improve students' reading proficiency and lessen their anxiety in post-pandemic reading classrooms.

Literature Review

A Learning Theory: Constructivism

A strong foundation is about the learning theory and philosophy, which is crucial in teaching and learning success since teachers may understand how their students learn. By understanding learning theory, teachers may optimally help students reach the learning target by designing relevant and exciting materials. In line with that, teachers should provide rooms where students can actively build their understanding together with their partners as co-learners. In this case, constructivism, a branch of cognitive theory (Clark, 2018), believes that individuals learn best when they actively construct the knowledge and meaning of new content from an interaction between their experiences and ideas (Gao & Bintz, 2019).

Additionally, Bada and Olusegun (2015) state that students work primarily in groups to be expert learners. Teachers act as facilitators who guide students to be active participants and make meaningful connections between prior knowledge, new knowledge, and the processes involved in learning. Therefore, the use of constructivism in EFL collaborative reading classes contributes to language learning that is not only for students themselves but also for their peers. In this case, collaboration is needed to help students reflect on the learning materials and pick up strategies and methods from one another. In line with that, this learning theory is a learner-centered model that becomes an essential contribution to constructivism based on the premise that cognition results from students' mental construction (Bada & Olusegun, 2015; Clark, 2018), where each individual has a different learning experience.

Compared to traditional classrooms, constructivist classrooms see knowledge as a dynamic process that is affected by the change in the learning experience (Bada & Olusegun, 2015; Clark, 2018). The difference concerns how students perceive new understanding in good circumstances and environments. The EFL teachers who apply this learning theory may pay attention to the seven pedagogical goals of constructivist learning environments (Honebein, 1996) consisting of (1) providing experience with the knowledge construction process, (2) providing experience in and appreciation for multiple perspectives, (3) embedding learning in realistic contexts, (4) encouraging ownership and a voice in the learning process, (5) embedding learning in social experience, (6) encouraging the use of multiple modes of representation, and (7) encouraging awareness of the knowledge construction process.

To sum up, student-centered learning becomes the most important contribution of constructivism since it is a learning theory that emphasizes how individuals make sense of information related to learning theories that they perceive; then, they construct their

knowledge. In the collaborative scenario, as one of the pedagogical principles, students may build their understanding with their peers and choose their relevant strategy or method. Meanwhile, constructivist teachers, as facilitators, should encourage their students in the learning process to constantly assess how the activity is helping them gain new understanding. Thus, to encourage students in learning activities, teachers should implement appropriate strategies and act as facilitators who help students to be actively involved in collaborative classrooms.

CSR

In the L2 context, reading English texts are challenging and sometimes becomes a "specter" for students whose first language is not English. As written in the previous section, individuals face many problems in reading classrooms, such as lacking vocabulary, motivation, and feeling alone. Dealing with their issues, they learn best when actively constructing knowledge and meaning of new content from an interaction between their experiences and ideas (Gao & Bintz, 2019). From this viewpoint, students need to have a different reading experience combined with appropriate strategies to develop their knowledge since reading strategies have been declared vital in reading comprehension among EFL classrooms (Isozaki, 2022; Suraprajit, 2019).

In this case, collaboration is an interactive activity where students collaborate with peers to learn reading materials and work on tasks (Anwar, 2020; Herda, 2023; Limeranto & Subekti, 2021). Moreover, during collaborative learning, students interrelate with each other since the feedback, reinforcement, and support come from student peers in the group, not teachers (Borich, 2017). In this case, teachers act as facilitators that monitor students' progress from the first activities to the end. That is why collaboration should be motivating and helpful in producing critical thinking skills in the context of higher-order thinking skills (HOTS) to improve the student's reading proficiency. In this case, the researchers considered CSR an appropriate strategy for boosting students' reading proficiency. The comprehension strategies cover the essence of collaboration as one of the 4Cs' core skills in this 21-st century learning (Fadel, 2008).

CSR as a research-based instructional practice (Abuhasnah, 2015; Vaughn et al., 2011; Klingner et al., 2004; Klingner & Vaughn, 1988) is fit to be conducted in reading comprehension classes. It becomes the teachers' effort to maximise students' involvement, especially in enhancing the content area of learning. In CSR, there are three reading phases, namely before, during, and after reading; each phase consists of a strategy, and they are helpful for students who feel alone and find it difficult to understand the L2 texts. Therefore, CSR consists of four strategies, which are (1) Preview, (2) Click and Clunk, (3) Get the Gist, and (4) Wrap Up (Klingner & Vaughn, 1988). The first strategy, Preview, is implemented in the first reading phase (Before reading). The activities cover using prior knowledge and making predictions about the text. Students' prior knowledge affects what is understood, remembered, or learned (McCarthy & McNamara, 2021). The first strategy helps students since it directly influences their

comprehension and knowledge, making it easier to connect the text (Goldman et al., 2012; Shapiro, 2004).

Click and Clunk is the second strategy aimed at knowing how well students understand the texts, or maybe they fail to understand and make meaning. In this stage, the students monitor the vocabulary they do not know and then apply a fix-up strategy to understand the unfamiliar word meanings. In this case, understanding the word meaning is one of the predictors of their comprehension (Stahl et al., 2019). Thus, they need to list their unknown vocabulary and activate their competence in making meaning through a fix-up strategy (Hardiyanti & Herda, 2023; Suhermanto, 2019) to interpret and discover the problematic words. The third strategy is Getting the Gist. In this phase, students will identify the text's main idea and elaborate on them with their language to ensure they understand better. However, the main idea is essential because it is identified as one of the highest-impact instructional practices teachers can apply to improve reading comprehension (Solis et al., 2021; Wilawan, 2012). On the other hand, students can also self-monitor and ensure they can find the central thought of the reading selection.

Last but not least, the students generate questions and try to answer them to check their comprehension of the Wrap-Up strategy. They review what they have learned by trying to create questions and answers based on the material to improve their knowledge, understanding, and memory (Riyawi, 2018). Students are trained to practise every single strategy before, during, and after reading as whole reading activities. Teachers should direct and ensure students have practised the CSR strategy based on the abovementioned phases.

Method

A quasi-experimental study with one group pretest-posttest design was conducted to investigate the effects of CSR on the students' reading skills.

The participants were 68 EFL students from a senior high school in Yogyakarta, Indonesia, of which 39.7% were female students (N=27), and 60.3% were male (N=41). Most of the students were over 20 years old (44 or 64.7%) and 34 (or 35.3%) were under 20 years old.

Two instruments were used to collect data. The pretest and posttest were in the form of a reading comprehension with five questions (see Appendix A and B). A 12-item questionnaire in Google Forms was used to gather information about students' perspectives on using CSR in reading Analytical Exposition text (see Appendix C). A five-point Likert scale was used for the items: (5) strongly agree, (4) agree, (3) neutral, (2) disagree, and (1) strongly disagree.

The study was conducted according to the guidelines of the Berlin Declaration on Education for Sustainable Development and approved by the Institutional Review Board of Universitas Negeri Yogyakarta (Protocol Code: B/20/UN34.12/KP/2023 (approval date: January 28, 2023)). Informed consent was obtained from respondents.

The research lasted for two weeks in February 2023 in the academic year 2022/2023. In the first week of February 2023, all participants did a pre-test for about 20 minutes. Students did the reading test in conventional ways, individually reading the text and answering the five essay questions. After that, the researchers monitored the pre-test result by looking at the students' scores. The researchers informed the teacher and prepared a large room for collaborative reading activity using CSR in the second week.

The students sat down together in groups of four. The researchers gave explanations and instructions on how to practise CSR. Students had facilitated a learning log and a handout covering the brief materials learned with the classroom teacher before this implementation so that they had gained knowledge of the nature of Analytical Exposition text, including its generic structure, social function, and language features. The implementation covered the three phases of reading comprehension represented by the Preview, Click and Clunk, Get the Gist, and Wrap up. Learning progress was monitored in their learning logs. Then, using the text learned in the CSR implementation, the students were tested in an individual post-test with five essay questions to determine their reading comprehension after being taught using CSR.

The pretest-posttest scores were analyzed using SPSS statistics version 25. Firstly, after knowing that the data were homogenous, the researchers conducted a paired samples t-test to compare the means and draw a conclusion on the first research questions. The questionnaire responses based on the Likert Scale was interpreted using Buphate and Esteban (2022) as shown in Table 2.

Table 2
Likert Scale Interpretation (Buphate & Esteban, 2022)

Average Score	Meaning
4.51 - 5.00	Participants strongly agreed with the statements.
3.51 - 4.50	Participants agreed to the statements.
2.51 - 3.50	Participants' position was neutral to the statements.
1.51 - 2.50	Participants disagreed with the statements.
1.00 - 1.50	Participants strongly disagreed with the statements.

Results and Discussion

Effects of Using CSR

To know the effect of using *Storynory,* the researchers set a null hypothesis: There is no significant difference between the mean scores of the pretest and posttest in the reading test using CSR. After testing the homogeneity and the result showed that the data collected were distributed normally, a parametric test employing a two-tailed was used

here. The mean of the pretest was 51.38, and the posttest was 81.32, and the improvement was 29.94 after the treatment (Table 1). A paired-sample t-test indicated that the increase was statistically significant, $t(68) = -36.276$, $p < 0.05$. The results showed that the students had performed better in their reading proficiency after being taught by using CSR. CSR affects students' success in reading proficiency. The students answered the questions independently, yet they gained the confidence to answer all questions after practising collaborative reading using CSR.

Table 3
Paired Sample Test

	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tiled)
Pretest – Posttest	-29.941	6.806	.825	-36.276	67	.000

Students' Perspectives on Using CSR

Table 4 shows the questionnaire results of students' perspectives on using CSR in reading classrooms. There were none who disagreed. The students viewed the strategy in CSR as very procedural because each reading phase has a sequence of activities because 39 students (57.4%) agreed, 16 (23.5%) strongly agreed, and 13 students (19.1%) chose to be neutral. Those who decided to agree and strongly agreed exceeded half of the total participants. Additionally, the students reported that they could collaborate (work together) at every stage of reading through CSR because 42 (61.8%) of the 68 participants agreed and nine (13.2%) chose to be neutral in this case. The students also reported that they learned to direct themselves to interact, communicate, and think critically during collaborative reading activities (self-direction). The result showed 35 (51.5%) agreed with the statement, 27 (39.7%), and six (8.8%) were neutral.

Table 4
Students' Perspectives on Using CSR in Reading Classroom

No.	Statement	Strongly Agree	Agree	Neutral
1	The strategy in CSR is very procedural because each reading phase has a sequence of activities.	23.5%	57.4%	19.1%
2	I can collaborate (work together) at every reading stage through CSR (collaboration).	61.8%	25%	13.2%
3	I learned to direct myself to interact, communicate, and think critically during collaborative reading activities (self-direction).	39.7%	51.5%	8.8%

Indeed, collaboration benefits EFL students to solve reading problems together in a well-planned procedure. Students, as readers, could construct meaning actively from an interaction between their experiences and ideas (Gao & Bintz, 2019) within collaborative activities. Moreover, students interrelate with each other in the collaborative reading since the feedback, reinforcement, and support come from student peers in the group, not teachers (Borich, 2017). In this case, the collaboration differs from the typical group work that emphasises students reading the whole texts and answering the questions. This study focuses on CSR as a comprehensive procedure for students, so they realize that collaborative reading of English texts is fun and valuable.

As Klingner and Vaughn (1988) stated, improving reading comprehension, conceptual learning, and student involvement in the classrooms is the strong point of CSR. By following each strategy as a reading comprehension procedure, students could manage their understanding of the texts through the level of reading comprehension, namely literal, inferential, and critical comprehension levels (Brassel & Rasinski, 2008).

Additionally, 51.5% (N=35) of students agreed that they learned to direct themselves to interact, communicate, and think critically during collaborative reading activities (self-direction). The demands of 21st-century learning cover the 4Cs (Communication, Collaboration, Creativity, and Critical Thinking) that ideally should be integrated into the teaching process, including in reading class. By using CSR, students can practise all the 4Cs. The results showed that students' critical thinking improved during the reading process. It can be gathered that the students performed their in-depth thinking skills by demonstrating their curiosity and raising questions as essential thinking characteristics (Saleh, 2019), where they try to find answers to the questions. How the students demonstrated their critical thinking may prepare social relationships (Renatovna & Renatovna, 2020) among them in collaborative reading nuances.

Conclusion

The quasi-experimental study concludes that CSR effectively enhanced EFL students' reading skills in the post-pandemic EFL classroom, based on pre- and post-test scores and students' perceptions. The CSR treatment significantly affects students' achievement, shown by the mean score of the pretest and posttest, supported by the analysis result of the paired sample t-test that showed CSR affects students significantly in reading proficiency. Each phase of CSR consists of a strategy that provides a new learning experience for students: Preview, Click and Clunk, Get the Gist, and Wrap up. Again, using CSR benefits students in the EFL reading context since they can explore their understanding of the English texts with the group members, improve reading proficiency, and develop social skills to fulfil the demands of 21st-century learning skills.

` This study shows that a collaborative strategy is one of the ways to enhance students' motivation and ability to read and Klingner and Vaughn's (1988) CSR is a good approach to adopt. Collaboration among students may improve their skills, such as critical

thinking, reasoning, problem-solving, and social life in the classroom. Moreover, during collaborative learning, students interrelate with each other since the feedback, reinforcement, and support come from student peers in the group, not teachers (Borich, 2017). Collaborative strategies in teaching reading foster interactive activities where students collaborate with peers to learn reading materials and work on the tasks (Anwar, 2020; Limeranto & Subekti, 2021). Therefore, it substantially supports EFL students' reading comprehension development since it is appropriate for content-based learning (Walldén, 2022; Stevens & Vaughn, 2020; Grabe, 2009).

