ASIAN EFL JOURNAL
The EFL Professional's Written Forum

The Asian EFL Journal

April 2019

Volume 22, Issue 2

Senior Editor:

Paul Robertson

Published by the English Language Education Publishing

Asian EFL Journal
A Division of TESOL Asia Group
Part of SITE Ltd Australia

http://www.asian-efl-journal.com

editor@asian-efl-journal.com

Publisher: Dr. Paul Robertson

Chief Editor: Dr. Paul Robertson

Associate Production Editor: Ramon Medriano Jr.

Assistant Copy Editor: Eva Guzman

ISSN 1738-1460

ASIAN EFL JOURNAL
The EFL Professional's Written Forum

Table of Contents

Research Articles

Asian EFL Journal Research Articles. Vol. 22 Issue No. 2 April 2019

Features of Filipino Infant Directed Speech (IDS) and Maternal Input

Richard M. Rillo
Centro Escolar University, Philippines
De La Salle University, Philippines

Jimmylen Z. Tonio
Catanduanes State University, Philippines
De La Salle University, Philippines

Rochelle Irene G. Lucas
De La Salle University, Philippines

Bioprofile

Richard Medina Rillo is an Assistant Professor III of the School of Education and the Graduate School of the Centro Escolar University-Manila. He holds a Master of Arts in Applied Linguistics degree and is currently pursuing his Doctor of Philosophy in Applied Linguistics at the De La Salle University, Manila, Philippines. His research interests include: Sociolinguistics, Psycholinguistics, Discourse Analysis, and World Englishes. He could be reached through his e-mail address at rmrillo@ceu.edu.ph or richard_rillo@dlsu.edu.ph.

Jimmylen Zuñiga-Tonio is an English instructor at the Catanduanes State University, Philippines. Her research interests focus on Philippine languages, sociolinguistics and discourse analysis. She received her BA in communication Arts degree at the University of the Philippines – Los Baños and MA in ESL degree at the Benguet State University. She is currently pursuing her PhD in Applied Linguistics at the De La Salle University-Manila. She could be reached through his e-mail address at jimmylen_tonio@dlsu.edu.ph.

Rochelle Irene G. Lucas is an Associate Professor and Chair of the Department of English and Applied Linguistics and former Vice Dean of the Br. Andrew Gonzalez FSC College of Education, De La Salle University-Manila. She has completed her Bachelor in Secondary Education major in English (cum laude) and Master of Arts in Literature (magna cum laude) at the University of Santo Tomas. She has a Doctor of Philosophy in Applied Linguistics degree from De La Salle University. She has published, presented and conducted research on psycholinguistics, bilingualism, language learning in children, motivation, alternative assessment, language documentation and discourse analysis. She has completed a competitive leadership training program called the International Deans' Course under the DAAD *(German Academic Exchange Service)* in 2010-2011. She is a member of the Board of the Linguistics Society of the Philippines (LSP) and the Summer Institute of Linguistics (SIL). She has served as the Philippine secretariat of the Resource Distribution and Training Centre (RDTC) UNESCO Bangkok. Recently she has been appointed as Field Contributor for *Ethnologue* (Languages of the World) Language Documentation website. She could be reached through her e-mail address at rochelle.lucas@dlsu.edu.ph.

Abstract

When talking to infants, adults, especially mothers, espouse a particular type of speech known as Infant-directed Speech (IDS) or "babytalk" or "babytalking" , which contains a set of specialized speech with simplified grammatical construction; more repetitive; and more grammatical than adult-directed speech. Specifically, this study reports on the lexical repertoire of Filipino mothers' IDS enriched by the inclusion of code switching as a linguistic strategy in optimizing language development among multilingual Filipino infants. This study has found out that Filipino mothers use as many nouns as verbs in their IDS more than any other lexical categories; and explored inter-sentential code switching as a strategy in their IDS. The findings of this study generate baseline information in part by recent cross-linguistic studies on early lexical development, contrary to the universal noun-bias hypothesis among young children, and the use of a single language in addressing young children to optimize language development.

Keywords: *Infant-directed Speech (IDS), babytalk, Filipino mothers, lexical repertoire, code switching.*

1 Introduction

Infant Directed Speech also known as ‘motherese’ or ‘baby talk’ is a crucial part to infant’s language acquisition. The way mothers speak to their children gives them information about the world around them as well as social cues to help their own language development. To acquire a human language, children must not only learn individual words, but must also discover the distinct kinds of words that are represented in their language (or grammatical categories, e.g. nouns, verbs, determiners) and how they map to meaning. Even within their first years, infants make significant advancement in this area. According to Shi, Werker and Morgan (1999) by age 0:9, infants distinguish between two very broad kinds of words: content words (e.g. nouns, verbs, adjectives) vs. function words (e.g. determiners, prepositions). By age 1:1, they begin to make finer distinctions among the content words, teasing apart the grammatical form noun (e.g. ‘cat’) and mapping this form specifically to objects and object categories (e.g. cats). Over the next several months, they make finer distinctions still, teasing apart the forms adjective and verb, and mapping each to its associated range of meanings (properties and events, respectively) (Waxman & Lidz, 2006). In the absence of a developmental disorder, children can accomplish all these successfully. Although prelinguistic infants eventually learn a language that is indistinguishable from that of other members of their linguistic community, they are exposed, during their formative years to examples of language that are often quite unique and those are in the form of the ‘baby talk, ’ which are often provided by mothers.

1.2 Review of Related Literature

This subsection presents the related literature and studies, which serve as the foundation in designing the conceptual framework of the study.

