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Analyzing the Linguistic Generalizations of Filipino Bilingual Children to Bare and Un- Form of Verbs

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Abstract

Language conventions are rooted in what children are exposed to in their households daily. These conventional meanings of words may or may not be the academically accurate forms that they can use in a formal setting or that other children and people can understand. In the current post-pandemic era and modern age, there are many new conventions that children learn from their parents, friends, environment, and media. This paper, in particular, delves into how conventionality affects children's grammar skills in terms of identifying the right and wrong bare and un- forms of verbs. One male (age 13) and female (age 10), were selected as participants in this study and took the 48-item grammaticality judgment test. Using a five-point face scale, they identified whether the verb form shown in a sentence is accurately used and if it has the right form. Using the linear regression statistical model, the results showed that both the participants did well in the test, wherein the female had only minimal errors and the male had more than half of the items correct. Hence, the female participant performed significantly better than the male participant. This study revealed that, amidst various changes in today's world, young bilingual children are still linguistically competent despite the effects of language conventions.

1. Introduction

The Principle of Conventionality states that, for specific words and meanings, there is a certain form that the speakers of the language are expected to use and adhere to in the language community (Clark, 2011). This phenomenon has a significant influence on the language acquisition of children as they imitate or learn words from their surroundings and through conversational settings (Clark, 2018). The conventional forms of language, both verbal and non-verbal, are what young children absorb, whether or not they are generally correct and applicable to society. As conventionality is arbitrary in nature and sometimes not acceptable to the masses, it is then important to observe how children generalize the conventional meanings and forms in their own language community with the language system of the world or other sectors of the society they go to such as in schools, churches, playgrounds, to name a few.

With conventionality playing an important role in language acquisition, it becomes more evident that this affects the knowledge and usage of grammar rules and systems the most, as well as how children interact with other people using the language they have at home (Clark, 2007). One of the earliest grammar lessons they learn at school is about verbs. When children are taught about inflected forms of verbs, they are often prone to errors due to the many different contexts and types they must consider before they decide on the form they think is the most grammatically correct (Ambridge et al., 2015). The major factor that affects their decision-making is what they know about language based on their household norms, which could either be formally accurate, acceptable, or casually informal. However, despite the inevitability of this situation among all households, this can still be addressed and resolved through spreading awareness and

informing parents about this phenomenon in order for them to help their children.

Current Situation

The generation of children today is living in a world that is facing two major changes — the post-pandemic era and modernization or proliferation of technology. Their livelihood, education, access to information and resources, and overall lifestyle have been affected by the aforementioned phenomena. In relation to the study, the post-pandemic era and modernization have also affected the conventions of language within the household and language community of the children. Moreover, as the English language is more commonly used in academic institutions and workplaces than any of the 186 languages (Borlongan, 2023) in the Philippines, it would be necessary to study the effects of conventionality on today's young generation of students in terms of English language proficiency in forms of verbs.

Scope and Delimitations

The focus of this study will be to discover and compare the linguistic proficiency and competence of bilingual children ages 10 and 13 in terms of bare and un- forms of verbs. Moreover, this study aims to identify through the results of the data-gathering tool if the participants generalize grammar rules rooted in the conventional forms of language in their household. The test given to the participants will determine the accuracy of identifying right and wrong verb forms and compare the performance between the male and female participants.

The study will not use factors such as academic ranking, socio-demographic profile, and learning environment as variables when analyzing the results. It will also not delve into the qualitative aspects, such as strategies and motivation, that may or may not affect the participants' performance before and during the commencement of the test. Lastly, since this is a pilot study, this research will not tap many participants for the data gathering.

Significance of the Study

The results of this pilot study will greatly contribute to the general knowledge about the current state of children in the post-pandemic era and modern age regarding the effects of conventionality on their linguistic competence and development. This study will be beneficial to the following people:

1. Parents – As conventional forms of meanings of words and phrases stem from the household, parents would gain insight on how to properly address their children in the house so the children would not experience difficulties in learning the formal rules and system of language in school.
2. Students – All students will be able to assess their own learning strategies upon analyzing the results of this study to avoid generalization of conventional linguistic meanings and be able to adapt well to new lessons.
3. Teachers – The results of the study will help teachers understand how students view and absorb grammar lessons, which will help them modify their teaching strategies and encourage them to know the individual profiles and needs of each of their students to know how to address their needs and learning styles.