However, this study is still limited in terms of the research design. The researchers conducted a quasi-experimental design with one pretest-posttest design, with only experimental groups to observe. Future studies should employ broadened research perspectives and experimental studies with control groups and even classroom action research to obtain better insights on teaching reading skills.

References

Abuhasnah, R. (2015). *Collaborative strategic reading (CSR): A comprehension strategy to enhance content area learning.* George Lucas Educational Foundation. https://www.edutopia.org/discussion/collaborative-strategic-reading-csr-comprehension-strategy-enhance-content-area-learning

Anwar, A. K. (2020). The effect of collaborative strategic reading toward students reading skill. *Anglophile Journal*, *1*(1), 21-28. http://dx.doi.org/10.51278/anglophile.v1i1.62

Babapour, M., Ahangari, S., & Ahour, T. (2018). *The effect of shadow reading and collaborative strategic reading on EFL learners' reading comprehension across two proficiency levels. Innovation in Language Learning and Teaching, 13*(4), 318-330. https://doi.org/10.1080/17501229.2018.1465059

Bada, S. O., & Olusegun, S. (2015). Constructivism learning theory: A paradigm for teaching and learning. *Journal of Research & Method in Education*, *5*(6), 66-70.

Borich, G. D. (2017). *Effective teaching methods: Research-based practice*. Pearson Education.

Brassel, D., & Rasinski, T. (2008). *Comprehension that works: Taking students beyond ordinary understanding to deep comprehension*. Shell Education.

Buphate, T., & Esteban, R. H. (2022). Using ideation discussion activities in design thinking to develop EFL students' speaking and critical thinking abilities. *LEARN Journal: Language Education and Acquisition Research Network*, *15*(1), 682-708.

Clark, K. R. (2018). Learning theories: Constructivism. *Radiology Technology, 90*(2), 180-182.

Fadel, C. (2008). 21st Century skills: How can you prepare students for the new global economy? *Partnerships for 21st century skills*. https://www.oecd.org/site/%20educeri21st/40756908.pdf

Gani, S. A., Yusuf, Y. Q., & Susiani, R. (2016). Progressive outcomes of collaborative strategic reading to EFL learners. *Kasetsart Journal of Social Sciences*, *37*(3), 144–149. https://doi.org/10.1016/j.kjss.2016.08.004

Gao, Y., & Bintz, W. P. (2019). An exploratory study on Chinese EFL teachers' beliefs about reading and teaching reading. *Journal of Asia TEFL*, *16*(2), 576-590. http://dx.doi.org/10.18823/asiatefl.2019.16.2.9.576

Goldman, S. R., Braasch, J. L., Wiley, J., Graesser, A. C., & Brodowinska, K. (2012). Comprehending and learning from internet sources: Processing patterns of better and poorer learners. *Reading Research Quarterly, 47*(4), 356–381. https://doi.org/10.1002/RRQ.027

Grabe, W. (2009). *Reading in a second language: Moving from theory to practice.* Cambridge University Press.

Hardiyanti, R. L. P., & Herda, R. K. (2023). Teaching vocabulary using flash cards in Indonesian ESP Classroom: A one-shot case study. *JELITA: Journal of Education, Language Innovation, and Applied Linguistics*, *2*(1), 1-11. https://doi.org/10.37058/jelita.v2i1.6466

Herda, R. K. (2023). Implementasi konsep peeragogy melalui CSR dalam pengajaran membaca berkonteks EFL. In A. Wijayanto (Ed.). *Heterogenitas pembelajaran bahasa dan literasi* (pp. 175-181). Akademia Pustaka.

Herda, R. K., Widyastuti, I., Castro, M. C. S. A., & Damayanto, A. (2022). Going beyond the EFL teachers' beliefs on authentic assessment: Reframing the five-dimensional approach. *Tamansiswa International Journal in Education and Science (TIJES)*, *4*(1), 1-19. https://doi.org/10.30738/tijes.v4i1.13346

Honebein, P. C. (1996). Seven goals for the design of constructivist learning environment. In B. G. Wilson (Ed.), *Constructivist learning environments: Case studies in instructional design* (pp. 11-24). Educational Technology Publications.

Isozaki, A. H. (2022). What if they are set free? Using autonomous reading-listening and book clubs in reading fluency development. *TESL-EJ*, *26*(3), 1-26. https://doi.org/10.55593/ej.26103a18

Kamal, S. M. (2019). Developing EFL learners' vocabulary by reading English comprehension in EFL classroom. *International Journal of English Language and Literature Studies*, *8*(1), 28-35. https://doi.org/10.18488/journal.23.2019.81.28.35

Kasim, A. A. M., Darus, N. A., Lee, N. A. A., Subramaniam, A. L. B., & Januin, J. (2022). Online collaborative performance in group-based tasks among learners of higher education. *Studies in English Language and Education, 9*(3), 948-966.

Ke, S., & Chan, S. (2017). Strategy use in L2 Chinese reading: The effect of L1 background and L2 proficiency. *System, 66, 27-38.* https://doi.org/10.1016/j.system.2017.03.005

Klingner, J. K., Vaughn, S., Arguelles, M. E., Tejero Hughes, M., & Ahwee Leftwich, S. (2004). Collaborative strategic reading: "Real-World" lessons from classroom teachers.

Remedial and Special Education, *25*(5), 291-302. https://doi.org/10.1177/07419325040250050301

Klingner, J. K., & Vaughn, S. (1988). Using collaborative strategic reading. *Teaching Exceptional Children*, *30*(6), 32-37.

Limeranto, J. T., & Subekti, A. S. (2021). Indonesian theology students' foreign language reading anxiety and reading performance: A correlational study. *Studies in English Language and Education, 8*(1), 131-142. https://doi.org/10.24815/siele.v8i1.17398

Masalimova, A. R., Ryazanova, E. L., Tararina, L. I., Sokolova, E. G., Ikrennikova, Y. B., Efimushkina, S. V., & Shulga, T. I. (2021) Distance learning hybrid format for university students in post-pandemic perspective: Collaborative technologies aspect. *Cypriot Journal of Educational Sciences*, *16*(1), 389-395. https://doi.org/10.18844/cjes.v16i1.5536

Moreillon, J. (2007). *Collaborative strategies for teaching reading comprehension: Maximizing your impact*. American Library Association.

Myhre, T. S., Dewaele, J., Fiskum, T. A., & Holand, A. M. (2023). Anxiety and enjoyment among young teenagers learning English as a foreign language outdoors: A mixed-methods study. *Innovation in Language Learning and Teaching, 17*(4), 1-18. https://doi.org/10.1080/17501229.2022.21615

Namaziandost, E., Razmi, M. H., Ahmad Tilwani, S., & Pourhosein Gilakjani, A. (2022). The impact of authentic materials on reading comprehension, motivation, and anxiety among Iranian male EFL learners. *Reading & Writing Quarterly*, *38*(1), 1-18. https://doi.org/10.1080/10573569.2021.1892001

Rao, P. S. (2019). The effective use of authentic materials in the English language classrooms. *Shanlax International Journal of Arts, Science and Humanities*, *7*(1), 1-8.

Renatovna, A. G., & Renatovna, A. S. (2020). Developing critical thinking on elementary class pupils is the most important factor for preparing social relationship. *JCR*, *7*(17), 438-448.

Riyawi, M. R. (2018). The effect of applying collaborative strategy reading (CSR) toward students' reading comprehension at the eighth grade of Mts Hubbulwathan Duri. *Al-Ishlah: Jurnal Pendidikan*, *10*(1), 69-78. https://doi.org/10.35445/alishlah.v10i1.69

Ross, C. S. (2000). Making choices: What readers say about choosing books to read for pleasure. *The Acquisitions Librarian, 13*(25), 5-21.

Saleh, S. E. (2019). Critical thinking as a 21st century skill: Conceptions, implementation and challenges in the EFL classroom. *European Journal of Foreign Language Teaching*, *4*(1), 1-16.

Shapiro, A. M. (2004). How including prior knowledge as a subject variable may change outcomes of learning research. *American Educational Research Journal, 41*(1), 159–189. https://doi.org/10.3102/00028312041001159

Solis, M., Reutebuch, C. K., Falcomata, T., Steinle, P. K., Miller, V. L., & Vaughn, S. (2021). Vocabulary and main idea reading intervention using text choice to improve content knowledge and reading comprehension of adolescents with autism spectrum disorder. *Behavior Modification*, *45*(1), 66-98. https://doi.org/10.1177/0145445519853781

Stahl, K. A. D., Flanigan, K., & McKenna, M. C. (2019). *Assessment for reading instruction* (4th ed.). The Guilford Press.

Stevens, E. A., & Vaughn, S. (2020). Effective practices for teaching content area reading. In *Oxford research encyclopedia of education* (pp. 1–28). Oxford University Press. https://doi.org/10.1093/acrefore/9780190264093.013.1209

Su, H. (2020). Educational assessment of the post-pandemic age: Chinese experiences and trends based on large-scale online learning. *Educational Measurement: Issues and Practice*, *39*(3), 37-40. https://doi.org/10.1111/emip.12369

Suhermanto, H. (2019). The effect of fix up strategy in enhancing students' reading comprehension in IAIN Curup. *English Franca: Academic Journal of English Language and Education*, *3*(01), 1-14.

Sumardi, S., & Nugrahani, D. (2021). Adaptation to emergency remote teaching: Pedagogical strategy for pre-service language teachers amid COVID-19 pandemic. *Turkish Online Journal of Distance Education*, *22*(2), 81-93. https://doi.org/10.17718/tojde.906553

Suraprajit, P. (2019). Bottom-up vs top-down model: The perception of reading strategies among Thai university students. *Journal of Language Teaching and Research*, *10*(3), 454–460. https://doi.org/10.17507/jltr.1003.07

Vaughn, S., Klingner, J. K., Swanson, E. A., Boardman, A. G., Roberts, G., Mohammed, S. S., & Stillman-Spisak, S. J. (2011). Efficacy of collaborative strategic reading with middle school students. *American Educational Research Journal*, *48*(4), 938-964. https://doi.org/10.3102/0002831211410305

Walldén, R. (2022). Focusing on content or strategies? Enactment of reading strategies in discussions about science texts. *Classroom Discourse*, *13*(4), 407-424. https://doi.org/10.1080/19463014.2021.2023598

Whidden, C. (2022). [Review of the book *Sometimes reading is hard: Using decoding, vocabulary, and comprehension strategies to inspire fluent, passionate, and lifelong readers* by R. Bright]. *Canadian Journal of Education/Revue canadienne de l'éducation*, *45*(3), xxxvii-xl.

Wilawan, S. (2012). Fostering main idea comprehension among EFL learners through cognitive and metacognitive strategies. *International Journal of Humanities and Social Science*, *2*(14), 46-54.

Appendix A

Pretest for Students

Read the following Analytical Exposition, "Banning Motorbikes Is Necessary for Housing Areas," then answer the questions thoughtfully!

Motorbikes are a nuisance and a cause for great distress. Even though motorbikes are considered the most convenient transportation, I believe they are a hazard to humans, animals, and the environment. I think banning motorbikes in housing areas is necessary for the following reasons: cause of the amount of unreasonable noise, air pollution, and accidents.

First, I would like to point out that motorbikes are a major contributor to pollution worldwide. Research has shown that motorbikes emit a deadly gas that is dangerous to the environment. Consequently, long-term gas emission from motorbikes is a major contributor to global warming (Science Daily). Secondly, motorbikes create so much noise. There is "vroom vroom" noise everywhere. It is extremely difficult to sleep. Parents with infants find it highly challenging. Experts believe that if there is extreme noise can lead to deafness and lack of concentration in children and adults (Fields, 1993).

Finally, motorbikes are responsible for horrible accidents. In some cases, there are deaths. Motorbike riders go so fast that they cannot stop on time. Thus they hit other people or animals.

In conclusion, based on the arguments above, I strongly believe banning motorbikes from housing areas is the appropriate solution. Minimizing the harmful effects on Society's health and comfort is necessary.

Adapted from:

Bashir, Makhrukh. (2017). *Buku Siswa Bahasa Inggris (2nd Ed.).* Kementerian Pendidikan dan Kebudayaan.

Questions:

1. There are some reasons for banning motorbikes in housing areas. Mention and explain them!
2. Based on the text, why are motorbikes responsible for horrible accidents?
3. It is written in the text that *Experts believe that if there is extreme noise can lead to deafness.* What do you know about deafness?
4. The text says, *"Parents with infants find it highly challenging."* Why is it called highly challenging?
5. Does the writer agree or disagree with the whole content of the text? Could you show me the evidence from the text?

Appendix B

Posttest for Students

Read the following analytical exposition, "The Urgency of Three Levels of Government in Australia," then answer the questions thoughtfully!

Society needs a government in every country *to make decisions and get things done. Therefore,* in Australia, there are three levels of government, namely the federal government, state government, and local governments. I think all of these government levels are necessary for Australians' life. Why do I say so? These are why having three levels of government in Australia is beneficial.

First, the federal government is necessary for the big things. They are **responsible for issues that affect all Australians. They** keep the Economy in order and look after the defense. Similarly, the state governments look after middle-sized things. For example, they look after law and order, preventing things like vandalism in school. They are responsible for the issues affecting **people in that state or territory.** Finally, the local government looks after the small stuff. They look after things like monitoring the parking area and collecting and recycling the rubbish. Otherwise, everyone would have the disease.