1.2.1 Infant-Directed Speech (IDS)

Infant-directed speech (IDS) also known as motherese (Newport, Gleitman, & Gleitman, 1977) parentese, or child-directed speech (CDS) (Pine, 1994) is defined by de Boer (2005) as a special way of speaking that is used when caretakers address infants. In other words, IDS take into consideration that the infant/child receives input from many sources – mother, father, relatives, friends, etc. (Bavin 1992). Likewise, Hoff (2009) argued that IDS is a style of speech different from the way adults talk to other adult, that is, IDS consists of meaningful utterances directed to

the infant/child, and these utterances include most or all of the following properties: first, prosodic characteristics of IDS include higher pitch, greater pitch range, shorter total length, slower rate of speech, and longer pauses (Fernald and Mazzie, 1991; Fernald and Simon, 1984; Grieser and Kuhl, 1988), second, speech directed to children by adults tends to consist of short sentences with simple rather than complex structures (Snow, 1972), and third, the vocabulary of IDS is typically simple and restricted (Philips, 1973), where words with simplified phonology and structure are often used (Ferguson, 1977; De Paulo & Bonvillian, 1978). Overall, IDS/CDS tends to be simplified, more grammatical, and more repetitive than adult-directed speech (Pine, 1994).

Furthermore, de Boer (2005) argued that there are at least three different kinds of infant-directed speech, first, to get the infant's attention, second, to soothe the infant, and lastly, to address the infant with linguistically meaningful utterances. Likewise, Fernald (1992) suggested that the special attention-getting properties of IDS have a unique basis, that is, IDS is not just talk; it is also a system of calls that have effects on infants entirely separate from the meaning of the words uttered.

1.2.2 Baby Talk

de Boer (2005) claimed that baby talk is different from IDS in a way that the former is characterized by meaningless vocalizing towards very young infants, while the latter consists of meaningful utterances directed to the infant. To further explicate the claim of de Boer, Casagrande (1948) and Ferguson (1964) determine that "babytalk" refers to the registers used primarily when talking with children and infants; however, it was found out in some studies that the same registers were also used when talking with the family "pet" (Hirsh-Pasek & Treiman, 1982; Mitchell, 2001, 2004; Mitchell & Edmonson, 1999) or when talking with the sick (Levin, Snow & Lee, 1984) or the elderly (Corporael & Culbertson, 1986; Ryan, Hamilton, & See, 1994) to show compassion and affection. The studies with the use of "babytalk" as also employed when talking to a family pet or a sick or an elderly person has prompted for the creation of a more neutral term, Infant-Directed Speech (IDS) to disambiguate it from the former. In contrast, Steinberg and Sciarini (2013) defined baby talk as "a form of parentese but with its own characteristics" (p. 29), these characteristics involve the use of vocabulary and syntax that is overly simplified and reduced (i.e. vocabulary and syntax which was culturally transmitted over generations and has already been coined and accepted by others).

1.2.3 Lexical Content of IDS

Humans are remarkably accustomed at learning lexicons, far exceeding the capabilities of other species in this respect. Hoff (2009) offered two factors underlying individual differences in vocabulary development, and these include: environmental factors and child factors. As regards environmental factors, these factors specifically refer to children's language experience. The language experience that a child encounters can also be examined along four subcategories – the amount of talk that children hear, the nature of the speech children hear, the informativeness of the context in presenting new words, and the speech children hear that is responsiveness to their own behavior, attention, or verbalization. In short, enviromental factors are exhibited in the quantity, quality and manner by which language input or language experience is provided to children.

With reference to lexical content of IDS/CDS, some lexical content features of IDS include the absence of inflectional endings and omission of the copula, e.g. baby hungry; invariant question tags are common and pronouns are used with different referents (Ferguson, 1978); the use of first person plural "we" for second person singular "you" as a result of the here and now semantics of adult-child discourse (Wills, 1977); lexicon is reduced and special lexical items are added, such as "gee-gee" for "horse" that tend to refer particularly to food, body parts, kin, animals, toys and games (Ferguson & De Bose, 1977); use of diminutives ("doggie"), onomatopoeia ("bow-wow") and reduplicated words ("din-din" for "food," "wee-wee" for "urinate") are common (Ferguson, 1978).

Early studies of IDS in the 1970s investigated how Western middle-class adults speak to young children and found that lexical content of IDS are found to have correlations between (i) the way individual mothers used noun phrases and the number of inflections per noun phrase their children produced, and (ii) the way mothers used auxiliary-fronted questions and the number of auxiliaries per verb phrase their children produced (Newport, 1977). Likewise, Broen's (1972) study also indicated clearly the very lexically specific nature of mothers' IDS showing, for instance that three verbs, *look*, *put* and *see*, accounted for 53% of all imperative sentences in the sample.

However, cross-linguistic studies conducted to examine caregivers' input in a variety of languages revealed conflicting results as above mentioned studies. For example, Kim, McGregor and Thompson (2000) examined caregivers' input in English and Korean and their findings showed that Korean-speaking caregivers used more verb types than noun types, while English-speaking caregivers did the opposite. These observations were supported by Choi and Gopnik

(1995) who also found out that Korean-speaking mothers provide more action verbs but fewer object nouns than English-speaking mothers, and Korean-speaking mothers engage in activity-oriented conversation more than English-speaking mothers. Meanwhile, local studies, for instance, Lucas and Bernardo (2008) suggested that there is a noun bias in children's early vocabularies brought about by features of adults' child-directed utterances. They further claimed that the noun bias in English of Filipino-English bilingual children was associated with the frequency of nouns in the caregivers' utterances and the proportion of nouns in the initial positions of the caregivers' utterances. Hence, these contrasting results suggest that the lexical content of IDS appears to be language dependent and not universal.