2. Review of Related Literature

Exploring the Principle of Conventionality

One of the most common and natural ways that children acquire a language, whether it is the first or second language, is through conversational settings (Clark, 2018). They pick up and learn verbal and non-verbal cues from the participants of the conversations around them, even if they are directly involved or are just mere observers. As a result, children apply these acquired words and phrases in their own sentences, relying on how adults or other people commonly use them. This phenomenon is a pragmatic principle called the Principle of Conventionality, which is how speakers utilize conventional forms of language within a community (Clark, 2014). This is tapped by

speakers to have the assurance that the receivers will understand their message.

Children rely on the Principle of Conventionality because their main source of linguistic knowledge is the people within the household, and the same people are the target receivers of their message, too. However, the conventions within children's immediate surroundings may differ in other places or institutions. Given that conventionality is arbitrary in nature (O'Connor, 2021), what children learn inside the house may or may not be applied outside. One possible mistake that children may commit is the overgeneralization of words' formation (morphology), meanings (semantics), and structures (syntax). According to Ambridge et al. (2013), the earliest overgeneralization errors happen when a toddler applies the meaning of a particular word to another word or word group that shares some similarities in visual or conceptual aspects, such as calling all animals with tail doggie and labeling all round fruits as apple. These types of errors result from either category errors or pragmatic adaptations to a limited vocabulary bank.

Effects of Generalization on Grammar Lessons

As children grow older, the danger of committing any of the aforementioned types of errors becomes more evident as they learn new concepts in school. Verbs, for example, are a huge part of their lessons in elementary school, and children must apply the principle of conventionality to this concept very cautiously. Children's acquisition of morphologically inflected forms of verbs or nouns is prone to error because of the various contexts and types that they must consider before deciding how to make the inflections (Ambridge et al., 2015). Some rules in the inflected form of verbs do not apply to all verbs, such as when and how to add the prefix -un or which verbs are regular (can be transformed into a past tense using the suffix -ed) and which must undergo suppletion (e.g., sing into sang) (O'Grady, 2017). With the prevalence of these errors among toddlers, some studies have been conducted worldwide to

discover the usual causes of such errors and how parents or teachers can help students correct them.

The study by Brebner et al. (2016) gathered 48 English–Mandarin monolingual and bilingual children in Singapore and utilized a 10-item action picture test where the children were asked to identify the proper verb and verb tense to describe each picture. The results showed that bilingual children have faster and different patterns of acquisition compared to monolingual children in terms of properly using inflectional markers -ed, -ing, -s, irregular past tense, and irregular past participle tense of verbs. In another study, Kambanaros and Grohmann (2015) compared the performance of 64 children with Specific Language Impairment (SLI) and children with Typical Language Development (TLD). Like the previous study by Brebner et al. (2016), these children from either category were tasked to identify the action portrayed in the pictures shown to test their lexical access and retrieval for single action words. The results revealed that children with SLI mainly identified general all-purpose (GAP) verbs and were unable to produce single-word, specific lexical verbs compared to the children with TLD, who were able to excel in both types of verb categories.

When faced with an unfamiliar action, children tend to extend what they know previously to the new phenomenon, whether or not the process is accurate. Childers et al. (2016) found that toddlers aged 2.5 years old can compare previous events when learning new verbs by aligning the two events. They were capable of extracting the common element across a set of three events and applying that information to labeling novel verbs they had just encountered. Aside from testing the aptitude of the children themselves, Lustigman and Clark (2019) invited adults to evaluate children's usage of verbs through a longitudinal study. Four Hebrew children were gathered as participants in the study, and they were basically recorded each week to study the development and progression of their first language acquisition. Their words were marked as either Transparent Verb Forms (clearly identifiable) or

Opaque Verb Forms (not clearly identifiable). The results showed that the adults in the household of the children participants have responses to the verb acquisition that fall under any of the four categories: (1) adults offer interpretation or confirmation of the child's utterance using the same verb lexeme, (2) adults take up the same verb lexeme in to elaborate on the topic but do not offer an interpretation, (3) adults elaborate on the same topic with a different, semantically related, verb lexeme, and (4) adults respond without mentioning the verb lexeme used by the child, or any other related verb lexeme.

Roles and Responsibilities of Adults

It is difficult, however, to monitor every single word or phrase that children may absorb from their environment. Aside from the risk of learning connotatively "bad" words, they may also make mistakes of inaccurately applying one word's meaning to another entirely different word. The role of the parents and adults in children's language acquisition and learning has been emphasized, especially in the last reviewed study by Lustigman and Clark (2019). Conventionality and overgeneralization are two factors that must be further investigated by researchers and studied by adults to lessen the mistakes that children may commit every now and then.