Thus, for the reasons above, we can conclude that Australia's three levels of government are necessary. Society can feel safe and comfortable when there is good government support that is complete with each other.

Modified from: http://englishadmin.com/2018/11/50

Questions:

1. Mention and explain the three levels of Australia's government, with each responsibility!
2. In the eighth line, it is stated that the state governments look after middle-sized things. Why is it called middle-sized things?
3. At the end of the text, it is written *Society can feel safe and comfortable when there is good government support that is complete with each other.* What does it mean?
4. The text says, *"the local government looks after <u>the small stuff</u>."* Why is it called the small stuff?
5. Does the writer agree or disagree with the whole content of the text? Could you show me the evidence from the text?

Appendix C

Questionnaire for CSR Implementation

No	Statement	Score				
		1	**2**	**3**	**4**	**5**
1	The strategy in CSR is very procedural because each reading phase has a sequence of activities.					
2	I don't hesitate to give predictions regarding the content of the text.					
3	It helps me to think critically because I record/classify unfamiliar vocabulary or don't know the meaning.					
4	I found essential parts/points of each paragraph in the Analytical Exposition text.					
5	My reading comprehension of the text is improving by successfully compiling questions and answers that follow the contents of the Analytical Exposition text.					
6	I can practice proper and accurate communication with my teammates (communication).					
7	I can collaborate (work together) at every reading stage through CSR (collaboration).					
8	My team and I showed creativity in solving problems in each phase of reading the Analytical Exposition text (creativity).					
9	I can train myself to think critically about ideas and solutions during reading activities (critical thinking).					
10	During the discussion, the team and I presented ideas and answers (taking turns).					
11	I learned to respect/appreciate colleagues' opinions during the collaborative reading process (respecting the rights of others).					
12	I learn to be able to control my emotions as a form of self-control (learning self-control)					
13	I learned to be able to direct myself to be able to interact, communicate, and think critically during collaborative reading activities (self-direction).					

SELF-EFFICACY AND SELF-REGULATED LEARNING AMONG UNDERGRADUATE IN LEARNING ARABIC AS A FOREIGN LANGUAGE VIA ONLINE

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Manuscript received 27 March 2023
Manuscript accepted 7 December 2023
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https://doi.org/10.33736/ils.5566.2023

ABSTRACT

As online learning becomes a major development in recent years and escalates due to the COVID-19 pandemic, it helps to have a high self-efficacy and self-regulated learning (SRL) to succeed in such a learning context. This study explored the undergraduates' levels of self-efficacy and SRL and provides a comparative analysis of these variables while learning Arabic as a Foreign language via online. The data was collected from 77 undergraduates in a public university in Malaysia through an online survey. The findings showed that both self-efficacy and SRL mean scores were high and that there was a statistically strong positive relationship between self-efficacy and SRL. Students appeared to adapt to online learning by managing their time, organising their schedules, interacting with classmates and instructors, and selecting the best spot to maximise their online learning experience.

The findings suggested that it is important and beneficial for language instructors to create interesting and inspiring lesson plans in an online environment so that the undergraduates could experience satisfaction inside and outside of learning, and simultaneously facilitate them for their success in foreign language learning.

Keywords: foreign language; Malaysian undergraduates; online learning; self-efficacy; self-regulated learning (SRL)

Introduction

In recent years, numerous studies have examined online learning, and this list has grown significantly due to the spread of the Covid-19 pandemic which has changed the educational settings from physical traditional classes to online classes (Omar et al., 2021). Similar to many other countries, Malaysia swiftly adopted a fully online learning approach to provide students at all educational levels, ranging from primary to tertiary education, an alternative mode of learning in compliance with stay-at-home directives and restrictions on in-person classes. It is worth noting that prior to the pandemic, Universiti Malaysia Kelantan (UMK), where this study took place, had already integrated online learning for several years, primarily utilising a blended learning approach (University Senate Standing Committee for Undergraduate, 2016). As a result, UMK students have had prior exposure to and familiarity with online learning tools and practices. Consequently, the shift to a fully online mode during the pandemic provided UMK students with an even more extensive experience with online learning (Deputy Vice Chancellor for Academic & International, 2020). While online learning is not a novel concept, it still presents numerous challenges for both instructors and students, particularly when fully implemented within an educational context. One major challenge is the absence of physical interaction in the class, both between teachers and students and among the students themselves, as everyone participates in online classes from their respective homes. This signifies the need for self-directed learning, encompassing self-efficacy and self-regulatory learning, which have the potential to enhance learning achievement (Loong, 2012; Wang et al., 2013; Zimmerman, 2000).

Literature Review

Self-Efficacy

Self-efficacy is about the individual's belief in their capabilities to execute work and perform well in each situation (Bandura, 2002) which refers to the beliefs that an individual has about what they can do and achieve influence how they will perform the required task. Several studies reported on self-efficacy and learning achievement. Shen et al. (2013) conducted a survey on self-efficacy in online classes and learning satisfaction among 406 students and reported that the students associated satisfaction with online

learning with their capabilities to complete an online course. Next, Joo et al.'s (2013) study on 897 undergraduates found that besides task value, self-efficacy was a significant predictor of learners' achievement in an online context. Wang et al. (2013) also discovered that among 256 respondents, students with higher levels of self-efficacy in technology showed better learning performances in online courses as compared to those with low levels of technology self-efficacy. In summary, the cited studies suggested that self-efficacy was the key to improved learning performances among students.

Hasan et al. (2014) confirmed that there was a significant relationship between self-efficacy and academic performance among students of two polytechnic institutes in Malaysia. Latip et al. (2020) focussed on the level of e-learning acceptance and self-efficacy among 414 local undergraduates and concluded that "students with a positive feeling about the usefulness of e-Learning tend to have a positive acceptance of the e-Learning method, and this, in turn, will affect their self-efficacy, thus resulting in an excellent understanding of the lessons" (p. 659). Also, Badiozaman et al. (2019) stated that the 838 undergraduates from four higher education institutions in Malaysia generally have a positive perception regarding their academic capabilities in learning English as a Second Language although they rated their English language proficiency as low.

Numerous studies have substantiated the impact of self-efficacy on students' academic achievement. However, there is a dearth of research addressing the connection between students' self-efficacy and online foreign language learning, particularly in the Malaysian context. Thus, it would be worthy to expand this investigation to encompass students' perceptions of their language proficiency and self-efficacy in learning other languages. For this study, the chosen foreign language is Arabic.

Self-Regulated Learning (SRL)

Self-regulated learning is defined as the constructive process whereby the individual systematically organises their thoughts, feeling and actions to achieve their goals, and it could also refer "… to the processes whereby learners personally activate and sustain cognitions, affects, and behaviours that are systematically oriented toward the attainment of personal goals" (Zimmerman & Schunk, 2011, p. 1). Agustiani et al. (2016) reported that apart from self-efficacy, SRL is the other variable that predicts students' academic performance as 101 respondents showed a positive correlation between self-regulation of learning and academic performance. Moreover, a majority of studies have linked SRL with learning performance, highlighting that students equipped with self-regulatory skills tend to outperform those lacking such skills (Littlejohn et al., 2016; Reparaz et al., 2020; Zimmerman & Schunk, 2011).

Next, Artino Jr. and Stephens (2009) found out that graduates were more aware of what they wanted to achieve, and thus they displayed "more adaptive self-regulated learning profiles" than the undergraduates even though they were not technically familiar with online learning as compared to the undergraduates (p. 149). Next, it appeared that students were quite selective whereby they would strategise their SRL when they felt that

the task given to them could benefit them, and on the contrary, they were not interested if they felt that the task has little utility value (Li & Zheng, 2018). Likewise, Littlejohn et al. (2016) stated that students with high SRL scores would relate their learning to their future needs in comparison with those with low SRL scores who were only interested in completing the online course. In sum, these studies indicated the possible differences in SRL scores among students enrolled in online courses, and that SRL is highly related to goals and performances.

Besides that, Loong (2012) compared the usage of SRL strategies between the international and home students at a university in Malaysia and stated that although home students use more SRL strategies than international students, both groups related their "excellent understanding of the lessons" due to SRL strategies (p. 309). Next, a study by Lim et al. (2020) among 347 undergraduates also in Malaysia found that SRL strategies were positively and statistically significant in online learning satisfaction. It appeared that both studies showed that SRL strategies contributed to online learning.

A high degree of SRL could be associated with learner autonomy since the student would have control over his or her learning activities but this notion is not mostly favoured in some Asian countries that follow "the conservative Asian cultural tradition that teachers know better", hence learners were not involved in constructing the curriculum or even planning the language lessons (Omar et al., 2021, p. 479). Their study revealed that contrary to that controversial notion, students perceived high responsibilities for their learning and were able to manage their learning activities during online classes. These findings indicate the development of learner autonomy among them.

It could be concluded from these studies that SRL was also related to students'' learning, and all of them were looking at the general students' learning or language learning. Therefore, there is still much to explore regarding the SRL strategies, particularly among undergraduates who were learning Arabic as a foreign language. Would they yield similar results as previous studies that showed the importance of SRL, or would they be selective of certain SRL strategies that helped to facilitate their Arabic language learning?

The Relationship Between Self-Efficacy and SRL

Some researchers have further discussed the relationship between self-effacing and SRL. For example, Wang et al. (2013) stated a chain reaction of 256 students who experience online learning were likely to have higher SRL strategies that led to high motivation and self-efficacy, and similar findings were reported by Lee et al. (2020) among 184 participants who enrolled in two massive open online courses that "there was a statistically significant difference in the use of self-regulated learning strategies between learners who possessed high self-efficacy and those who possessed low self-efficacy" (p. 23).

Next, Ulfaton et al.'s (2021) study among accounting undergraduates also investigated the relationship between self-efficacy and SRL during the COVID-19 pandemic in which the students could only have online classes at home also confirmed

that students' high levels of online self-efficacy are correlated with their high levels of online SRL. In addition, one interesting research on the relationship between self-efficacy and SRL was by An et al. (2021) who specifically discussed how undergraduates in China utilised technology in enhancing the SRL strategies to assist their self-efficacy, enjoyment and learning outcomes in English language classes, and they discovered that, "SRL strategies fully mediated the relationship between English enjoyment and English learning outcomes" (p. 1). In summary, these research studies concluded that students with high self-efficacy were able to utilise more SRL strategies during online classes, which in turn enhanced their learning and conversely, those with lower self-efficacy tended to utilise fewer SRL strategies. It would be interesting to find out whether online learning Arabic as a foreign language in Malaysia would produce similar findings or would the students perceive differently from these previous results.

In addition, the learning contexts have now shifted from physical traditional classrooms to online classes and these situations have escalated due to the COVID-19 pandemic. Adapting to online learning in one's own home and away from the hustle and bustle of the physical classroom might be a challenge to learners such as reported in studies by Zapata-Cuervo et al. (2023), Handayani and Sholikhah (2021), and Simamora (2020) that in general learners faced difficulties in online classes. Thus, this has also heightened the importance of self-efficacy and self-regulation to increase learners' engagement and motivation in an online learning environment (Artino Jr. & Stephens, 2009; Hasan et al., 2014; Joo et al., 2013; Latip et al., 2020; Li & Zheng, 2018; Shen et al., 2013).

The overview of cited studies on self-efficacy and SRL focussed on their influences on students' language learning in general, but research on these two variables in online foreign language learning is still scarce. This study would contribute to the body of research by clarifying the relationship between students' self-efficacy and SRL with foreign language within the online learning context, which helps to fill the knowledge gap in the existing literature particularly in higher education institutions in Malaysia. Next, findings from this research could provide an understanding of what the undergraduates have felt and experienced during their online classes and may be valuable, particularly to young lecturers who have little experience with online methodology. The data could assist them in conducting lessons that better meet the students' online learning situation. Lastly, the data could inform instructors of foreign language classes on assisting students to operationalise self-efficacy and SRL strategies to achieve their learning goals. Specifically, three research questions were formulated for this study as follows.

RQ 1: What is UMK undergraduates' self-efficacy level in online Arabic language classes?
RQ 2: What is UMK undergraduates' SRL level in online Arabic language classes?
RQ 3: What is the correlation between the self-efficacy level and endorsement of SRL strategies among UMK undergraduates?

The results of this study could provide an understanding of what the undergraduates have felt and experienced during their online classes and may be valuable to young lecturers who have little experience with online methodology. The data could also assist them in conducting lessons that better suit the students' learning situation at home.

Theoretical Framework

In this study, the socio-cognitive perspective by Bandura (2002) was applied as a theoretical framework to examine students' self-efficacy and self-regulatory learning (SRL) since it viewed individuals as the ones in charge of their learning processes including achievement and these processes interact with one's behaviour, personal factors, and the surrounding context (Schunk & Pajares, 2002). Bandura (2002) highlighted that there are three modes of agency within the social cognitive theory, namely, direct personal agency, proxy agency and collective agency, and they are closely related to each other.

In an academic context, students have their own perceptions of their capabilities and learning styles (direct personal agency), but they might compare their performances with their peers who got good grades for benchmarking (proxy agency) and collaborate with each other as in group work to get better results (collective agency). These indicated the relationship between self-efficacy and SRL beliefs within the socio-cognitive model. In line with this perspective, most studies demonstrated self-efficacy and SRL as the important variables that enable learners to determine their learning paces, strategies, materials, and achievements (Loong, 2012; Ömer & Akçayoğlu, 2020; Wang et al., 2013; Wulandari et al., 2023; Zimmerman, 2000).