1.2.4 Code-switching

Numerous definitions of the term "code- switching" had emerged. According to Cook (2000), code- switching refers to the process of "going from one language to the other in mid-speech when both speakers know the same languages" (p.59). Code- switching, as defined by Li (2008), is the alternate use of two or more languages in an extended stretch of discourse, where the switch takes place at sentence or clause boundaries. Moreover, Hymes' (1976) perspective stressed that it is a common term for alternative use of two or more language, varieties of a language or even speech styles.

Notably, researchers like Duran, Kan, Khnert, Nett, and Yim, (2005) and Rosario and Maguddayao (2019) pointed out that code- switching is an effective communication mode available to adept bilingual speakers for interface with other individuals who share both languages. With respect, therefore, to some definitions aforementioned, it indicates that code-switching becomes one of the expanding areas evidently observed not only in bilingual but also in multilingual contexts.

The categories of code- switching have been presented by Poplack (1980) in terms of linguistic features. He recognized four types of code- switching, specifically inter- sentential, intra-sentential, tag- switching, and intra- word code- switching. Poplack (1980) also described these types as follows: *inter- sentential switching* takes place *outside* the sentence or the clause level (i.e. at sentence or clause boundaries). At times, it is also known as *extra- sentential switching; intra-sentential switching* comes about *within* a sentence or a clause; *tag-switching* is the switching of either a tag phrase or a word, or both, from language-B to language-A, (common

intra-sentential switches); and *intra-word switching* occurs *within* a word, itself, such as at a morpheme boundary.

When bilinguals switch or mix two languages, there might be motivation and reasons for code-switching and code-mixing (Then &Ting, 2009). Grosjean (1982) puts forward some reasons for code-switching. For instance, some bilinguals mix two languages when they cannot find proper words or expressions or when there is no appropriate translation for the language being used. Also, their interlocutors, situations, messages, attitudes, and emotions generate code mixing. In addition, Bhatia and Ritchie (2004) explained that bilinguals make their language choice based from a number of factors, such as *with whom* (participants: their backgrounds and relationships), *about what* (topic, content), and *when and where a speech act occurs*. Lastly, Bautista (2009) claimed that one main reason why people code-switch is for communicative efficiency. She further asserted that Filipino-English bilinguals choose the most concise and most expressive ways of delivering their words and feelings.

Also, throughout the years, although there is an increasing number of research studies recorded focusing along the area of infant-directed speech, studies involving code-switching in IDS appear to be limited. The study of de Houwer and Bornstein (2016) on bilingual mothers' language choice in child-directed speech found that most mothers reported addressing children in the same single language. Also, observational data confirmed mothers' use of mainly a single language in interactions with their children, but also showed the occasional use of the other language in over half the sample when children were 20 months and once children were 53 months, mothers again used only the same language they reported speaking to children. Another study on code-switching focused on child-directed speech in a Sinhala-English bilingual household (Herat, 2016). The study revealed that code switching is used by Sri Lankan parents to make them understand and to clarify things that the child might otherwise not know. Finally, another study conducted along this line is the code-switching in speech to toddlers carried out by Bail, Morini, and Newman (2015) where they found out all parents code-switched at least once in a short play session, and some code-switched quite often (over 1/3 of utterances). This code-switch included both inter-sentential and intra-sentential switches, suggesting that at least some children are frequently exposed to mixed-language sentences. Also, parents often repeated words across their two languages, but this did not appear to increase the likelihood of children having translation equivalents in their vocabulary.

1.3 Research Questions

Thus, this study explored and answered the following research questions:

1. What are the Filipino Mothers' IDS (lexical content, and code switching) in terms of infants' age?
    a. 0-12 months; and
    b. 13-24 months
2. Is there a significant difference between the features of Filipino mothers IDS with their infants' age?
3. Is there a significant difference between the features of Filipino mothers' IDS in terms of their—
    a. age; and
    b. socio-economic status (SES)?

2 Methodology

In this study, we analyzed fifteen (15), ten-minute recordings of Filipino mothers' interactions with their infants aging from 0-12 months and 13-24 months; seven (7) of which are mothers with 0-12 month-old infants and eight (8) with infants 13-24 months (mean age 14 months, 7 days). Both the mothers and infants were chosen from Metro Manila (National Capital Region) and Catanduanes (Region V) in the Philippines. Each recording was transcribed following the transcription notation system adapted from Atkinson and Heritage (1984). The transcribed recordings were analyzed through hand-tagging.

3 Results and Discussion

This section presents the analysis and discussion of Filipino mothers' IDS, in general. Specifically, we looked into the features of Filipino mothers' IDS in relation to infants' age, as well as the significant difference between the features of mothers' IDS with infants' age and between IDS and mother's age and socio-economic status (SES)

Table 1. *Lexical Content of Filipino Mothers' IDS with Infants 0-12 months old*

Lexical Category	*Frequency*	*Percentage*
Noun	627	21.45
Verb	605	20.70
Adjective	171	5.85
Preposition	76	2.60
Pronoun	250	8.55
Determiner	187	6.40
Conjunction	36	1.23
Interjection	220	7.53
Pragmatic particle	408	13.96
Demonstrative	118	4.04
Adverb	225	7.70
TOTAL	*2923*	*100.00*

Table 1 shows that Filipino mothers with 0-12 month-old infants use more nouns [f=627 (21.45%)] and verbs [f=605 (20.70%)] in their IDS and use conjunctions [f=36 (1.23%)] less.

