

The Effect of TikTok Exposure on the English Language Comprehension of International Students: A Quasi-Experimental Study

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Abstract

With numerous types of research on the effectiveness of YouTube as an instructional tool in teaching English language learners, there is a need to study the efficacy of using TikTok as a new supplemental educational platform for students. As the platform has steadily seen an increase in the number of users, particularly among Gen Z and Generation Alpha, TikTok can be used as an alternative online learning tool for English language learners. The researcher used a quasi-experimental research with 14 high school students of Makati Hope Christian School who were enrolled in the Intensive Academic Program, the school's program for English as Second Language students, and subjected the respondents to an eight-week experiment using TikTok as supplemental class material. These students were divided into an Uncontrolled Group, Control Group A, who were exposed to a single content creator, and Control Group B, who were exposed to multiple content creators. All three groups answered a pretest prior to the eight-week TikTok intervention. After the implementation and exposure of the students to TikTok video content, a posttest was conducted. The study proves that higher exposure to TikTok with English language content videos leads to a higher proficiency level and that higher exposure to TikTok with English language content videos from multiple creators leads to a higher English language proficiency compared to students who are exposed to a single TikTok video creator only.

Keywords: Communication Technology, English as a Second Language, English Proficiency, Language Learners, TikTok

Introduction

The introduction of the Internet in the late 1960s brought a rapid change in the way communication is produced and consumed. It has also shifted industries and ways of life, wherein organizations and companies are now heavily relying on computers, and voluminous amounts of information are processed using various technologies, known as the Information Age (Leiner et al., 2024).

Leiner et al. (2024) further noted that despite its presence for more than five decades, the Internet was only able to prove to be a very useful channel of information dissemination to the masses through the arrival of social media platforms in the mid-2000s all the way to the present time. From the early stages of email as a method of communication, the landscape was improved by YouTube, Facebook, Twitter, and Instagram, among others (Maryville Online, 2024). These platforms combine texts, images, videos, and, more recently, non-verbal messages such as emoticons, emojis, and graphic interchange formats (GIFs) as examples (Jones, 2024).

The booming popularity of social media in today's culture has also been crucial in developing communication skills and acquiring secondary languages. Various educational organizations regularly upload video tutorials on their social media channels, primarily YouTube. Through repetition, curious language learners can speak and understand a new language (Delouya, 2022).

However, longer forms of videos commonly found on YouTube were increasingly losing their appeal to younger learners. These users were more familiar with shorter videos more common on TikTok, a newer social media platform that contains videos ranging from 15 seconds to one minute before extending the length to at least three minutes (Santos, 2024; Kajabi, 2024; Creators Are Mitigating Burnout with Long-form YouTube Videos, 2022).

As such, educators whose primary method of teaching delivery is through digital platforms and online classes are burdened with creating video materials that contain enough skills and lessons but in a creative and fun way. Another challenge would be whether the TikTok video

content consumed by these social media users is able to accomplish its goal of language development (Khan, 2023; Zhang, 2020; *Short Educational Videos Are Better for Learning*, n.d.).

The research builds its foundations on Stephen Krashen's Second Language Acquisition Theory (1981) and Albert Bandura's Social Learning Theory (1963).

Krashen's Second Language Acquisition (SLA) Theory highlights two different methods of developing skills and understanding of a second language: learning and acquisition. This distinction is further explained in the Acquisition-Learning Hypothesis, one of the five hypotheses that he postulated in his theory.

According to him and other SLA theorists, learning involves a conscious effort from the student or learner to acquire the necessary knowledge and skills of the language. Acquisition, on the other hand, focuses on the subconscious way of understanding a new language. The learning process emphasizes the form of the language, which is referred to as the structure, while acquisition emphasizes the message or meaning of the language (Krashen & Terrell, 1983; Littlewood, 1984; Ellis, 1985).

Ibrahim Abukhattala (2012) noted that most classroom activities focus on the learning process of the SLA, wherein the evaluation of knowledge falls on grammatical and lexical usage. This is contrasted with the interactions with native speakers of the second language we are trying to understand. The focus is on the message and its meaning and other paralinguistic features such as gestures and signs.