Methodology

This small-scale descriptive study was carried out among 77 undergraduates from all faculties in a public university in Malaysia. The researchers contacted around 80 students who enrolled in Arabic I (Level 1) in the previous semester through WhatsApp and provided the link to the online questionnaire along with the information about this study such as the research objectives and its significance. A total of 77 students ranging from first year to third-year undergraduates, who also have experienced at least one semester of learning academic courses fully online participated in the study.

There were 36 male respondents (46.8%) and 41 female respondents (53.2%) ranging from first year to third-year undergraduates, and they have experienced at least one semester of learning academic courses fully online. During the online learning period, 41 respondents (53.2%) were residing in the suburbs while another 36 respondents (46.8%) were residing in the rural area.

Instrument

Data were collected using an online questionnaire that consisted of two main scales: Self-Efficacy and SRL. The items in the Self-Efficacy scale are adopted from Tsai et al. (2020). The 26 items were measured on a 5-point rating scale from 1 (cannot do at all) to 5 (highly confident can do):

- Self-efficacy to complete an online course.
- Self-efficacy to interact socially with classmates.
- Self-efficacy to handle tools in a CMS (Course Management System).
- Self-efficacy to interact with instructors in an online course.
- Self-efficacy to interact with classmates for academic purposes.

Meanwhile, the items in the SRL scale are adopted from Barnard et al. (2009), and there are 24 items. The items were measured on a 5-point rating scale from 1 (strongly disagree) to 5 (strongly agree).

- Environment structuring
- Goal setting
- Time management
- Help seeking
- Task strategies
- Self-evaluation

Malay translation was incorporated for all questionnaire statements to enhance respondents' comprehension. To ensure accuracy, two researchers initially translated the original English version into Malay. Subsequently, another proficient colleague performed a re-translation from Malay to English. The final Malay translation aligned with the original English version.

Data Collection and Analysis

The online questionnaire was distributed to the undergraduates who have completed one or more foreign language online courses. For the purpose of this study, the researchers chose the Arabic language since it has the highest student enrolment in comparison to other foreign languages such French, Japanese, German, Thai, Spanish and Korean. As stated earlier, the researchers reached out to the potential respondents through Whatsapp.

Before completing the online questionnaire, participants were provided with information about the research's nature and assured that their responses would be used solely for research purposes. Participation was entirely voluntary, and by selecting the "I agree to participate in this study" option in the online form, participants indicated their consent for the researchers to use their response data. Out of 80 students who completed Arabic I, 77 have responded, giving a high response rate of 96.3%.

The students were given a week to complete the online questionnaire, and the collected data were analysed using the Statistical Package for Social Science (SPSS). To determine the level of students' online self-efficacy (SE) and SRL (SRL) descriptive and inferential statistics were employed on the data obtained. The mean score and standard deviation of the SE and SRL scales were also derived from the mean analysis procedure. After the normality test was conducted, the relationship between students' SE and SRL was measured by employing Pearson's product-moment correlation coefficient I. Pearson correlation was utilised in this study to assess the strength of the relationship between SE and SRL due to the nature of the data which is normally distributed (Saunders et al., 2019).

Findings

The mean analysis was carried out on the data to obtain the mean score of the self-efficacy (SE) and SRL (SRL) scales. Table 1 shows the mean analysis of factors and the items for SE. The SE scale comprises five factors with 26 items in total. The analysis of Subscale 1 (*Self-efficacy to complete an online course*) has displayed the highest mean score (*M* = 4.04, *SD* = 0.60). This is followed by Subscale 5 (*Self-efficacy to interact with classmates for academic purposes*) (*M* = 3.90, *SD* = 0.59). The lowest mean score among the five subscales is Subscale 3 (*Self-efficacy to handle tools in a CMS*) with a moderate level of mean score (*M* = 3.37, *SD* = 0.69).

Table 1
The Mean Analysis of Self-Efficacy (SE) Items

Subscales and Items	*M*	*SD*
Subscale 1: Self-efficacy to complete an online course	**4.04**	**0.60**
1. I am willing to face challenges.	4.01	0.72
2. I create a plan to complete the given assignments.	4.14	0.68
3. I willingly adapt my learning styles to meet course expectations.	4.03	0.78
4. I understand complex concepts.	3.75	0.76
5. I complete my previous online course at Fakulti Bahasa (FBI) with a good grade.	3.91	0.67
6. I keep up with course schedule.	4.26	0.70
7. I evaluate assignments according to the criteria provided by the lecturers or instructors.	4.17	0.77
Subscale 2: Self-efficacy to interact socially with classmates	**3.86**	**0.65**
8. I pay attention to other students' social actions.	3.84	0.71
9. I initiate social interaction with classmates.	3.79	0.77

10. I apply different social interaction skills depending on situations.	3.84	0.73
11. I develop friendship with my classmates.	3.95	0.87
Subscale 3: Self-efficacy to handle tools in a CMS	**3.37**	**0.69**
12. I send email to classmates with or without attached files.	3.06	0.86
13. I reply to classmates' messages in a discussion board.	3.62	0.74
14. I post a new message in a discussion board.	3.42	0.78
Subscale 4: Self-efficacy to interact with instructors in an online course	**3.88**	**0.63**
15. I clearly ask my questions to lecturers or instructors.	3.71	0.72
16. I seek help from lecturers or instructors when needed.	4.05	0.79
17. I timely inform the lecturers or instructors when unexpected situations arise.	3.95	0.65
18. I initiate discussions with the lecturers or instructors.	3.74	0.79
19. I express my opinions to lecturers or instructors respectfully.	3.96	0.80
Subscale 5: Self-efficacy to interact with classmates for academic purposes	**3.90**	**0.59**
20. I actively participate in online discussions.	3.73	0.70
21. I effectively communicate with my classmates.	3.77	0.78
22. I respond to other students in a timely manner.	3.68	0.75
23. I request help from my classmates when needed.	4.09	0.73
24. I request help from others when needed.	4.01	0.73
25. I express my opinions to other students respectfully.	3.88	0.71
26. I provide help to other students when assistance is needed.	4.13	0.62

Table 2 shows the mean analysis of factors and items of SRL. There are six subscales in SRL, consisting of 24 items. The analysis outcome shows that Subscale 2 (*Environment structuring*) has provided the highest mean score (M=4.03, SD=0.52). Both Subscale 1 (*Goal setting*) (M=3.78, SD=0.66) and Subscale 4 (*Time management*) (M=3.78, SD=0.60) have shown high mean scores after Subscale 2. The mean analysis shows that Subscale 3 (*task strategies*) has the lowest mean score (M=3.61, SD=0.71).

Table 2

The Mean Analysis of Self-Regulated Learning (SRL) Items

Factors and Items	*M*	*SD*
Subscale 1: Goal setting	**3.78**	**0.66**
1. I set standards for my assignments in online courses.	3.80	0.78
2. I set short-term goals as well as long term goals.	3.91	0.71
3. I keep a high standard for my learning in my online courses.	3.60	0.85
4. I set goals to help me manage studying time for my online course.	3.84	0.76
5. I don't compromise the quality of my work because it is online.	3.77	0.74
Subscale 2: Environment structuring	**4.03**	**0.52**
6. I choose the location where I study to avoid too much distraction.	4.04	0.64
7. I find a comfortable place to study.	4.21	0.57
8. I know where I can study most efficiently for online.	3.99	0.70
9. I choose a time with few distractions for studying during my online courses.	3.87	0.66
Subscale 3: Task strategies	**3.61**	**0.71**
10. I try to make more thorough notes for my online courses because notes are even more important for learning online than in a regular classroom.	3.82	0.84
11. I read aloud instructional materials posted online to fight against distractions.	3.48	0.93
12. I prepare my questions before joining in the chat room and discussion.	3.71	0.92
13. I work extra problems in my online courses in addition to the assigned ones to master the course content.	3.44	0.79
Subscale 4: Time management	**3.78**	**0.60**
14. I allocate extra studying time for my online courses because I know it is time demanding.	3.75	0.71
15. I try to schedule the same time every day or every week to study for my online courses, and I observe the schedule.	3.74	0.70
16. Although we 'on't have to attend daily classes, I still try to distribute my studying time evenly across days.	3.84	0.67
Subscale 5: Help seeking	**3.71**	**0.58**

17. I find someone who is knowledgeable in course content so that I can consult with him or her when I need help.	4.10	0.64
18. I share my problems with my classmates online, so we know what we are struggling with and how to solve our problems.	3.62	0.81
19. If needed, I try to meet my classmates face-to-face.	3.57	0.90
20. I am persistent in getting help from the lecturer through email.	3.54	0.87
Subscale 6: Self-evaluation	**3.70**	**0.63**
21. I summarize my learning in online courses to examine my understanding of what I have learned.	3.75	0.73
22. I ask myself a lot of questions about the course material when studying for an online course.	3.73	0.64
23. I communicate with my classmates to find out how I am doing in my online classes.	3.60	0.86
24. I communicate with my classmates to find out what I am learning that is different from what they are learning.	3.74	0.77

Table 3 displays the result that shows both SE (*M* = 3.87, *SD* = 0.55) and SRL (*M* = 3.77, *SD* = 0.51) mean scores are high.

Table 3
Summary of Mean Analysis of Self-Efficacy (SE) and Self-Regulated Learning (SRL)

Scales	*M*	*SD*	No. of Items	*n*
Self-Efficacy (SE)	3.87	0.55	26	77
Self-regulated Learning (SRL)	3.77	0.51	24	77

As shown in Table 4, the mean score was also used to categorise the respondents' SE and SRL levels.

Table 4
Range of Mean Categorization

Range of mean	Interpretation
1.00-2.33	Low
2.34-3.67	Moderate
3.68-5.00	High

Table 5 reveals that most of the students belong to the high-level category in both SE (68.8%) and SRL (46%). Only 1 student (1.3%) belong to the low level.

Table 5
Categorisation of Stude'ts' Self-Efficacy (SE) and Self-Regulated Learning (SRL) Levels

Variable	Category	Frequency	Percentage (%)
SE	Low	1	1.3
	Moderate	23	29.9
	High	53	68.8
SRL	Low	1	1.3
	Moderate	30	39.0
	High	46	59.7
n		77	100.0

Further analysis was conducted to identify the correlation between SE and SRL. Table 6 shows that there is a statistically strong positive relationship between SE and SRL (r = .690, p < .001). The strong correlation between these variables indicates that higher levels of self-efficacy are associated with higher levels of SRL.

Table 6
The Pearson Correlation Analysis

Variables		Self-efficacy	Self-regulated Learning
Self-efficacy	Pearson Correlation	1	.690**
	Sig. (2-tailed)		.000
	n	77	77
Self-regulated Learning	Pearson Correlation	.690**	1
	Sig. (2-tailed)	.000	
	n	77	77

**Correlation is significant at the .01 level (2-tailed).

Discussion

RQ1: What is UMK undergraduates' self-efficacy level in online Arabic language classes?

A possible explanation for the highest score appearing for *Subscale 1: Self-efficacy to complete an online course* (see Table 1) is that the students perceived their potential in

accomplishing the Arabic I course and did not face many difficulties in learning online. One of the items under this subscale that has the highest score, that is, Item 6: I keep up with course schedule, indicated that students' capabilities to cope with the lessons' arrangement and having this confidence could help them to get good grades in this course. Item 7: I evaluate assignments according to the criteria provided by the lecturers or instructors was also one of the highly rated items that showed students followed closely the instructions for assignments to get good marks. Also, as expected, students reported high levels for this subscale since they were aware that they could not enrol in the following Arabic II if they failed this course which is a prerequisite to Arabic II.

Online learning separates students physically from each other and from the instructors or teachers. Thus, this probably hinders the interaction between students and students or between teachers and students. However, the results in Subscale 5: Self-efficacy to interact with classmates for academic purposes, indicate otherwise. The high score for this scale demonstrates that students have been actively interacting with their peers through online discussion and helping each other when they encounter any issues throughout the online learning experience. This is further strengthened with evidence from Item 23: I request help from my classmates when needed, and Item 26: I provide help to other students when assistance is needed. In addition, Subscale 4: Self-efficacy to interact with instructors in an online course that students rated as high, showed that they realised that they could contact their teachers anytime online as the interactions were not limited to class hours. It could also indicate that being physically away from classmates or teachers did not discourage them from collaborating with each other in academic matters. Other than that, all items of Subscale 2: Self-efficacy to interact socially with classmates were rated high which suggested that students managed to develop friendships among themselves although they have never met each other in real life.

There was, however, the lowest mean score among the five subscales, which is Subscale 3: Self-efficacy to handle tools in a CMS. This score shows that students' participation in utilising tools such as email or discussion boards are at a moderate level. This scenario might be due to the high usage of applications on a mobile phone such as WhatsApp, WeChat or Telegram are more popular, convenient, and widely used than email. In the context of this study, the interaction between the teacher and students is usually through the main online platform of the university and other online video conferencing applications such as Google Meet and Zoom, which explained the moderate level of email correspondence in this subscale.

In summary, the students displayed a high level of self-efficacy despite engaging in an online learning setting in which students would have to learn the Arabic language by themselves at home, in seclusion away from their classmates and teachers. As reported in other studies, if these students could maintain this kind of self-efficacy, it could lead to successful online learning (Joo et al., 2013; Wang et.al., 2013).