The results show the prevalent use of nouns by mothers that can be attributed to how Filipino mothers center their conversation with infants on objects and names. This observation lend support to Gentner's (1982) claim that nouns are mapped onto cohesive perceptual entities and allow for the partitioning of objects into natural categories more so than verbs, while verbs are more complex in that they label more language-specific categories, and thus require language input and more time to acquire them. Also, despite the fact that Tagalog and Bicol languages follow the VSO structure, Filipino mothers appear to use more naming words particularly English nouns when speaking to their infants, hence producing more nouns in their utterances.

Along local studies conducted, these findings are also in accordance to Lucas and Bernardo's (2008) claim that there is a noun bias in children's early vocabularies brought about by features of adults' child-directed utterances. The results of this present study support the high frequency of nouns in the caregivers' utterances and the proportion of nouns in the initial positions of the caregivers' utterances.

Table 2. *Lexical Content of Filipino Mothers' IDS with Infants 13-24 months old*

Lexical Category	*Frequency*	*Percentage*
Noun	616	24.01
Verb	472	18.39
Adjective	197	7.68
Preposition	107	4.17
Pronoun	311	12.12
Determiner	208	8.11
Conjunction	36	1.40
Interjection	77	3.00
Pragmatic Particle	174	6.78
Demonstrative	122	4.75
Adverb	246	9.59
TOTAL	*2566*	*100.00*

Table 2 presents that the Filipino mothers with 13-24 month old infants IDS contains more nouns [f=616 (24.01)] than any other lexical categories. As seen in IDS of mothers with 0-12 month old infants, Filipino mothers with 13-24 month old infants use nouns more than other lexical categories. This only suggests that despite the age of the infants, noun bias disregarding verb bias in some oriental languages' early lexical acquisition through adult input is also observed. The prevalent use of nouns among Filipino mothers' IDS supports the idea that much of mothers' speech to their young children revolves around a particular subset of such items and expressions, in this case nouns and so, quite naturally, this is what children learn and use first.

Table 3. *Code Switching Strategies of Filipino Mothers' IDS with Infants 0-12 months old*

Code Switching Strategy	*Frequency*	*Percentage*
Intersentential	77	30.56
Intrasentential	128	50.79
Tag Switching	5	1.98
Intra-word	42	16.67
TOTAL	*252*	*100.00*

Table 3 shows that intra-sentential code switching [f= 77 (30.56%)] was used by the Filipino mothers with infants 0-12 month-old infants as a strategy while tag-switching [f=5 (1.98%)] being the least. This result indicates that the frequent occurrences of intra-sentential switching in mothers' utterances suggest that Filipino mothers have acquired a certain level of fluency and communicative competence in using the English language (Bautista, 2009). It may then be claimed that the ease of access of the word/s in the second language, which is English marks fluency and greatly contributes to the high incidence of intra-sentential switching. Also, this suggests that words in the second language tend to provide a quick and rich resource for their expressions, filling what might be the gap during interactions. It may likewise be inferred that mothers' implicit teaching or telling of the important details about a particular topic is done through intra-sentential switching where the mothers are required to switch to the rules of syntax mid-sentence to get an assurance that the communication will not be cut and the message will be conveyed effectively. In support, the following exemplars are provided below.

Mom 1: *Ayaw mong magpalit* ***not yet***↑ *para mag-sleep na ikaw.*

'You don't like to change your clothes yet so you can now sleep.'

Mom 9: *gatulo na ang* ***nose*** *mo*↑ *ta galuwas ang* ***teeth.***

'You have a runny nose because you are teething.'

Given the above utterances, it can be observed that intra-sentential code switching by Filipino mothers with 0-12 month-old infants occurs in the middle and final positions of the sentence and is usually done without interruptions, hesitations and pauses.

This result lends support to the study of Kobari (2013) on intra-sentential and inter-sentential code switching in Turkish-English bilinguals in New York, where it was found out that intra-sentential code switching occurred at a higher rate than inter-sentential code-switching. The same can be observed to Iqbal's (2011) study, which found that in a bilingual setting, intra-sentential code switching is the most common lexical feature used by speakers. Lastly, these findings lend support to Bail, Morini, and Newman (2015) assumptions that all parents code-switched at least once in a short play session, and some code-switched quite often (over 1/3 of utterances). This code-switch included both inter-sentential and intra-sentential switches, suggesting that at least some children are frequently exposed to mixed-language sentences.

Table 4. *Code Switching Strategies of Filipino Mothers' IDS with Infants 13-24 months old*

Code Switching Strategy	*Frequency*	*Percentage*
Inter-sentential	123	44.09
Intra-sentential	93	33.33
Tag Switching	6	2.15
Intra-word	57	20.43
TOTAL	*279*	*100.00*

Similarly, it can be observed from Table 4 that the mostly used code switching strategy among Filipino mothers with infants aging from 13 to 24 months is inter-sentential code switching [f=123 (44.09)] and the least, tag switching [f=6 (2.15%)].

This means that Filipino mothers with infants aging from 13 to 24 months employ code switching that occurs outside the sentence or the clause level. This indicates that these mothers exhibit greater fluency in both languages as each utterance must agree with the rules of the corresponding language being spoken (Zirker, 2007). In the case of Filipino mothers with 13-24 month-old babies, they probably resort to inter-sentential switching because they wanted to emphasize the message of their utterance to their infants. This observation is similar to Bail, Morini, and Newman's (2015) claim that parents often repeated words across their two languages, but this did not appear to increase the likelihood of children having translation equivalents in their vocabulary. In short, parents appear to code-switch fairly often to young children, even within sentences. Furthermore, these findings also support Herat's (2016) study where it was found that code switching is used by Sri Lankan parents to make them understood and to clarify things that the child might otherwise not know. The utterances below are some of the examples of inter-sentential switch that we transcribed and analyzed:

Mom 3: *apodan mo na dun dada mo, call na.*
'Call your daddy, call him now.'