Krashen (1982) argued that while children use the acquisition process and adults use the learning process, the latter can also use the acquisition process through a "language acquisition device (LAD)," although not at a native-like level like the former.

The second theory utilized in this research is the Social Learning Theory, sometimes referred to as the Social Cognitive Theory. Bandura (1963) explained that people learn by watching the actions and behaviors of other people. These may include parents, siblings, teachers, friends, coworkers, YouTube vloggers, influencers, or celebrities, among others. Learners will observe their actions and behavior and mimic those to understand and experience what they have observed.

Part of the theory is Bandura's Bobo Doll experiments. In 1961, he conducted a controlled experiment to investigate whether social behaviors, particularly aggression, can be acquired by observation and imitation. The experiment tested 36 boys and 36 girls from the Stanford University Nursery School aged 3 to 6.

The Bobo Doll Experiment showed that children can learn various social behaviors, including aggression, through observational learning.

Both the SLA theory and the Social Learning theory emphasize the importance of observing, modeling, and repeating the actions and behaviors of the people around the learners.

The worldwide study by the Organisation for Economic Cooperation and Development (OECD), known as the 2022 Programme for International Student Assessment (PISA) in 2023, showed that the Philippines ranked sixth from the bottom in reading and mathematics and had the third worst score in science among the 81 countries surveyed. The study examined students' knowledge in three core school subjects: reading, mathematics, and science (OECD, 2019; San Juan, 2019).

According to the study, Filipinos aged 15 had an average of 347 in the subject reading compared to the global average of 476. Furthermore, the nation's average of 355 points in mathematics and 356 in science were still deemed far from the global average of 472 and 485, respectively. In terms of reading, the Philippines ranked sixth to last, above the statistics posted by Kosovo with 34, Jordan with 342, Morocco with 33, Uzbekistan with 33, and Cambodia with 329.

In a statement following the release of the OECD's first study, the Department of Education (DepEd) claimed that it would provide an overview of Filipino students' learning status and help improve the curriculum it offers. The department added that as part of its Sulong Edukalidad, which then-DepEd Secretary Leonor Magtolis Briones led, it will be performing aggressive reforms in various areas of the curriculum. Furthermore, the MATATAG Agenda/MATATAG Curriculum was launched in 2023 to address this growing concern.

Seeing the potential of TikTok as an educational platform, DepEd has conducted training and seminars for its teaching personnel on its usage to equip them with the necessary skills in creating engaging,

informative, and useful content; use the platform for fun, enjoyable, and enjoyable learning; discover and utilize free websites and applications for teachers to learn more by using the social media application; and motivate the teachers to use the tool to enhance instruction by creating educational content. However, the Philippine Senate was split in its support of TikTok (Bautista, 2021).

DepEd TikTok was launched in October 2020, but as of this writing, only 91 videos have been uploaded to the account, with only 29,800 followers and 65,900 likes, compared to the 28,035,042 enrolled learners in public and private schools.

With numerous types of research on the effectiveness of YouTube as an instructional tool in teaching English language learners in the late 2000s and the entire 2010s, there was a need to study the effectiveness of using TikTok as a new supplemental educational platform for students (Klein, 2020). Despite the abundance of users and the pivot of even the education sectors to use it, there is a scarcity of research looking into whether and how TikTok affects the English language skills of student users (Orr, 2022; Zulkifli et al., 2022).

The research aimed to measure the effect of high school international English as a Second Language (ESL) students' exposure to TikTok on their English language comprehension.

Furthermore, the study sought to answer the following specific objectives:

1. To determine the level of English language proficiency of high school ESL students of Makati Hope Christian School;
2. To ascertain the level of exposure to TikTok of the high school ESL students of Makati Hope Christian School prior to the conduct of the experiment;
3. To experiment by exposing one treatment group of high school ESL students of Makati Hope Christian School to English language content videos in TikTok from a single creator;
4. To experiment by exposing another treatment group of high school ESL students of Makati Hope Christian School to English language content videos in TikTok from multiple creators and

5. To measure the level of English language proficiency of high school ESL students who were exposed to TikTok videos with English language content and those who were not exposed to TikTok videos with English language content.