RQ2: What is UMK undergraduates' SRL level in online Arabic language classes?

"SRL involves activities that focus on learning objectives in which students direct, modify, and maintain their learning activities" (Agustiani et al., 2016, p. 2). In the context of this study, students were learning Arabic I in their second semester as they had gone through online learning during the first semester. Based on their previous online learning experience, students were able to locate a proper place in their house for studying purposes. Hence the highest mean score for Subscale 2: Environment structuring indicates that students can station themselves at a comfortable spot, which is also suitable to avoid distractions while learning online.

Online learning entails some degrees of autonomy mainly because the students are learning independently at home, and not in a traditional face-to-face classroom, as well as lacking physical interaction with their teacher and classmates. As stated earlier, though it is not a new concept, learner autonomy is not widely practised among Asian students. However, the high mean scores for Subscale 1: Goal setting and Subscale 4: Time management show that they are highly determined to learn and know how to manage their time when learning online which reflects the traits of learner autonomy. These also indicated that students might have organised their SRL strategies since they know the importance of passing this Arabic I course as the prerequisite to Arabic II, and these were like findings by Li and Zheng (2018) that students would operate SRL activities when they valued that the task was worthy and beneficial to them.

Next, students also rated Subscale 5: Help seeking and Subscale 6: Self-evaluation as high to indicate their willingness to ask for help from teachers and peers in learning Arabic in addition to self-study. This was consistent with how they perceived high self-efficacy towards interaction with teachers and classmates in an online learning context where they can easily become socially isolated.

Meanwhile, the lowest mean score for Subscale 3: Task strategies suggests that students moderately prepare prior to the online class session. Arabic is a foreign language to them, and they need to work hard to learn it. Apart from the grammar and vocabulary, the students also must learn how to write the Arabic Alphabet, and this might be easier if they were in a traditional, physical class with a teacher who can show or correct them on the spot. Online learning, however, requires students to depend on themselves on how to learn all these, and as such the teachers provided abundant learning materials so that the students would get the necessary exercises and did not have to generate extra efforts to acquire them. The support from the teachers could help to ease the students' learning process.

RQ3: What is the correlation between self-efficacy and SRL levels among UMK undergraduates in online Arabic language classes?

Overall, the analysis for both self-efficacy and SRL levels shows that most of the students belong in the high-level category (see Table 3). This result shows that students can adapt

to online learning by managing their time, organising their schedules, interacting with classmates and instructors, and selecting the best spot to maximise their online learning experience.

This study confirms that students' self-efficacy is associated with their SRL, particularly in terms of online learning. This finding agrees with Ulfatun et al. (2021), An et al. (2021) Lee et al. (2020) and Wang et al. (2013), which showed that the two variables were correlated. The strong correlation between these variables indicates that a high level of self-efficacy will also increase the level of SRL among the students.

The observed positive correlation between students' self-efficacy and SRL might be explained by applying Bandura's (2002) socio-cognitive perspective. This theoretical framework views individuals as the ones in charge of their learning processes and achievement, which interact with other factors including the surrounding context (Schunk & Pajares, 2002). Since the COVID-19 pandemic, the learning contexts have shifted from physical traditional classrooms to online classes. In this case, to thrive in the new context, the students who oversee their learning journey resorted to having a high level of self-efficacy and SRL, which are pertinent to their achievement in Arabic as a foreign language online course.

Finally, based on the findings, there are some strategies that could enhance stude'ts' self-efficacy and SRL in online Arabic language classes. According to Yu (2023), previous studies have shown that external assistance and instruction can significantly enhance SRL proficiency, and without teacher support in teaching, students may overestimate their ability to understand learning materials (Baars et al., 2018). Thus, here are some suggested interventions that present and future language instructors could implement to enhance stude'ts' self-efficacy and SRL in online Arabic language classes such as encouraging more online collaborative work among the student, exposing them to more learning platforms in Arabic for learning engagement, increasing their awareness of SRL strategies, as well as encouraging and stimulating students' learning interest in Arabic.

Conclusion

This research has presented a contextualised view of self-efficacy and SRL and has made several contributions such as adding to the current existing literature on these variables in online foreign language learning settings. From a pedagogical perspective, awareness of the relationships between foreign language self-efficacy, SRL and online learning is important and helpful for language instructors. The findings indicate that university students demonstrate a high level of self-efficacy in online Arabic language learning, which strongly predicts their employment of SRL strategies. However, their agreement level regarding task strategies suggests only moderate preparation for online foreign language class sessions. Furthermore, the findings indicate that students' self-efficacy and SRL are both high, with a positive association between self-efficacy with SRL in online foreign language classes. This implies a substantial impact of their elevated self-efficacy

on their SRL level. This study found that students perceived a positive correlation between self-efficacy and SRL in online Arabic language classes. However, there are some limitations such as the study design which relies on students' perception of the variables and the correlation among them, self-perceived survey questions which may be prone to bias in the responses, and the student sample being only from an online Arabic language class which may not generalise to other foreign language settings. Future investigations should investigate the causal relationships between self-efficacy, SRL and performance in learning as well as utilising qualitative approaches to corroborate the statistical evidence.

References

Agustiani, H., Cahyad, S., & Musa, M. (2016). Self-efficacy and self-regulated learning as predictors of students' academic performance. *The Open Psychology Journal*, *9*(1), 1-6. 10.2174/1874350101609010001

An, Z., Wang, C., Li, S., Gan, Z., & Li, H. (2021). Technology-assisted self-regulated English language learning: Associations with English language self-efficacy, English enjoyment, and learning outcomes. *Frontiers in Psychology*, *11*, 1-14. https://doi.org/10.3389/fpsyg.2020.558466

Artino Jr, A. R., & Stephens, J. M. (2009). Academic motivation and self-regulation: A comparative analysis of undergraduate and graduate students learning online. *The Internet and Higher Education, 12*(3-4), 146-151. https://doi.org/10.1016/j.iheduc.2009.0 2.001

Baars, M., Leopold, C., & Paas, F. (2018). Self-explaining steps in problem- solving tasks to improve self-regulation in secondary education. *J. Educ. Psychol, 110*, 578-595. https://doi: 10.1037/edu0000223

Badiozaman, I. F. A., Leong, H. J., & Jikus, O. (2019). Students' perception and use of English in higher education institutions: Links with academic self-efficacy. *Journal of Applied Research in Higher Education*, *11*(1), 36-49. www.emeraldinsight.com/2050-7003.htm

Bandura, A. (2002). Social cognitive theory in cultural context. *Applied Psychology*, *51*(2), 269-290. https://doi.org/10.1111/1464-0597.00092

Barnard, L., Lan, W. Y., To, Y. M., Paton, V. O., & Lai, S. L. (2009). Measuring self-regulation in online and blended learning environments. *The Internet and Higher Education*, *12*(1), 1-6. https://doi.org/10.1016/j.iheduc.2008.10.005

Deputy Vice Chancellor for Academic & International. (2020). *Academic circular no.6/2020 guidelines for the implementation of online teaching and learning following the movement control order (COVID-19) of Universiti Malaysia Kelantan.* UMK.B01.02.100-1/3/1(11). Universiti Malaysia Kelantan.

Handayani, S., & Sholikhah, N. (2021). Pengaruh antara self efficacy dan self regulated learning terhadap prestasi belajar mahasiswa selama pembelajaran daring. *Edukatif: Jurnal Ilmu Pendidikan, 3*(4), 1373-1382. https://doi.org/10.31004/edukatif.v3i4.553

Hasan, M. Z. B., Hossain, T. B., & Islam, A. (2014). Factors affecting self-efficacy towards academic performance: A study on polytechnic students in Malaysia. *Advances in Environmental Biology*, 8(9), 695-705. http://www.aensiweb.com/old/aeb/special%204%202014/695-705.pdf

Joo, Y. J., Lim, K. Y., & Kim, J. (2013). Locus of control, self-efficacy, and task value as predictors of learning outcome in an online university context. *Computers & Education*, *62*, 149-158. https://doi.org/10.1016/j.compedu.2012.10.027

Latip, M. S. A., Noh, I., Tamrin, M., & Latip, S. N. N. A. (2020). Students' acceptance for e-learning and the effects of self-efficacy in Malaysia. *International Journal of Academic Research in Business and Social Sciences, 10*(5), 658-674. http://dx.doi.org/10.6007/IJARBSS/v10-i5/7239

Lee, D., Watson, S., & Watson, W. (2020). The relationships between self-efficacy, task value, and self-regulated learning strategies in massive open online courses. *International Review of Research in Open and Distributed Learning, 21*(1), 23-39. https://doi.org/10.19173/irrodl.v20i5.438

Li, S., & Zheng, J. (2018). The relationship between self-efficacy and self-regulated learning in one-to-one computing environment: the mediated role of task values. *The Asia-Pacific Education Researcher*, *27*(6), 455-463. https://doi.org/10.1007/s40299-018-0405-2

Lim, C. L., Ab Jalil, H., Maa'rof, A. M., & Saad, W. Z. (2020). Self-regulated learning as a mediator in the relationship between peer learning and online learning satisfaction: A study of a private university in Malaysia. *Malaysian Journal of Learning & Instruction, 17*(1), 51-75. https://doi.org/10.32890/mjli2020.17.1.3.

Littlejohn, A., Hood, N., Milligan, C., & Mustain, P. (2016). Learning in MOOCs: Motivations and self-regulated learning in MOOCs. *The Internet and Higher Education, 29*, 40-48. https://doi.org/10.1016/j.iheduc.2015.1 2.003

Loong, T. E. (2012). Self-regulated learning between low-, average-, and high-math achievers among preuniversity international students in Malaysia. *European Journal of Social Sciences*, *30*(2), 302-312. https://www.europeanjournalofsocialsciences.com/issues/EJSS_30_2.html

Omar, S., Shaharuddin, W. Y. W., Azim, N. A. F., Azim, N., Nawi, N. S. M., Zaini, N., & Syahfutra, W. (2021). Academic motivation in English online classes: A comparative study of universities in Malaysia and Indonesia. *Indonesian Journal of Applied Linguistics*, *11*(2), 477-487. https://ejournal.upi.edu/index.php/IJAL/article/view/34538

Ömer, Ö. Z. E. R., & Akçayoğlu, D. I. (2021). Examining the roles of self-efficacy beliefs, self-regulated learning and foreign language anxiety in the academic achievement of tertiary EFL learners. *Participatory Educational Research*, *8*(2), 357-372.

Reparaz, C., Aznárez-Sanado, M., & Mendoza, G. (2020). Self-regulation of learning and MOOC retention. *Computers in Human Behavior*, *111*(2), 106423. https://doi.org/10.1016/j.chb.2020.106423

Saunders, M. N. K., Lewis, P., & Thornhill, A. (2019) *Research methods for business students* (8th ed.). Pearson.

Schunk, D. H., & Pajares, F. (2002). The development of academic self-efficacy. In A. Wigfield & J. S. Eccles (Eds.), *Development of achievement motivation* (pp. 15-31). Academic Press. https://doi.org/10.1016/B978-012750053-9/50003-6

Shen, D., Cho, M. H., Tsai, C. L., & Marra, R. (2013). Unpacking online learning experiences: Online learning self-efficacy and learning satisfaction. *The Internet and Higher Education*, *19*, 10-17. https://doi.org/10.1016/j.iheduc.2013.04.001

Simamora, R. M. (2020). The challenges of online learning during the COVID-19 pandemic: An essay analysis of performing arts education students. *Studies in Learning and Teaching*, *1*(2), 86-103. https://doi.org/10.46627/silet

Tsai, C. L., Cho, M. H., Marra, R., & Shen, D. (2020). The self-efficacy questionnaire for online learning (SeQoL). *Distance Education*, *41*(4), 472-489. https://doi.org/10.1080/01587919.2020.1821604

Ulfatun, T., Septiyanti, F., & Lesmana, A. G. (2021). University students' online learning self-efficacy and self-regulated learning during the COVID-19 pandemic. *International Journal of Information and Education Technology*, *11*(12), 597-602. http://www.ijiet.org/vol11/1570-IJIET-3049.pdf

University Senate Standing Committee for Undergraduate. (2016). 'Item 6.3: Blended learning mode achievement reporting'. *Minutes of the university senate standing committee for undergraduate meeting no.8/2016 (34th time) 08 September 2016*, Maybank entrepreneurship meeting room, City Campus, Universiti Malaysia Kelantan.

Wang, C. H., Shannon, D. M., & Ross, M. E. (2013). Students' characteristics, self-regulated learning, technology self-efficacy, and course outcomes in online learning. *Distance Education*, *34*(3), 302-323. http://dx.doi.org/10.1080/01587919.2013.835779

Wulandari, R. N. A., Rosy, B., Trisnawati, N., Nugraha, J., & Rahmawati, F. (2023). Factors influencing students' academic performance in online courses during the COVID-19 pandemic. *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*, *8*(2), 107-114. DOI: http://dx.doi.org/10.17977/jptpp.v8i2.21395

Yu, B. (2023). Self-regulated learning: A key factor in the effectiveness of online learning for second language learners. *Front Psychol, 13*(1051349), 1-6. https://doi.org/10.3389/fpsyg.2022.1051349

Zapata-Cuervo, N., Montes-Guerra, M. I., Shin, H. H., Jeong, M., & Cho, M. H. (2023). Students' psychological perceptions toward online learning engagement and outcomes during the COVID-19 pandemic: A comparative analysis of students in three different countries. *Journal of Hospitality & Tourism Education*, *35*(2), 108-122. https://doi.org/10.1080/10963758.2021.1907195

Zimmerman, B. J. (2000). Self-efficacy: An essential motive to learn. *Contemporary Educational Psychology, 25*, 82-91. https://doi.org/10.1006/ceps.1999.1016

Zimmerman, B. J., & Schunk, D. H. (2011). Self-regulated learning and performance: An introduction and an overview. In B. J. Zimmerman & D. H. Schunk (Eds.), *Handbook of self-regulation of learning and performance* (pp. 1–12). Routledge.