Mom 11: *Ano ang sasabihin mo?* Lolo can I have a penny?
'What are you going to say?'

Based on the excerpts, it can be inferred that Filipino mothers tend to code-switch due to what Bhatia and Ritchie (2004) explained that bilinguals make their language choice based from a number of factors, such as *with whom* (participants: their backgrounds and relationships), *about*

what (topic, content), and *when and where a speech act occurs*. This further suggests that Filipino mothers employ inter-sentential code-switching to 13-24 month-old infants to establish personal contact with the infant by praise or by other forms of verbal feedback, and in turn indicates the mothers' desire to provide infants with as comprehensible input as possible.

Difference between Features of Filipino Mothers' IDS and Infant Age

Table 5. *Difference between the Filipino Mothers' Lexical Content in IDS and Infants' Age*

Lexical Category	*Significant Difference*	*p-value*	*Interpretation*
Noun	0.653		
Verb	0.653		
Adjective	1.00		
Preposition	0.562		
Pronoun	0.384		
Determiner	0.602	>0.05	Not significant
Conjunction	0.953		
Interjection	0.270		
Pragmatic Particle	0.325		
Demonstrative	0.862		
Adverb	0.562		

p-value= 0.05

It can be gleaned from Table 5 that there is no significant difference between the Filipino mothers' lexical content in IDS and their infants' age since the significant values for each lexical category is greater than the p-value at alpha 0.05. Therefore, both Filipino mothers with infants aging from 0 to 12 and 13-24 use the same extent of lexical categories in their IDS.

The result implies that Filipino mothers maintain the shorter and often grammatically simplified sentences (Newport, Gleitman, & Gleitman, 1977) and use of more repetitive words and phrases (Fernald & Morikawa, 1993) of IDS without varying them according to their infants' age as opposed to the claim of Kitamura and Burnham's (2003) that as babies grow older and appear to understand more, parents will use less and less of the typical characteristics of IDS.

Table 6. *Difference between the Filipino Mothers' Code Switching Strategies in IDS and Infants' Age*

Code Switching Strategies	*Significant Difference*	*p-value*	*Interpretation*
Intersentential	0.884		
Intrasentential	0.933	>0.05	Not significant
Tag switching	0.160		
Intra-word	0.477		

p-value= 0.05

Table 6 reveals that there is no significant difference between the Filipino mothers' code switching strategies in terms of their infants' age since the significant difference values for each code switching strategy is greater than alpha 0.05. Thus, both Filipino mothers with infants aging from 0 to 12 and 13-24 employ the same varying extent of code switching strategies as established in Table 4.

These findings suggest that the practice of code switching in infant directed speech is by and large believed to be an effective communication strategy that facilitates mother-infant communication. It appears that Filipino mothers find code-switching favorable, and they support the judicious use of the first language as an alternate to the second language and vice versa. It is likewise interesting to note that code switching is practiced by mothers across age levels of the infants indicating how code switching and code mixing can be considered as an ordinary phenomenon in the area of bilingualism (Kim, 2006).

Difference between Filipino Mothers' IDS Features and their Age

Table 7. *Difference between the Filipino Mothers' Lexical Content and their Age*

Lexical Category	*Significant Difference*	*p-value*	*Interpretation*
Noun	0.464		
Verb	0.121		
Adjective	0.540		
Preposition	0.141		
Pronoun	0.187		
Determiner	0.494	>0.05	Not significant
Conjunction	0.204		

Interjection	0.355
Pragmatic Particle	0.212
Demonstrative	0.716
Adverb	0.553

p-value= 0.05

Table 7 presents that the significant difference values for each lexical category is greater than the alpha (p-value) 0.05, hence, no significant difference in terms of their relationships with the Filipino mothers' age. However, the mean scores reveal that mothers aging from 26-30 use more nouns, verbs, adjectives, prepositions, determiners, conjunctions, pragmatic particles, demonstratives, and adverbs; 31-35 use more pronouns; and 36-40 use more interjections.

The use of varied lexical category among Filipino mothers' IDS regardless of age seems to indicate the breadth and depth of vocabulary of these mothers. Clearly, nouns and verbs with general meanings make up the largest proportion in terms of tokens, while other categories appear to be lower than those obtained for general nouns and verbs.

Furthermore, the observed predominance of noun over other word-types in 26-30 years old mothers may be associated to the maternal construction types used by these mothers within this age bracket that show a fair amount of lexical diversity, whereas others have much more lexical consistency. The one-word utterances of these mothers obviously showed much lexical diversity (since they were mostly content words), with about half of these being nouns and the other half being distributed among various other word types. Hence, these findings somehow present a clear description that Filipino mothers' IDS contains many cues to syntactic constituency at the level of what adults choose to use as complete utterances which according to Brent and Siskind (2001) are the kind of fragments that beginning language learners often use as utterances with some regularity. Lastly, the result also suggests that the relative accessibility of noun meanings by contrast to verb meanings (Tomasello, 2000) can be one of the possible reasons for its dominace in Filipino mothers' IDS.