Considering the implications of the aforementioned studies, the surroundings and people in the immediate environment of children indeed play an important role in the honing of a child's knowledge and skills in identifying and using words, particularly verbs, which is the main focus of this present study. However, one of the things that these studies have failed to address is how children use verbs and their various forms in sentences. They were simply tasked to look at pictures and label them. This type of assessment would not measure the children's semantic knowledge in terms of appropriately using these verbs in sentences or using the proper inflections to infer the tense, aspect, or mood. Thus, this gap will be addressed in the current pilot study through the Verb Grammaticality Test by Ambridge (2012),

wherein Filipino children will be gathered to assess their skills and schema in identifying proper inflected verbs used in sentences.

3. Theoretical Framework

Overgeneralization is one of the most common errors children commit when they learn a new language or grammar lessons. According to Ambridge (2012), it is one of the three main factors that affect the grammar knowledge and skills of young students. The other two factors are lack of exposure and adult influence. To elaborate further, overgeneralization happens when children apply what they know before to the new things presented to them. They tend to automatically correlate past knowledge with novel learning, which is sometimes good, and sometimes bad. Thus, Ambridge proposed three possible solutions or mechanisms to the three aforementioned concerns, namely, entrenchment, pre-emption, and formation of semantic verb classes.
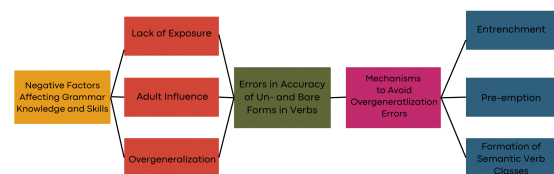
Figure 1: Theoretical Framework of the Study

Entrenchment can be done through consistent exposure to correct grammar forms of language both through visual and auditory senses. This would mean that, even at home or other places besides school, children should have daily access to accurate grammar lessons. Pre-emption, on the other hand, mostly relies on the parents' efforts, as this is done through monitoring the language utterances of children. Parents should correct statements or immediately fill in the correct form or meaning of words before the child makes the mistake or every time they are *about* to make an error. Lastly, the formation of semantic verb classes is spearheaded by teachers during class lectures and discussions. This is done by giving various examples of the same grammatical item in order to help the students fully understand how the said grammatical item is used or modified in

different contexts. These three solutions or mechanisms aim to address lack of exposure, adult influence, and overgeneralization.

4. Conceptual Framework

Since this study is focused on addressing overgeneralization, the following conceptual framework was created by the researcher based on the previous research of Ambridge (2012).
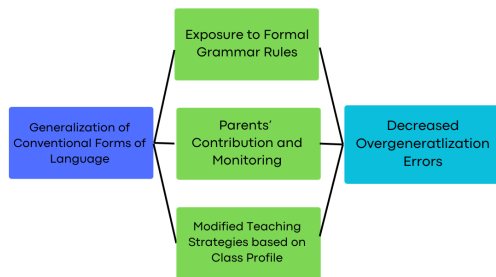

Figure 2: Conceptual Framework of the Study

In order to avoid or decrease the generalization of conventional forms of language, specifically verb forms, the researcher presents three possible solutions. The first one is exposure to formal grammar rules. This is related to the entrenchment hypothesis mentioned above. However, in this framework, there is an emphasis on the "formality" of grammar rules, which means that children should not just be exposed to general grammar rules but also to the formal ones that will be applicable to academic papers and tasks. The second one is the parents' contribution and monitoring. Aside from pre-empting their child's errors, parents should also proactively monitor their children's language development and contribute to their learning through activities, conversations, games, media consumption, and more. And third, modified teaching strategies can be done after teachers have one-on-one consultation with each of their students in order to understand their needs and skills. Combining these three solutions can help ease and decrease the overgeneralization errors committed by children.

5. Research Questions

Using Ambridge's (2000) study on children's overgeneralization tendencies and proposed mechanisms to address them, this research aims to identify if the children of today's world still have these tendencies and how they can be resolved. The purpose of this study is to answer the following questions:

1. How accurately can bilingual children identify if verbs in bare forms and un-forms presented to them are correct or not?
2. What are the differences between the male and female participants' competence in terms of identifying the accuracy of verbs in bare and un- forms?