TRIGGERED CODE-SWITCHING: A BOTTOM-UP APPROACH TO CODE-SWITCHING AMONG L2 TEACHERS

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Manuscript received 22 March 2023
Manuscript accepted 8 December 2023
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https://doi.org/10.33736/ils.5522.2023

ABSTRACT

Classroom interaction in the second language (L2) is an important source of language input for students. Yet, code-switching from the target language to another language is commonplace in many L2 classrooms. Psycholinguistic studies have shown code-switching happens through top-down and bottom-up processes during bilingual speech production. Triggering is a bottom-up process where code-switching is caused by words that are shared between different languages. To investigate if triggered code-switching takes place among secondary school ESL teachers in Malaysia, a study on teachers' language use in class was conducted. A total of 111 minutes of interaction from two English lessons was audio recorded and 225 instances of teacher code-switching in the recordings were analysed. The analysis reveals that lexical transfers between English and Malay and selected discourse markers triggered instances of code-switching among the teachers. The findings suggest that teacher code-switching in L2 classrooms should be considered from both top-down and bottom-up perspectives. Based on these findings, suggestions for future studies on code-switching among L2 teachers were provided.

Keywords: bilingual speech production; code-switching; ESL; L2 teachers; triggering

Introduction

Code-switching is a common occurrence in many second language (L2) classrooms, regardless of the target language (TL) or the proficiency levels of the students (Cook, 2016). In general, code-switching is when the L2 teacher or a student switches from the TL to another language during the process of teaching and learning. This usually involves another language that they have in common such as a shared first language (L1). As classroom interaction is an important source of input for language learners, many studies have been conducted on the use of code-switching among L2 teachers. Most of these studies focused on the pedagogical functions of their code-switching (Temesgen & Hailu, 2022). In other words, the studies were conducted with the idea of code-switching being the result of top-down processing during bilingual speech production (i.e., code-switching is based on speaker intentions). For example, teachers code-switch because they want to achieve a particular classroom effect (Temesgen & Hailu, 2022). However, it has been found that code-switching among bilinguals is the result of both top-down and bottom-up processes (Green, 2018; Green & Wei, 2014). Bottom-up processing of code-switching is a type of code-switching that is triggered or primed by some sort of stimulus in the conversation. Typically, when bilinguals code-switch "involuntarily", they are said to have experienced the bottom-up processing of code-switching. Unfortunately, there are not as many studies on the bottom-up processes behind teacher code-switching in L2 classrooms. As L2 teachers are proficient and functional bilinguals who experience all of the related processes during speech production, it is important to further investigate teacher code-switching in L2 classrooms from a bottom-up perspective. Thus, the current study was conducted to investigate triggering in the code-switching of secondary school ESL teachers in Malaysia, a multiracial and multilingual country. The specific objectives of this study are:

- to identify instances of triggered code-switching by secondary school ESL teachers in Malaysia
- to describe the trigger words behind triggered code-switching by secondary school ESL teachers in Malaysia

Literature Review

The Control Process Model of Code-Switching

According to Muysken (2013), intra-sentential use of more than one language can be divided into three categories: insertion, alternation, and congruent lexicalisation. Based on Muysken's (2013) typology, code-switching is said to have occurred only when a speaker alternates between two languages "without either one being subordinated to the

other" (Muysken, 2013, p. 713). In other words, there is a complete switch from one language to the other, including both grammar and lexicon. However, inserting singular items from one language into a sentence in another language is not considered code-switching. Similarly, congruent lexicalisation, whereby an utterance is made up of multiple items from two languages due to a high level of structural similarity, is also not considered code-switching. Over the years, many frameworks have been developed to account for code-switching under different linguistic paradigms. For example, under sociolinguistics, Gumperz (1982) proposes six functions for code-switching including quotations, interjections, and so on. Later, Auer (1999) suggests that code-switching can be discourse-related or participant-related.

Other than sociolinguistic-based frameworks, there are also psycholinguistic-based frameworks to study code-switching and Control Process Model is one of them (Green, 2018; Green & Wei, 2014). Control Process Model was developed based on the concept of the co-activation of languages during bilingual speech production. When a bilingual formulates a message during the process of speech production, the corresponding linguistic representations in both of his/her languages are activated. Control Process Model suggests that the co-activated languages are likely to be in a "cooperative" relationship. This means that control of the speech production system can quickly shift from one language to another. This allows for both top-down and bottom-up processing of code-switching to take place.

As mentioned earlier, the top-down processing of code-switching is a type of code-switching that is based on speaker intentions whereas the bottom-up processing of code-switching is stimulus-based. According to Green and Wei (2014, p. 504), the top-down processing of code-switching is when a bilingual switches from one language to another based on his/her "intention to use an item or construction from the other language". Accordingly, the top-down processing of code-switching has been studied mostly in the form of the functions of code-switching via the sociolinguistic frameworks (e.g., Al Rousan & Merghmi, 2019; Prin, 2021; Smith-Christmas, 2014; Zebari, 2014). In contrast, bottom-up processing of code-switching is one that is "opportunistically adopted" (Green & Wei, 2014, p. 505) due to the presence of a certain stimulus in the conversation. Under the Control Process Model, two stimulus-based bottom-up processes can lead to code-switching namely, triggering and priming.

Firstly, code-switching can be "triggered" by certain words that are shared between languages such as lexical transfers, proper nouns, and bilingual homophones. Lexical transfers are words from one language that have been adopted into another language. Although they may be spelt differently in the receiving language, they are mostly pronounced in a similar manner. For example, *televisyen* in the Malay language is a lexical transfer based on the English word "television". On the other hand, bilingual homophones are words in different languages that are spelt and pronounced similarly because they have the same origins. English and Dutch, for example, are both West Germanic languages under the Indo-European language family. As a result, English and Dutch have bilingual homophones such as "cat/*kat*" and "book/*boek*". Finally, proper

nouns are the names of people or places that do not change regardless of the language being used and as such, are also considered shared words. The triggering theory was originally proposed by Clyne (2003) who found that the use of a trigger word in one language increases the activation level of the other language (to which the trigger word also belongs), leading to items from that language being selected "accidentally" during speech production that is, code-switching. However, Broersma and de Bot (2006) argue that only words that directly follow a trigger word (within the same clause) have the best chance of being switched. This is because the activation of the other language is the highest right after the production of a trigger word. In a more recent study, Broersma et al. (2019) concede that trigger words can also cause code-switching in the subsequent clause if the first clause has more than one trigger word.

Apart from triggering, priming is another stimulus-based, bottom-up process that can lead to code-switching. Primed code-switching is when a code-switched utterance is likely to be followed by another code-switched utterance. When a bilingual's conversational partner uses code-switching, the bilingual has to process what has been said (Green, 2018). To do so, the bilingual activates both of his/her languages. This can lead to the bilingual also engaging in code-switching due to the co-activation of languages. For example, Fricke and Kootstra (2016) found that the code-switching that took place among a group of Spanish-English speakers from Florida was influenced by priming. Interestingly, it was found that priming was not restricted to between speakers. Priming within the same speaker that is, self-priming is just as likely as priming between speakers or interlocutor-priming. In an earlier study, it was found that bilinguals also tend to code-switch at the same syntactic position as the preceding code-switched utterance (Kootstra et al., 2012).

In summary, code-switching involves a combination of top-down and bottom-up processing during bilingual speech production. Code-switching can be the result of speaker intentions in the former case, or it can be stimulus-based for the latter. Examples of bottom-up processing of code-switching are triggered code-switching and primed code-switching.

Code-Switching Among L2 Teachers

In terms of teacher code-switching in L2 classrooms, many studies have been conducted on different aspects of the phenomenon. For example, classroom interaction in the L2 is an important source of language input for students. Thus, a number of these studies focused on the amount of teacher code-switching (e.g., Nakatsukasa & Loewen, 2015; Taşçı & Ataç, 2020; Tsagari & Georgiou, 2016). They investigated how often L2 teachers code-switch in class. In particular, Nakatsukasa and Loewen (2015) as well as Tsagari and Georgiou (2016) found that L1 made up approximately 40% of L2 teachers' language use in class. Nakatsukasa and Loewen (2015) coded teacher utterances as L1 (English only), L2 (Spanish only), or mixed language (mix of English and Spanish) before adding up the number of utterances under each category to determine the extent of teacher code-

switching whereas Tsagari and Georgiou employed the word count method where they counted the number of L1 (Greek) and L2 (English) words spoken by teachers.

Most of the studies on teacher code-switching in L2 classrooms, however, are based on the functions of teacher code-switching (Adriosh & Razi, 2019; Debreli, 2016; Hall & Cook, 2013; Paker & Karaağaç, 2015). The studies were mostly set within the English as a Second Language (ESL) or English as a Foreign Language (EFL) context. For example, Hall and Cook (2013) conducted a survey on the use of code-switching among English teachers from more than 100 countries. It was revealed that the core functions of code-switching stood out the most to the teachers such as to introduce new vocabulary items and to explain grammar rules. In another study, Paker and Karaağaç (2015) used a combination of questionnaires and interviews to investigate the use of code-switching among EFL teachers in Indonesia. Similarly, the researchers found that teachers code-switched to introduce new vocabulary items as well as to explain difficult topics. In a more recent study, Debreli (2016) conducted one-on-one and focus group interviews with more than 50 EFL teachers in Northern Cyprus. The teachers' responses showed that teachers code-switched to introduce new vocabulary items, explain difficult topics, and give instructions. More recently, Adriosh and Razi (2019) collected actual production data from the classroom to identify the functions of teacher code-switching. It was discovered that teachers code-switch for two main reasons: code-switching for constructing and transmitting knowledge and code-switching for interpersonal relations. Code-switching for constructing and transmitting knowledge is related to pedagogical functions such as clarification, repetition, and recapitulation whereas code-switching for interpersonal relations mostly involves the function of socialisation. In a review of studies in this area, Temesgen and Hailu (2022) propose that teacher code-switching in L2 classrooms can be summarised into three categories: academic function, managerial function, and social function.

As can be seen, research on teacher code-switching in L2 classrooms mostly took on a top-down approach to teacher code-switching. Nevertheless, there are some studies conducted based on the bottom-up processing of code-switching (Rahimi & Eftekhari, 2011; Yao, 2016). For example, Rahimi and Eftekhari (2011) observed that some of the code-switching demonstrated by Iranian EFL teachers were triggered by lexical transfers between Persian and English. However, they did not observe any code-switching related to proper nouns or bilingual homophones, which are the other two categories of trigger words identified under the triggering theory. The lack of bilingual homophones was eventually attributed to the fact that Persian and English are not "genetically related languages" (Rahimi & Eftekhari, 2011, p. 57) as they belong to different branches of the Indo-European language family. On the other hand, Yao (2016) found that discourse markers can also trigger code-switching among EFL teachers. English markers such as "okay" and "now" as well as the Mandarin marker '好' (good) can lead to code-switching among the Chinese ESL teachers in her study. However, it should be noted that both Rahimi and Eftekhari's (2011) study as well as Yao's (2016) study were conducted in largely monolingual contexts (Iran and China). This suggests that research on the bottom-

up processing of code-switching about teacher code-switching in L2 classrooms is not as extensive as research on the top-down processing of code-switching especially in multilingual settings.

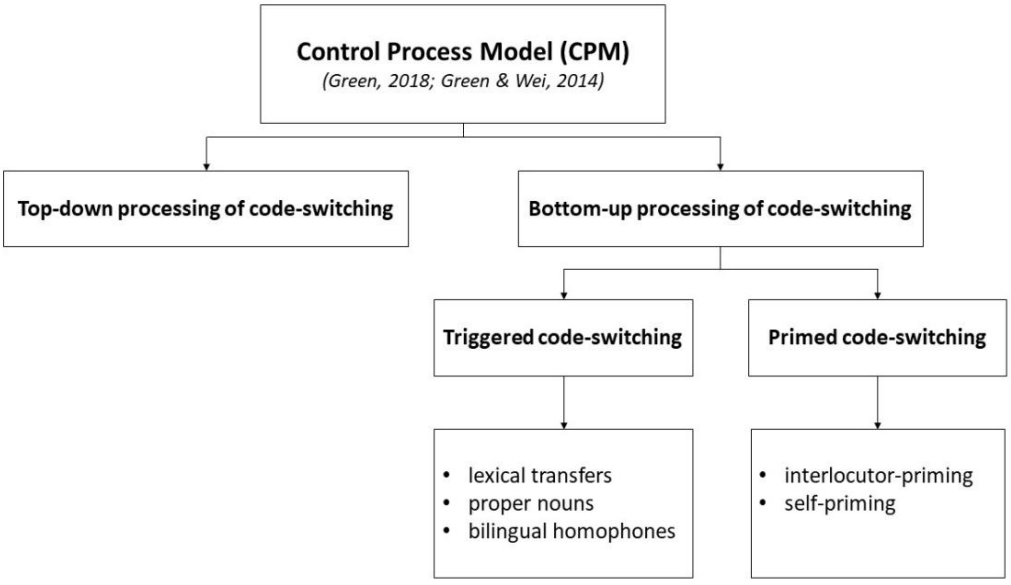
Methodology

Conceptual Framework

The conceptual framework for the study (Figure 1) is based on the Control Process Model whereby triggered code-switching is a type of bottom-up processing of code-switching (Green, 2018; Green & Wei, 2014). Triggered code-switching is said to be related to trigger words such as lexical transfers, proper nouns, and bilingual homophones. As such, the three categories of trigger words served as the main guide during the analysis of triggered code-switching by secondary school ESL teachers in Malaysia.