In contrast, the prevalent use of pronouns among 31-35 year-old mothers may somehow provide insights into the extent to which these mothers talk about themselves, about third parties or about their infants. This finding indicates that 31-35 year-old mothers talk frequently about themselves and the babies, suggesting their inclination to talk about their own personal experiences and their babies' experiences, thereby addressing their babies directly or generically during their

mother-infant interactions. Finally, the finding showing that 36-40 years old mothers use more interjections suggests that the IDS of these mothers highlights the characteristic of spoken language, thereby producing highly monologic or dialogic speech. One possible explanation of this could be attributed to the nature of mother-child interaction, which provides a favorable environment for the context of use that trigger the production of these interjections. This is in accordance to Stange's (2016) claim that interjections are common in IDS than in adult directed speech and that interjections function as a mechanism that helps the child build confidence, encouraging the child to repeatedly try things or to get and to sustain the child's attention.

Table 8. *Difference between the Filipino Mothers' Code Switching Strategies and their Age*

Code Switching Strategies	*Significant Difference*	*p-value*	*Interpretation*
Intersentential	0.884		
Intrasentential	0.933	>0.05	Not significant
Tag switching	0.160		
Intra-word	0.477		

p-value= 0.05

It can be observed from Table 8 that the significant difference of the code switching strategies across Filipino-mothers' age are greater than the p-value at alpha (0.05). This implies that there is no significant difference between the two variables. On the other hand, the mean scores reveal that Filipino mothers aging from 26-30 utilize all the code switching strategies more than the rest of the other groups.

As discussed above, all Filipino mothers' utilize code-switching strategies in their infant-directed speech. The practice of code switching in infant directed speech is by and large believed to be an effective communication strategy that facilitates mother-infant communication, thereby considering the code-switching in IDS as favorable. Further, Filipino mothers' tend to the support the use of the first language as an alternate to the second language or third language and vice versa.

Difference between Filipino Mothers' IDS Features and SES

Table 9. *Difference between the Filipino Mothers' Lexical Content and their SES*

Lexical Category	*Significant Difference*	*p-value*	*Interpretation*
Noun	0.648		
Verb	0.598		
Adjective	0.891		
Preposition	0.804		
Pronoun	0.303		
Determiner	0.365	>0.05	Not Significant
Conjunction	0.361		
Interjection	0.305		
Pragmatic Particle	0.399		
Demonstrative	0.227		
Adverb	0.791		

p-value= 0.05

Table 9 shows that the significant values of the Filipino mothers' lexical content are greater than the p-value (0.05) alpha. This implies that there is no significant difference between the two. Despite the insignificant difference between the variables, the obtained mean scores discloses that high earning mothers use more nouns, verbs, pronouns, determiners, interjections, and pragmatic particles; middle- income Filipino mothers use more conjunctions, and adverbs; and low-income Filipino-mothers use more adjectives, prepositions, and demonstratives.

This result contradicts Davis, Rubinstein, and Teplow's (2016) study where they found that high SES mothers spoke marginally more to their infants than low SES mothers, regardless of task type or infant sex. In addition, Ninio (1979) also argued that socio-economic status has an impact on parents' naïve theories about children's cognitive stimulation. For instance, he found that there is a significant relationship between children's cognitive development and socio-economic status which can be attributed to the belief of low SES mothers that children develop certain cognitive skills much later than high SES mothers. The findings of Ninio appear to be not the case among Filipino mothers who belong to high or low SES. Filipino mothers in general employ relatively similar linguistic contents when talking to their children, regardless of their socio economic status.

Table 10. *Difference between the Filipino Mothers' Code Switching Strategies and their SES*

Code Switching Strategies	*Significant Difference*	*p-value*	*Interpretation*
Intersentential	0.839		
Intrasentential	0.267	>0.05	Not significant
Tag switching	0.075		
Intra-word	0.893		

p-value= 0.05

It can be gleaned from Table 10 that there is no significant difference between the code switching strategies employed by the Filipino mothers with respect to their SES since the significant values are greater than the p-value at alpha 0.05. However, the obtained mean scores divulges that the high income Filipino mothers employ intra-sentential code switching the most; middle-income Filipino mothers with inter-sentential code switching, and tag-switching; and the low-income Filipino mothers with intra-word code switching.

It is generally agreed that there is no predictive value associated with the interpretation of code switching events. However, the result here correlates the findings of the study conducted by Bergen (1990) among Spanish-English bilinguals, which reveals that the utterances of middle SES speakers had become grammatically more complex, in the sense that one could recognize a shift from intra-sentential to inter-sentential code switching. Also, the study further revealed that low SES members preferred Spanish sentences with English elements as compared to the low middle class.

The differences in the mean scores of Filipino mothers' code switching patterns indicates that the ability of high income Filipino mothers to employ relatively frequent intra-sentential code switching may be attributed to Poplack's (1980) claim that intra-sentential is the most complex type of code switching hence implies that mothers belonging to high SES have acquired a certain level of fluency and communicative competence in using either the English, Filipino or Bicol languages. Meanwhile, middle-income Filipino mothers' frequent utilization of inter-sentential code switching may then be attributed to the mothers' level of proficiency on the languages used. According to Poplack (1980), inter-sentential code switching that occurs within same sentence or between speaker turns requires its speaker to be fluent in both languages in order to conform to the rules of languages. This means that middle SES mothers are knowledgeable to some extent about the syntactic, morphological and semantic rules governing the languages, which of course

can be attributed as well to their educational background and level of exposure to the languages. Lastly, the observed prevalent use of tag-switching with intra-word code switching among low-income Filipino mothers implies a lower level of proficiency of the languages in this group in such a way that code switching can only occur either as a tag phrase or a word, or both, from Language B to Language A (Poplack, 1980). Although tag switching may also be used to check understanding, to emphasize, or to conform what has been said, mothers belonging to low SES could possibly attributed its use from their limited linguistic inputs (i.e., education level or level of exposure) hence lesser degree of code switching.