The researcher hypothesized the following:

1. Higher exposure to TikTok with English-language content videos will result in a more proficient English language comprehension of Makati Hope Christian School's high school ESL students.
2. Higher exposure to TikTok with English language content videos from multiple creators will result in a higher English language proficiency of high school ESL students of Makati Hope Christian School compared to students who are exposed to a single TikTok video creator only.

Materials and Methods

The study used a quantitative research design, a systematic investigation of phenomena by gathering quantifiable data and performing statistical, mathematical, or computational techniques. As such, the research focused on gathering numerical data and generalized it across groups of people to explain a particular phenomenon.

Furthermore, the researcher utilized causal-comparative research, which is sometimes referred to as quasi-experimental research. The study attempted to establish a cause-and-effect relationship among the variables. The goal was to determine whether the independent variable affected the outcome or dependent variable by comparing two or more groups of individuals.

A causal-comparative design is used when groups are formed prior to the study (Bakker & van Eerde, 2015; McCusker & Gunaydin, 2015).

In this quantitative research study, the variables were based on which group of ESL students would have a higher English proficiency level. The independent variable was the exposure of two groups of ESL students to TikTok videos containing English language content and

the non-exposure of one group to TikTok videos during their English classes.

The dependent variable consisted of the scores of the ESL students on four different areas of the exam: the parts of speech, vocabulary, verb tenses, and reading comprehension. The students were allowed to answer the same set of questions during the pretest and the posttest.

Using the quasi-experimental design, the researcher was able to determine if and to what extent the independent variable impacted the dependent variable. Additionally, participants are not randomly selected when conducting causal-comparative research designs.

Hanrahan et al. (2005) describe this method as helping to understand and evaluate various factors that may influence the system under study using statistics. This approach combines a theoretical understanding of the use of experimental designs with the application of the factors to be studied

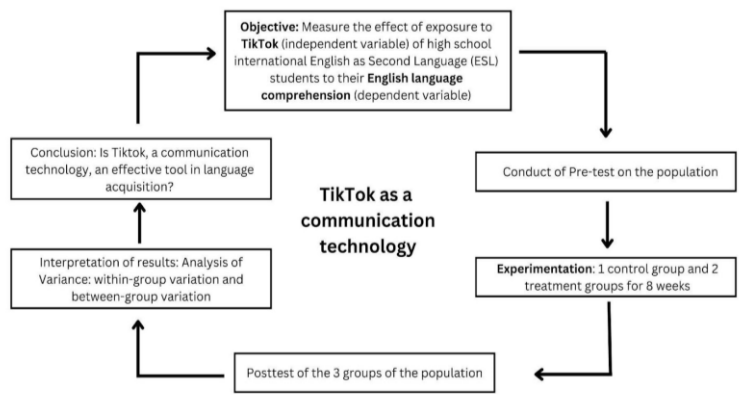


Figure 1. Experimental Planning on the effect of TikTok exposure on the English language comprehension of high school ESL students of Makati Hope Christian School

Population, Sample Size, and Sampling Technique

The research was conducted on the high school ESL students of a Chinese-Filipino educational institution located in Makati City,

Philippines. Offering both the Chinese Language Arts curriculum and the Department of Education curriculum from nursery to Grade 12, the school caters to a total of 1,044 students for School Year 2023-2024, 264 of which belong to the junior high school levels from Grade 7 to Grade 10.

According to the data provided by the educational institution's person-in-charge, 14 students were enrolled in the Intensive Academic Program at the school's ESL program. The number of students per strata or grade level is as follows: six for Grade 7, three for Grade 8, two for Grade 9, and three for Grade 10.

The researcher conducted the study based on a consensus of the entire population of high school ESL students for School Year 2023-2024.

Participants

The participants of the study were high school ESL students for School Year 2023-2024. These students were enrolled in the Intensive Academic Program of the school and were part of the Grades 7, 8, 9, and 10 levels. These students are categorized as those born in mainland China and have migrated to the Philippines for their basic education. Having grown and acclimatized to the culture and language of China, these students were unable to communicate in the English language as this is not their first or second language at home.

Having difficulty understanding English, these students were also unable to comprehend their class lessons in various subjects, as most of these subjects are taught in the English language.