6. Methodology

Research Design

The researcher utilized a quantitative design for the study. The research focus was embedded in the interest of discovering how accurately young bilingual children can identify if verbs in bare forms and un- forms presented to them are correct or not, as well as the differences in the performances between the male and female participants in determining the proper forms of verbs. The main objective of the researcher was to determine how well children can figure out correct and incorrect verb forms in correlation with the Principle of Conventionality influenced by today's digital age and the modern world they grew up in.

Research Setting

The data gathering took place in a school facility after all classes were finished so as not to interrupt their classes and also to have a convenient location that could accommodate all students. The assessment took place for two hours, giving the participants approximately two minutes to answer each item.

Research Participants

The participants consisted of one boy (13 years old) and one girl (10 years old). They are chosen through random convenience sampling. All participants are bilingual speakers of Filipino and English from the same community. Both participants took the training test and the actual test for a total of approximately two hours and

30 minutes. The participants' parents accompanied them throughout the procedure.

Research Instrument

The instrument used was the Verb Grammaticality Test (Ambridge, 2012). In this assessment, the participants decided which of the verbs given were prefixable with un- ("un-verbs") and which were not ("zero verbs/bare form").

Research Procedure

The Verb Grammaticality Test (Ambridge, 2012) showcased verbs presented in sentences to provide context clues, and the participants rated their accuracy or acceptability through a five-point face scale. Before the official test, a training test was conducted.

For the pre-data gathering procedure, the researcher provided a brief review of bare-form and un- form verbs with some examples before the data gathering proper. Moreover, a training test was conducted, which consisted of 7 bare-form verbs in sentences that the participants rated on a scale of 1 to 5, with 1 being "extremely acceptable" and 5 being "extremely acceptable."

For the actual data gathering, the official test consisted of 48 un- form verbs in sentences, and the children identified whether the un- form verbs were correct or not through the same five-point face scale they used during the training test.

Method of Analysis

The data was analyzed through a linear regression statistical model. The test results of the male and female participants were computed along the total average of the correct rating of the bare and un- form verbs on the five-point face scale wherein the former is the Outcome variables (x) and the latter is the Predictor variables (y).

Ethical Considerations

As the participants of this study were minors, the participants' parents were present during all the procedures. Both the children and the parents were thoroughly informed of every procedure, and they were provided with consent forms, which they signed right after the researcher explained every content in detail.

Before the data gathering, the researcher provided the participants with an informed consent form containing all of the parts of the data-gathering procedure, including whether or not they agreed with the results of their assessments being used as data for the study. The parents were also given a parental consent form that contained the data-gathering procedures in thorough detail, including whether or not they allowed their child to participate in the study. Both the parents and participants signed the forms, and they were thoroughly briefed on the contents of the said forms.

During the data gathering, the researcher did not record any video or audio recordings throughout the assessment. The test papers were the only data collected from the participants. Moreover, their parents were beside them throughout the procedure while the researcher monitored them to avoid coaching from their parents. The names of the participants were not collected; only their age and gender were used to label the data.

After the training test and official test were completed, the researcher read aloud the informed consent form and parental consent form to the participants and parents to remind them of the contents and to request their approval for the second time for reiteration purposes. The researcher also reminded them that the results of the data-gathering will not be used for anything other than the researcher's specific study.

7. Results & Discussion

Using the linear regression statistical model, the test results of each participant were computed and analyzed along with the total average of the correct rating of the bare and un- form verbs on

the five-point face scale. The test results are the outcome variables (x), and the total number of correct ratings is the predictor variables (y).
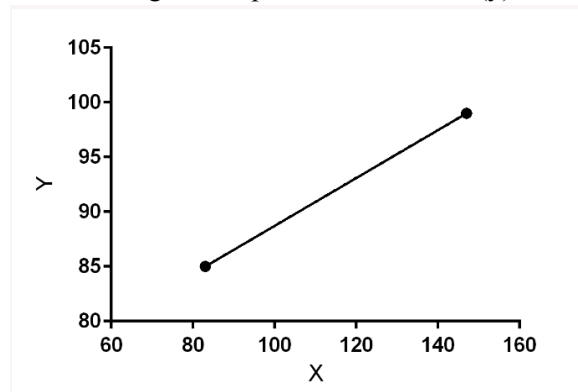
Figure 3: Male Participant Results
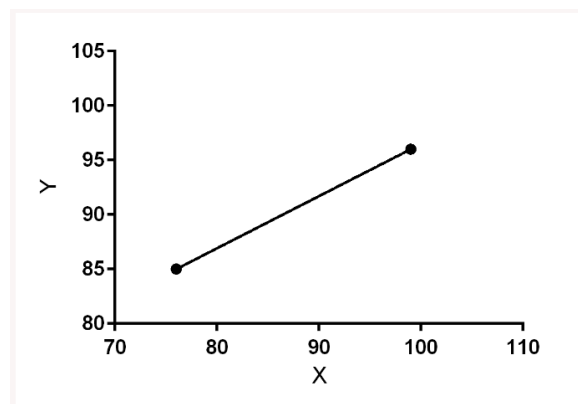
Figure 4: Female Participant Results