5 Implications of the Study

Infant directed speech is essential in the child's language development. Early discrimination of the sound patterns of the language in which an infant is exposed to influence the development of their phonological awareness and lexical production. This will later affect their acquisition and production of their vocabulary. Teachers handling pre-school children may realize the differences as regards the lexical abilities of their students because of the richness of the linguistic inputs the learners have received from their caregivers. In cases where learners are exposed to limited linguistic inputs, teachers may provide the necessary opportunities to augment what have been missed in the course of initial language learning.

6 Conclusions

In light of the findings of the study, the following conclusions are drawn:

1.a. In terms of lexical content, Filipino mothers with infants 0-12 month-old and 13-24 month-old use more nouns and verbs in their IDS and use conjunctions less.

1.b. In terms of code switching, intra-sentential code switching was used by the Filipino mothers with 0-12 month-old infants as a strategy while tag-switching being the least. In contrast, Filipino mothers with 13-24 month-old infants employ inter-sentential code switching and the least, tag switching.

2. In terms of infants' age, it was found that there is no significant difference between the Filipino mothers' lexical content and between the Filipino mothers' code-switching strategies.

3.a. Lexical content of Filipino mothers' IDS was found to have no significant difference as regards mothers' age and socio-economic status.

3.b. Code switching strategies in Filipino mothers' IDS was also found to have no significant difference as regards mothers' age and socio-economic status.

References

Atkinson, J. and Heritage J. (1984). *Structures of social action: Studies in communication analyses.* Paris: Cambridge University Press.

Bail, A., Morini, G., & Newman, R. (2015). Look at the gato! Code-switching in speech to toddlers. *Journal of Child Language, 42,* 1073-1101.

Bautista, M. L. S. (1998). Another look at Tagalog-English code-switching. In M. L. S. Bautista (Ed.), *Pagtanaw: Essays on Language in Honor of Teodoro A. Llamzo* (pp. 121-146). Manila, the Philippines: The Linguistic Society of the Philippines.

Bavin, E. (1992). *The acquisition of Warlpiri, in The Crosslinguistic Study of Language Acquisition* (Vol. 3). (D. I. Slobin, Ed.) Hillsdale, NJ: Lawrence, Erlbaum.

Bhatia, T.K. & Ritchie, W. (2004). The bilingual mind and linguistic creativity. *Journal of Creative Communications*, 3(1), 5-21.

Bret, M. & Siskind, J.M. (2001). The role of exposure to isolated words in early vocabulary development. *Cognition*, 81, 33-44.

Broen, P.A. (1972). *The verbal environment of the language-learning child.* ASHA Monographs, American Speech and Hearing Association: Washington, D.C.

Casagrande, J. B. (1948). Comanche baby language. *International Journal of American Linguistics, 14*(1), 11–14.

Caporael, L. R., & Culbertson, G. H. (1986). Verbal response modes of baby talk and other speech at institutions for the aged. *Language and Communication, 6(1/2),* 99–112.

Choi, S.J. & Gopnik, A. (1995). Early acquisition of verbs in Korean. *Journal of Child Language,* 22, 497-529. DO10.1017/S0305000900009934.

Davis, E., Rubinstein, K. & Teplow S. (2016). *The interaction between task, infant sex, and socio economic status in maternal infant directed speech.* Honor's theses: Whitman College

de Boer, B. (2005). Infant directed speech and evolution of language. In M. Tallerman, *Evolutionary Prerequisites for Language* (pp. 100-121). Oxford: Oxford University Press.

de Houwer, A., & Bornstein, M. H. (2016). Bilingual mothers' language choice in child-directed speech: Continuity and change. *Journal of Multilingual and Multicultural Development, 37*(7), 680-693.

De Paulo, B. M., & Bonvillian, J. D. (1978). The effect on language development of the special characteristics of speech addressed to children. *Journal of Psycholinguistic Research, 7*(3), 189-211.

Ferguson, C. A. (1964). Baby talk in six languages. *American anthropologist, New series, 66,* Part 2: The ethnography of communication, pp. 103–114.

Ferguson, C. A. (1977). Baby talk as a simplified register. In C. E. Snow, & C. A. Ferguson, *Talking to Children: Language Input and Acquisition* (pp. 219-235). New York, NY: Cambridge University Press.

Fernald, A. (1992). Human maternal vocalizations to infants as biologically relevant signals: An evolutionary perspective. In J. H. Barkow, L. Cosmides, & J. Tooby (Eds.). (1992). *The adapted mind: Evolutionary psychology and the generation of culture* (pp. 391–428). New York: Oxford University Press.

Fernald, A., & Mazzie, C. (1991). Prosody and focus in speech to infants and adults. *Developmental Psychology, 27*, 209-221.

Fernald, A., & Morikawa, H. (1993). Common themes and cultural variations in Japanese and American mothers speech to infants. *Child Development*, 64(3), 637-656.

Fernald, A., & Simon, T. (1984). Expanded intonation contours in mother's speech to newborns. *Developmental Psychology, 27*, 104-113.

Ferguson, C.A. (1964). Baby talk in six languages. *American Anthropology*, 66, 103-114.

Gentner, D. (1982). Why nouns are learned before verbs: Linguistic relativity versus natural partitioning. In S. Kuczaj (Ed.), *Langauge development: Language, cognition, and culture* (pp. 301-334). Hillsdale, NJ: Erlbaum.