Figure 1

Conceptual Framework for the Current Study



Sample

Two teachers from two different public secondary schools in Sabah, Malaysia participated in the current study. Because previous studies have shown that teacher code-switching can be the result of teachers' lack of competence in the L2 (Jogulu & Mohd Radzi, 2018), to provide a clearer picture of the triggering phenomenon, proficient and experienced teachers who were professionally trained were purposefully sampled for the current study. Both teachers have a bachelor's degree in Teaching English as a Second Language.

One of the teachers even has a master's degree in Applied Linguistics. In terms of proficiency, both teachers achieved the C1 level in the Cambridge Placement Test for English. Based on the Common European Framework of Reference (CEFR) scale, individuals with a C1 level of achievement in a language are considered proficient users of the language (Council of Europe, 2018). In addition to that, both teachers had been teaching English for more than five years at the time the study was conducted. This is an important criterion as, according to Jogulu and Mohd Radzi (2018), teachers who have been teaching for more than five years are considered experienced teachers. Table 1 provides further information about the teachers including their L1 and L2. To ensure the anonymity of the teachers, they are referred to as Teacher A and Teacher B.

Table 1
Information About the Teachers

	Teacher A	Teacher B
Gender	female	female
Age	34	36
Ethnicity	Malay	Kadazan
L1	Malay	Kadazandusun
L2	English	Malay/English
Professional Qualifications	Bachelor	Master
CEFR Level for English	C1	C1
Years of Teaching Experience	10	12

Instrument and Data Collection

Data collection for the current study was carried out in April 2022. The study was conducted according to the guidelines of the Declaration of Helsinki and approved by the Research Ethics Committee of Universiti Kebangsaan Malaysia (Ethics approval code: JEP-2022-176; Ethics approval date: 14 April 2022).

The main instrument used for data collection is audio recordings. According to Lester and O'Reilly (2019), audio recordings are suitable as they can capture spoken language in its entirety. For the recording, the teachers were provided with portable audio recorders (Sony ICD-PX370 Mono Digital Voice Recorder) that are easy to operate in the classroom. The recording was carried out by the teachers themselves to minimise interference in the teaching and learning process. The teachers each audio recorded one double-period English lesson for the current study. The lesson by Teacher A was a lesson on writing for Form 4 (16 years old) students whereas the lesson by Teacher B was a lesson on reading, also for Form 4 students. Lessons from the same grade were chosen to ensure that the lessons were comparable in terms of difficulty. The students were also comparable in terms of their level of English proficiency. Both classes were made up of lower intermediate students. However, Teacher B's class has 50% more students (n=31)

compared to Teacher A's class (n=20). Due to differences in the timetable at different schools, Teacher A's double-period lesson lasted for 63 minutes whereas Teacher B's double-period lesson lasted for 48 minutes. This was not seen as an issue as the current study focused on the qualitative aspect of the teachers' code-switching rather than the quantitative aspect. At the end of the lessons, the audio recordings were sent to the main researcher for data analysis.

Data Analysis

Prior to data analysis, the recordings were transcribed verbatim by the main researcher. To facilitate the data analysis process, the transcriptions for the current study were arranged in a table form, following Hepburn and Bolden's (2013) suggestion. An example of the table used for the transcriptions is provided in Figure 2. As can be seen, the table in Figure 2 includes information such as line number and speaker to facilitate the data analysis process. (For the transcription conventions used, refer to the Appendix.)

To facilitate the subsequent analysis for code-switching, as part of the initial transcription process, words from any language other than English used by the teachers (and students) during the lessons were also identified. It was found that all the non-English words used were Malay words even though one of the teachers' L1 is Kadazandusun. This is most probably due to the fact that Malay is the shared language between multiracial teachers and students. In other words, the code-switching in the current study is from English to Malay. It is important to note that Malay belongs to the Austronesian language family whereas English, as mentioned earlier, is an Indo-European language. Following that, instances of teacher code-switching were identified based on Muysken's (2013) typology. Teacher code-switching is when teachers make a complete switch from English to Malay, including grammar and lexicon, in the process of teaching. However, the teacher turns that are entirely in Malay was not considered teacher code-switching. Instances of student code-switching were not identified as the focus of the current study is on teacher code-switching. An example of teacher code-switching can be seen in Figure 2. In Line 16, Teacher A made a complete switch from English to Malay, including grammar and lexicon.

Figure 2

An Example of the Transcription Table

Lesson: Teacher A

Date: 21 April 2022

Total length: 63 minutes 12 seconds

Line number	Speaker	Text
1	Teacher A	okay can we start our lesson ?
2	Student	done done =
3	Teacher A	= can we start (.) settle everything
4	Student	no =
5	Teacher A	= no ? anything you want to discuss ?
6	Student	no =
7	Teacher A	= no alright okay now today we are going to continue with yesterday's
8		activity take out your exercise boo:k (.) take out your exercise boo:k
9		(students talking among themselves)
10	Teacher A	okay ? we continue with question seven ? there was a piece of paper
11		inside start with that one essay *kamu* start with that one okay you
12		answer the first question number two: in your essa:y you have this one
13		a message or map you either can put about a message or you can put
14		about map settle number two number three: your essay must have
15		element of surprise (.) three points if you answer all these three: you
16		will get marks (.) okay *jawab je tiga ni: kamu akan dapat markah* (.) and
17		remember yesterda:y when you write your essa:y you must have the

Next, all instances of teacher code-switching were analysed to determine if they were influenced by triggering. To do so, each English word directly preceding an instance of teacher code-switching to Malay was identified. Then, the words were analysed to determine whether they are shared words between the two languages (Broersma et al., 2019). Two dictionaries were referred to for this part of the analysis: the Cambridge Advanced Learner's Dictionary (Cambridge University Press, 2013) and the *Kamus Dewan*'which is a leading dictionary for the Malay language (Dewan Bahasa dan Pustaka, 2010). If the word preceding the switch was found in both dictionaries, the word was regarded as a shared word between English and Malay. On the contrary, if the word preceding the switch was only found in the English dictionary, the word was not considered a shared word between English and Malay. If the word preceding a switch is a proper noun, it was also considered a shared word between English and Malay. Switches following a shared word were categorised as triggered code-switching and switches following a non-shared word were categorised as non-triggered code-switching (Broersma et al., 2019). Thus, the analysis for triggered code-switching in the current study is entirely based on the teachers' speech in class which has been transcribed. This is in line with the procedures of previous studies on triggered code-switching such as Broersma and de Bot (2006) and Broersma et al. (2019). All instances of teacher code-switching were analysed based on these procedures.

Results

Instances of Triggered Code-Switching by Secondary School ESL Teachers in Malaysia

The transcriptions were first analysed to identify all instances of teacher code-switching. Excerpt 1 shows teacher code-switching taken from Teacher A's lesson.

Excerpt 1

103	Teacher A	where is your book =
104	Student 3	= *tak ada* teacher =
105	Teacher A	= ah nevermind la you you continue eh write down the answer
106		down here la (.) *tak payah tam* no need to paste anything down
107		yet *tak payah tampal lagi* because i want to collect the paper
108		(2.5) do new book la syukri =
109	Student 3	= ah =
110	Teacher A	= new book new book

In Excerpt 1, Teacher A was asking a student if he had his book with him to which the student replied in Malay that he did not (Line 104). Teacher A then instructed the student to write down his answers on a handout that she had just provided. In the middle of Line 106, Teacher A switched from English to Malay (*tak payah tam*) to inform the student that he does not have to paste the handout into his book just yet. As can be seen, the switch is a complete switch into Malay including both grammar and vocabulary. However, Teacher A only articulated the first syllable of the word "*tampal*" which is the Malay word for "paste" before switching back to English. At the beginning of Line 107, Teacher A switched to Malay again (*tak payah tampal lagi*). It is a repetition of the earlier switch but in full. Thus, two instances of teacher code-switching were identified from this teacher turn. Apart from Teacher A, Teacher B also engaged in code-switching during her lesson.

Excerpt 2

196	Teacher B	okay so let's look into your textbook now (.) *kat sini* (.) it tells
197		you the story of how coral reef uh exist *macam mana dia*
198		*terbentuk* and then later on *apa jadi kat dia*

In Excerpt 2, Teacher B was briefly explaining about an article in the textbook to her students. In this teacher turn, three instances of teacher code-switching can be observed. In the middle of Line 196, the teacher briefly switched from English to Malay for the phrase "*kat sini*" which means "over here" to refer to the article. A second longer switch from English to Malay (*macam mana dia terbentuk*) occurred at the end of Line 197 followed by a third switch (*apa jadi kat dia*) in Line 198. (Note that the two excerpts above are provided as examples of teacher code-switching that occurred in Teacher A and

Teacher B's lessons. The code-switching described here are not triggered code-switching thus, no trigger words were identified.)

From the two lessons, 225 code-switches were identified. Teacher A's lesson had more instances of code-switching (n=126) compared to Teacher B's lesson (n=99). However, Teacher A's lesson was longer than Teacher B's lesson. Teacher A's lesson was 63 minutes long whereas Teacher B's lesson lasted for 48 minutes. When averaged, it was found that both teachers code-switched at least twice per minute. Nevertheless, this analysis was carried out only to provide an idea of the amount of code-switching that took place in both lessons. As mentioned earlier, the current study focused on the qualitative aspect of the teachers' code-switching and not the quantitative aspect.

Following that, words directly preceding an instance of teacher code-switching were identified and analysed. As none of the words that preceded teacher code-switching are proper nouns, reference was made to the two dictionaries mentioned earlier for all the words. It was found that some of the words are shared words between English and Malay, that is, they exist in both languages. The code-switching that occurred following these words is categorised as triggered code-switching. On the contrary, code-switching that takes place after English words (words that are not shared with Malay) is classified as non-triggered code-switching. Table 2 summarises the number of triggered code-switching and non-triggered code-switching in Teacher A and Teacher B's lessons.

Table 2

Frequency of Triggered Code-switching and Non-triggered Code-switching in Teacher A's and Teacher B's Lessons

Lesson	Total Number of Code-switches	Triggered Code-switching	Non-triggered Code-switching
Teacher A	126	5	121
Teacher B	99	5	94

As shown in Table 2, Teacher A and Teacher B each had five instances of triggered code-switching in their respective lessons. However, in comparison to the total number of teacher code-switches, the number of triggered code-switching is relatively small. Triggering accounted for 3.9% of Teacher A's code-switching and 5% of Teacher B's code-switching. The trigger words that led to Teacher A and Teacher B's code-switching are presented in the following section.

Trigger Words Behind Triggered Code-Switching by Secondary School ESL Teachers in Malaysia

Excerpt 3 shows triggered code-switching taken from Teacher A's lesson. Two instances of teacher code-switching are found in Line 265. For the first switch, the teacher was responding to a student's question. The teacher initially responded in the English

affirmative form before she repeated the Malay phrase used by the student ("*boleh tulis*" which translates into "can write") to further reinforce her message. In this sense, the switch was most probably an intentional switch or the result of top-down processing. However, the second switch ("*pun tak apa*") was triggered by the word "pencil". In this case, the word "pencil" is an English lexical transfer in Malay ("*pensil*"). In addition to this instance of triggered code-switching, other instances of triggered code-switching in Teacher A's lesson also involved lexical transfers between English and Malay such as "message" ("*mesej*"), "element" ("*elemen*"), and "essay" ("*esei*"). Among them, the English word "element" triggered two instances of code-switching to Malay for Teacher A. No triggered code-switching as a result of bilingual homophones was observed in Teacher A's lesson.

Excerpt 3

264	Student 8	*boleh tulis dah* =
265	Teacher A	= yes yes *boleh tulis* (.) write down with pencil *pun tak apa*

In Teacher B's lesson, code-switching was similarly triggered by lexical transfers between English and Malay such as "pyramid" ("*pyramid*"), "organism" ("*organisma*"), "technology" ("*teknologi*"), "cement" ("*simen*"), and "option" ("*opsyen*"). Excerpt 4 shows three examples of triggered code-switching in Teacher B's lesson. The first switch in Line 301 ("*pernah terfikir tak macam mana*") was a direct translation of the preceding clause. Once again, the switch was most probably an intentional switch. However, the second and third switches in Line 302 were both triggered by lexical transfers between English and Malay. The second switch ("*zaman dulu*") was triggered by the English word "pyramid" ("*pyramid*"). Following that, there was a brief switch back to English before another switch to Malay ("*tapi dia boleh bina pyramid yang*"). The third switch was also triggered by a lexical transfer between English and Malay. In this case, it was triggered by the English word "technology" ("*teknologi*"). Similarly, no triggered code-switching as a result of bilingual homophones was observed in Teacher B's lesson.