For Figure 3, the slope is **0.2188,** the y-intercept is **66.84,** the x-intercept is **-305.6,** and the 1/slope is **4.571.** As for Figure 4, the slope is **0.4783,** the y-intercept is **48.65,** the x-intercept is **-101.7,** and the 1/slope is **2.091.** The results will be further evaluated in detail in the Discussion part below.

Upon completing the 48-item grammaticality judgment test for bare and un- form of verbs, both male and female participants did well, as seen in the test results. The slope for the male and female children is 0.2188 and 0.4783, respectively. The overall results of both participants prove that, even as a pilot study, young bilingual children in the Philippines have a clear grasp of what an accurate bare and un-form of verb looks like.

Now, in terms of differences between the performances of the two genders, the results show that the female participant did significantly better than the male. The male participant has an error of 0.7812, while the female participant has a lower error of 0.5217. For the y and x-intercept, the combined error of the male participant is 238.76, while for the female participant, it's 53.05 only. All of the data from the analysis using the linear regression statistical model proves that the female participant comprehends the accuracy of the bare and un-forms of verbs better than the male participant.

8. Conclusion

Amidst the various changes faced during the post-pandemic era and digital world, language conventionality still does not greatly and negatively affect the linguistic skills and competencies of children. Moreover, despite English being a second language in the Philippines, young children still perform well in terms of identifying correct verb forms and applying effective strategies to adapt to new learning situations and lessons. The results of this pilot study give hope to the current generation of students, as well as their parents and teachers that despite the countless developments and innovations in today's world, children have the innate ability to adjust and thrive. This can be applied not only to grammar skills but also to holistic competencies.

Adults should be aware of how they affect and influence the children around them, whether unconsciously or proactively. Parents should try to be directly involved in their children's learning because it would be difficult for a child to be exposed to contrasting things when they are in school and at home. As for the teachers, they should modify their teaching strategies and plans to better suit the profile and needs of their students.

9. Recommendations

Future researchers could tap on more students to answer the grammaticality judgment test in order to get a more generalizable result.

Moreover, the study could also have a broader scope, such as more age range, interview questions, and involvement of parents and teachers in the data gathering process.

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Appendix A. Signed Consent Form of Participants and Parents

Appendix B. Sample Answers of Participant A (Male)

Appendix C. Sample Answers of Participant B (Female)

Credits

This document has been adapted from the instructions for earlier ACL and NAACL proceedings, including those for ACL 2020 by Steven Bethard, Ryan Cotterell and Rui Yan, ACL 2019 by Douwe Kiela and Ivan Ivan Vulić, NAACL 2019 by Stephanie Lukin and Alla Roskovskaya, ACL 2018 by Shay Cohen, Kevin Gimpel, and Wei Lu, NAACL 2018 by Margaret Mitchell and Stephanie Lukin, BibTeX suggestions for (NA)ACL 2017/2018 from Jason Eisner, ACL 2017 by Dan Gildea and Min-Yen Kan, NAACL 2017 by Margaret Mitchell, ACL 2012 by Maggie Li and Michael White, ACL 2010 by Jing-Shin Chang and Philipp Koehn, ACL 2008 by Johanna D. Moore, Simone Teufel, James Allan, and Sadaoki Furui, ACL 2005 by Hwee Tou Ng and Kemal Oflazer, ACL 2002 by Eugene Charniak and Dekang Lin, and earlier ACL and EACL formats written by several people, including John Chen, Henry S. Thompson and Donald Walker. Additional elements were taken from the formatting instructions of the International Joint Conference on Artificial Intelligence and the Conference on Computer Vision and Pattern Recognition.