Green, J., Nip, I., Wilson, E., Mefferd, A., & Yunusova, Y. (2010). Lip movement exaggerations during infant-directed speech. *Journal of Speech, Language & Hearing Research*, 53 (6): 1529–1542.

Grieser, D. L., & Kuhl, P. K. (1988). Maternal speech to infants in a tonal language: Support for universal prosodic features in motherese. *Developmental Psychology, 27*, 14-20.

Grosjean, F. (1982). *Life with two language: An introduction to bilingualism.* Cambridge, MA: Harvard University Press.

Hauser, M. D., Chomsky, N., & Fitch, W. T. (2002). The faculty of language: what is it, who has it, and how did it evolve? *Science, 298*, 1569-1579.

Herat, M. (2016). A study of child-directed speech in Sinhala-English bilingual household. *Researchgate*, 74-91.

Hirsh-Pasek, K., & Treiman, R. (1982). Doggerel: Motherese in a new context. *Journal of Child Language, 9, 229–237.*

Iqbal, L. (2011). Linguistic features of code- switching: A study of Urdu/ English bilingual teachers' classroom interactions. *International Journal of Humanities and Social Science,* 1 (14), 188-194.

Kim, E. (2006). Reasons and motivations for code- mixing and code- switching. *TESOL Journal,* 1 (1), 62-67.

Kim, M., McGregor K. & Thompson, C. (2000). Early lexical development in English and Korean-speaking children: Language-general and language-specific patterns. *Journal of Child Language*, 27 (2), 225-254. DOI: 10.1017/S0305000900004104.

Kitamura, C., & Burnham, D. (2003). Pitch and communicative intent in mother's speech: Adjustments for age and sex in the first year. *Infancy*, 4, 85–110.

Levin, H., Snow, C. E., & Lee, K. (1984). Nurtural talk to children. Language and Speech, 27(2), 147–162.

Lucas, R.I., & Bernardo, A. (2008). Exploring noun-bias in Filipino-English bilingual children. *Journal of Genetic Psychology*, 169 (2), 149-163. DOI: 10.3200/GNTP.169.2.149-164

Mitchell, R. W. (2001). Americans' talk with dogs: Similarities and differences with talk to infants. *Research on Language and Social Interaction, 34(2)*, 183–210.

Mitchell, R. W. (2004). Controlling the dog, pretending to have a conversation, or just being friendly? *Interaction Studies, 5(1)*, 99–129.

Newport, L. L. (1977). Motherese: The speech of mothers to young children. In N. J. Castellan, D. B. Pisoni, & G. R. Potts, *Cognitive theory* (Vol. 2). Hillsdale, NJ: LEA.

Newport, E. L., Gleitman, H., & Gleitman, L. R. (1977). Mother, I'd rather do it myself: Some effects and non-effects of maternal speech style. In C. E. Snow, & C. A. Ferguson, *Talking to children: Language input and acquistion* (pp. 109-149). New York: Cambridge University Press.

Ninio, A. (1979). The naïve theory of infant and other maternal attitude in two groups in Israel. *Child Development,* 50, 976-980.

Philips, J. R. (1973). Syntax and vocabulary of mothers' speech to young children: age and sex comparisons. *Child Development, 44*, 182-185.

Pine, J. (1994). The language of primary caregivers. In C. Gallaway, & B. J. Richards, *Input and interaction in language acquisition* (pp. 15-37). Cambridge, England: Cambridge University Press.

Poplack, S. (1979/1980). Sometime's I'll start a sentence in Spanish y termino en espanol: toward a typology of code- switching. In L. Wei (ed.), *The Bilingualism Reader* (pp. 221-256). New York: Routledge.

Rosario, O. & Maguddayao, N. (2019). Code switching of language teachers and students in an ESL classroom. *The Asian EFL Journal,* 21 (2.3), 102-122.

Ryan, E. B., Hamilton, J. M., & See, S. K. (1994). Patronizing the old: How do younger and older adults respond to baby talk in the nursing home? *International Journal of Aging and Human Development*, *39*(1), 21–32.

Snow, C. E. (1972). Mothers' speech to children learning language. *Child Development, 43*, 549-565.

Shi, R., Werker, J. F. & Morgan, J. L. (1999). Newborn infants' sensitivity to perceptual cues to lexical and grammatical words. *Cognition* , 72, B11–B21.

Stange, U. (2016). *Emotive interjections in British English: A corpus-based study in acquisition variation, fuction, and usage.* London: John Benjamins Publishing Company.

Steinberg, D. D., & Sciarini, N. V. (2013). *An introduction to psycholinguistics* (2nd ed.). New York, NY: Routledge.

Then, D. & Ting, S. (2009). Demistfying the notion of teacher code-switching for student comprehension. *English International Language Journal,* 5, 182-197.

Tomasello, M. (2000). Do children have adult syntactic competence? *Cognition*, 74, 209–253.

Waxman, S. R. & Lidz, J. (2006). Early word learning. In D. Kuhn & R. Siegler (eds),

Handbook of child psychology, 6th edn, vol. 2, 299–335. Hoboken, NJ: Wiley.

Wills, D. (1977). *Cultures cradle: Social structural and interactional aspects of Senegalese socialization.* Unpublished Doctoral Disseration, University of Texas, Austin.

Zirker, K.A. (2007). Intrasentential vs. intersentential code-switching in early and late bilinguals. *All Theses and Dissertations.* https://scholarsarchive.byu.edu/etd/927.