Excerpt 4

301	Teacher B	have you ever wonder *pernah terfikir tak macam mana* they
302		can build the pyramid *zaman dulu* without technology *tapi dia*
303		*boleh bina piramid yang* =
304	Student 4	= *besar* =
305	Teacher B	= very very huge until now is still there

In addition to the above, there were some instances of code-switching among the teachers that were triggered by discourse markers. Excerpt 5 taken from Teacher A's lesson. Teacher A was giving feedback to a student about her essay. At the beginning of Line 341, Teacher A briefly switched from English to Malay ("*kat sini*") following the discourse marker "okay". At the end of Line 341, the teacher switched from English to

Malay again ("*cuma kamu* teacher *tak nampak elemen* surprise *tu kat mana contohnya"*/ "I do not see where the element of surprise is") following the second "okay". (Here, the word "teacher" and "surprise" are considered as insertions of singular English words into an otherwise Malay sentence. Thus, "*cuma kamu* teacher *tak nampak elemen* surprise *tu kat mana contohnya*" is considered as a continuous stretch of Malay and the only switch occurred after the word "okay".)

Excerpt 5

341	Teacher A	okay *kat sini* (1.5) your essay is good okay *cuma kamu* teacher
342		*tak nampak elemen* surprise *tu kat mana* (1.0) *contohnya* for
343		example I give you ah this morning

On the other hand, in Teacher B's lesson, there were some instances of triggered code-switching following the phrase "okay so". In Excerpt 6, Teacher B was explaining coral reefs to her students. In Line 296, there was a switch from English to Malay ("*apa kegunaan dia*") following the phrase "okay so". This is also an example of code-switching triggered by discourse markers although the discourse marker used here is the phrase "okay so" rather than just the word "okay". It was observed that this is an idiosyncrasy on Teacher B's part where she often combines these two words when speaking in English. Excerpt 7 is another example of code-switching by Teacher B following the phrase "okay so".

Excerpt 6

294	Teacher B	alright there are <u>huge</u> amounts of limestone under the ocean in
295		islands and mountains these limestone islands and mountains
296		are called coral reef okay so *apa kegunaan dia* what do we do
297		with that so the Egyptian used it to build the great pyramids

Excerpt 7

466	Teacher B	coral reef *ni* is ve:ry expensive okay so *dia orang memang nak*
467		how however alright the chemical threat is a threat to the coral
468		reef

Discussion

Results from the data analysis in the current study echo the results of previous studies on teacher code-switching in L2 classrooms based on the concept of triggering. Both Rahimi and Eftekhari's (2011) study and the current study found triggered code-switching among L2 teachers due to lexical transfers between the TL and the teachers' L1. However, in the current study, Teacher B's L1 was Kadazandusun and Malay was not her L1. Thus, in Teacher B's case, her code-switching was motivated by lexical transfers between two languages whereby neither was her L1. Nevertheless, the current study lends support to

the idea of teacher code-switching in L2 classrooms being related to lexical transfers between languages. Apart from that, all of the lexical transfers that led to code-switching in the current study are nouns. A similar observation was made in an earlier study on Croatian-English speakers (Hlavac, 2012). It was found that most of the lexical transfers that resulted in code-switching are nouns. This suggests that there is a need to explore further the triggering effect of other types of lexical transfers such as verbs and function words (e.g., determiners and prepositions).

Interestingly, both Rahimi and Eftekhari's (2011) study and the current study did not find any triggered code-switching due to bilingual homophones. Rahimi and Eftekhari (2011) attributed the lack of bilingual homophones in their data to the fact that Persian and English are not "genetically related languages" (p. 57) as they belong to different branches of the Indo-European language family. Similarly, Malay and English are also not genetically related as Malay is an Austronesian language. Thus, this could be a possible explanation for the absence of triggered code-switching in the current study due to bilingual homophones nor proper nouns. However, triggered code-switching has been found between languages that are not closely related such as Dutch and Arabic (Broersma & Bot, 2006) even though most of the triggered code-switching that occurred were associated with the use of proper nouns rather than bilingual homophones.

Additionally, the data analysis revealed that some of the teachers' code-switching in the current study were triggered by discourse markers. Similar observations have been made by Yao (2016), whereby English markers such as "okay" and "now" led to code-switching among EFL teachers in China. In the current study, the English marker "okay" also led to instances of teacher code-switching. Code-switching due to the use of discourse markers was also found in an earlier study on Spanish-English speakers by Pena (2011). Thus, the current study has reinforced the potential of discourse markers as trigger words for code-switching. This is important because discourse markers were not included in the original triggering theory that has mostly concentrated on three categories of trigger words, namely, lexical transfers, proper nouns, and bilingual homophones (Clyne, 2003). As such, the findings of the current study can additionally help to inform future studies within the triggering paradigm.

Nevertheless, it is important to bear in mind that in Yao's (2016) study, English and Mandarin do not share discourse markers. On the other hand, in the current study, the English word "okay" is part of the Malay language, "*okey*" (Dewan Bahasa dan Pustaka, 2010). Thus, it is unclear whether the code-switching triggered by the word "okay" in the current study is due to its status as a discourse marker or its status as a lexical transfer between English and Malay. To clarify this issue, future studies with a greater amount of production data is needed. A greater amount of production data may be able to reveal code-switching due to other English markers. According to Lee (2017), apart from the word "okay", words such as "so" and "right" as well as "now" also function as discourse markers in English. Because these words are undoubtedly not part of the Malay language, any code-switching that occurred following the use of these words will truly establish the triggering effects of discourse markers.

Finally, the data analysis revealed that the number of triggered code-switching is relatively small. As mentioned earlier, triggering accounted for less than 5% of either teacher's code-switching. This suggests that the bottom-up processing of code-switching, especially triggered code-switching, may not be as relevant to Malaysian ESL teachers. However, previous studies on triggered code-switching among L2 teachers did not report on the amount of triggered code-switching (Rahimi & Eftekhari, 2011; Yao, 2016). As such, it is not possible to draw any conclusions as to whether the small number of triggered code-switching is a common scenario or something that is exclusive to the Malaysian context. At the same time, these findings indicate that most of the teacher code-switching that occurred are, in fact, purposeful and functional (i.e., via top-down processing) which is an observation that has been repeatedly made (Ferguson, 2009).

Conclusion

The current study set out to investigate possible triggered code-switching among secondary school ESL teachers in Malaysia. Two English lessons in different secondary schools in Sabah, Malaysia were audio recorded for the purpose of this study. Analysis of the transcriptions revealed that triggering did occur in the code-switching of Malaysian ESL teachers. Specifically, triggered code-switching among Malaysian ESL teachers is related to the use of lexical transfers between English and Malay. In addition to that, there were some instances of triggered code-switching due to the use of the English discourse marker, "okay". These findings have successfully provided new insights into teacher code-switching in L2 classrooms as the result of different processes during bilingual speech production. However, the current study also has certain limitations. The study involved only two teachers from Sabah, Malaysia as participants. Accordingly, the findings of the study may not be applicable to the larger population of English teachers across Malaysia. Apart from that, the current study is based on slightly less than two hours of production data. The amount of data collected may not have been adequate to reflect other types of triggered code-switching such as code-switching due to bilingual homophones or proper nouns. Moreover, the small number of triggered code-switching in general suggests that it may be more productive to consider the psycholinguistic aspect of teacher code-switching in tandem with other aspects of code-switching such as the interactional aspect or the functional aspect when it comes to teacher code-switching in L2 classrooms. Other bottom-up processes related to code-switching such as primed code-switching should also be explored in future studies. This is because primed code-switching not only involves stimulus from the speaker (self-priming) but also from the speaker's conversational partner (interlocutor-priming) which is another important dimension in the bottom-up processing of code-switching among L2 teachers.

References

Adriosh, M., & Razi, O. (2019). Teacher's code switching in EFL undergraduate classrooms in Libya: Functions and perceptions. *SAGE Open*, *9*(2), 1-11. https://doi.org/10.1177/2158244019846214

Auer, P. (1999). From codeswitching via language mixing to fused lects: Toward a dynamic typology of bilingual speech. *International Journal of Bilingualism*, *3*(4), 309-332. https://doi.org/10.1177/13670069990030040101

Broersma, M., & Bot, K. de. (2006). Triggered codeswitching: A corpus-based evaluation of the original triggering hypothesis and a new alternative. *Bilingualism: Language and Cognition*, *9*(1), 1-13. https://doi.org/10.1017/S1366728905002348

Broersma, M., Carter, D., Donnelly, K., & Konopka, A. (2019). Triggered codeswitching: Lexical processing and conversational dynamics. *Bilingualism: Language and Cognition*, *23*(2), 1-14. https://doi.org/10.1017/S1366728919000014

Cambridge University Press. (2013). *Cambridge advanced learner's dictionary* (4th ed.). Cambridge University Press.

Clyne, M. (2003). *Dynamics of language contact: English and immigrant languages*. Cambridge University Press.

Cook, V. (2016). *Second language learning and language teaching* (5th ed.). Routledge.

Council of Europe. (2018). *Common European framework of reference for languages: Learning, teaching, assessment: Companion volume with new descriptors*. Cambridge University Press.

Debreli, E. (2016). Perceptions of non-native EFL teachers' on L1 use in L2 classrooms: Implications for language program development. *English Language Teaching*, *9*(3), 24-32. https://doi.org/10.5539/elt.v9n3p24

Dewan Bahasa dan Pustaka. (2010). *Kamus dewan* (4th ed.). Dewan Bahasa dan Pustaka.

Ferguson, G. (2009). What next? Towards an agenda for classroom codeswitching research. *International Journal of Bilingual Education and Bilingualism*, *12*(2), 231-241. http://dx.doi.org/10.1080/13670050802153236

Fricke, M., & Kootstra, G. J. (2016). Primed codeswitching in spontaneous bilingual dialogue. *Journal of Memory and Language*, *91*, 181-201. https://doi.org/10.1016/j.jml.2016.04.003

Green, D. (2018). Language control and code-switching. *Languages*, *3*(8), 1-16. https://doi.org/10.3390/languages3020008

Green, D., & Wei, L. (2014). A control process model of code-switching. *Language, Cognition and Neuroscience*, *29*(4), 499-511. https://doi.org/10.1080/23273798.2014.882515

Gumperz, J. (1982). *Discourse strategies*. Cambridge University Press.

Hall, G., & Cook, G. (2013). *Own-language use in ELT: Exploring global practices and attitudes*. https://www.teachingenglish.org.uk/article/own-language-use-elt-exploring-global-practices-and-attitudes

Hepburn, A., & Bolden, G. (2013). The conversation analytic approach to transcription. In J. Sidnell & T. Stivers (Eds.), *The handbook of conversation analysis* (pp. 57-76). Blackwell.

Hlavac, J. (2012). Psycholinguistic, metalinguistic and socio-psychological accounts of code-switching: A comparative analysis of their incidence in a large Croatian-English sample. *Suvremena Lingvistika*, *5*(3), 47-71.

Jogulu, L. N., & Mohd Radzi, N. S. (2018). Code switching as a learning strategy in polytechnic ESL classroom: Exploring perceived functions and lecturers-students' attitudes. *International Journal of Education, Psychology and Counseling*, *3*(12), 23-36.

Kootstra, G. J., van Hell, J., & Dijkstra, T. (2012). Priming of code-switches in sentences: The role of lexical repetition, cognates, and language proficiency. *Bilingualism: Language and Cognition*, *15*(4), 797-819. https://doi.org/10.1017/S136672891100068X

Lee, J. M. (2017). The multifunctional use of a discourse marker okay by Korean EFL teachers. *Language Education Research*, *21*, 41-65.

Lester, J., & O'Reilly, M. (2019). *Applied conversation analysis: Social interactions in institutional settings*. SAGE.

Muysken, P. (2013). Language contact outcomes as the result of bilingual optimization strategies. *Bilingualism: Language and Cognition*, *16*(4), 709-730. https://doi.org/10.1017/S1366728912000727

Nakatsukasa, K., & Loewen, S. (2015). A teacher's first language use in form-focused episodes in Spanish as a foreign language classroom. *Language Teaching Research*, *19*(2), 133-149. https://doi.org/10.1177/1362168814541737

Paker, T., & Karaağaç, Ö. (2015). The use and functions of mother tongue in EFL classes. *Procedia - Social and Behavioral Sciences*, *199*, 111-119. https://doi.org/10.1016/j.sbspro.2015.07.494

Pena, C. (2011). Discourse markers as a strategy of code-mixed discourse in a Galician-Spanish-English community. *Journal of English Studies, 9*, 183-197. https://doi.org/10.18172/jes.171

Rahimi, A., & Eftekhari, M. (2011). Psycholinguistic code switching in Iranian university classroom context. *The Journal of Language Teaching and Learning*, *1*, 54-63.

Temesgen, A., & Hailu, E. (2022). Teachers' codeswitching in EFL classrooms: Functions and motivations. *Cogent Education*, *9*(1), 1-23. https://doi.org/10.1080/2331186X.2022.2124039

Tsagari, D., & Georgiou, E. (2016). Use of mother tongue in second language learning: Voices and practices in private language education in Cyprus. *Mediterranean Language Review*, *23*, 101-126. https://doi.org/10.13173/medilangrevi.23.2016.0101

Yao, M. (2016). Discourse markers as triggers of code-switching in EFL classes. *International Journal on Studies in English Language and Literature*, *4*(9), 49-57. https://doi.org/10.20431/2347-3134.0409007

Appendix: Transcription Conventions

Transcription Conventions	Meaning
word	talk produced in English
word	talk produced in any language other than English
=	the two lines connected by the equal lines are continuous talk
(1.2)	silence timed in tenth of a second
(.)	micro pause of less than 1 second
?	rising intonation
:	lengthened sound
<u>word</u>	emphasis