The 14 participants were divided into three groups. Four students—two Grade 7, one Grade 8, and one Grade 10—were placed in the Uncontrolled Group. This group did not receive any intervention using the communication technology TikTok. They relied on their teachers and the materials they provided to study the English language.

The second group - the Control Group A - was composed of two Grade 7, one Grade 8, one Grade 9, and one Grade 10 students. These students received intervention from the researcher with one TikTok video daily during their English class, originating from a single content creator.

These five students were exposed to this communication technology for eight weeks.

The third group - the Control Group B - was composed of two Grade 7, one Grade 8, one Grade 9, and one Grade 10 students. These students received intervention from the researcher by one TikTok video daily during their English class, originating from different content creators. These five students were exposed to this communication technology for eight weeks.

Research Instrument

The study used standardized English Proficiency Tests as a main tool in gathering data. This was utilized during the pretest and the posttest stages. There were four sets of exams: (a) Parts of Speech, (b) Vocabulary, (c) Verb Tenses, and (d) Reading Comprehension. Each exam contained 30 questions.

The examinations were adapted from the Muncy School District in Pennsylvania and the Birmingham City Schools in Alabama. The four-part English test was used on both pretest and posttest to assess and measure their language development.

Furthermore, the researcher used 40 TikTok videos with English language content from a single content creator and another 40 TikTok videos with English language content from multiple content creators. One video was shown during their class per day.

Data Gathering Procedure

To gather sufficient and credible information for the study, the researcher experimented. After determining their English language level, the students were grouped into three: one group received a treatment using TikTok videos from a single content creator as a supplement to their classes, another group received a treatment using TikTok videos from multiple content creators as a supplement to their classes, while the third group focused on the traditional language learning through their teacher.

Prior to the experiment, all groups of students underwent a pretest

to measure their English language skills. Their scores were used as a baseline for interpreting the experiment's results.

The study was conducted for one academic quarter of the said school year, which consisted of eight teaching weeks. Students from the one treatment group were provided with one TikTok video from a single content creator per school day, which was incorporated into their lessons and as supplemental learning material. Students from the other treatment group were provided with one TikTok video from multiple content creators per school day, which was incorporated into their lessons and as supplemental learning material. As such, the students watched 40 TikTok videos for the entire implementation of the research.

After the eight-week experiment was completed, students in both the Uncontrolled Group and the treatment groups underwent a posttest using the same set of questions used during their pretest. Their scores in the posttest were used to interpret the effect of using TikTok as a supplemental learning tool for the students and the difference in the learning outcomes of those exposed and those who were not exposed to TikTok videos.

Data Analysis

The mean average was used to determine the students' proficiency levels in the eight parts of speech, vocabulary, verb tenses, and reading comprehension.

1. The percentage was used to interpret and analyze data for the profile using the formula below:

$$P = n/N \times 100$$

Where:

n = number of participants that belong to a specific category of a variable

N = Total number of participants

2. Weighted Mean (wM) is a measure of central tendency that is sensitive to all values of the entire distribution. It was used to compute the scores in each exam's proficiency level. It was also applied to consolidate participants' answers to each question. Ranking will be used to derive the highest and lowest points of the weighted mean from each exam's proficiency level.

3. Analysis of Variance (ANOVA) will be used to test the difference in each variable between the three groups of participants in this study. ANOVA is used to show differences between two or more means or components through significance tests. The ANOVA test is performed by comparing two types of variation: the variation between the sample means and the variation within each of the samples.

If the ANOVA shows a significant result, a pairwise comparison test will be performed using either Tukey's or Bonferroni's test.

4. To measure the difference between two groups, the researcher used the t-test, a parametric test of difference that assumes data are independent, approximately normally distributed, and have a similar amount of variance within each group being compared, otherwise referred to as homogeneity of variance. Since the three groups came from a single population, the study entailed a paired t-test, which was a within-subjects design.

Results and Discussions

Table 1 compares the demographic characteristics in terms of grade, years in the Philippines, years studying in the institutions, and years enrolled in ESL between the three groups and shows whether there are any significant differences (noted as the p-value) in any of these variables.

The grade level's p-value is 0.98; as this is greater than the 0.05 significance level, this variable has no significant difference in this study.

Additionally, the p-value for the number of years they have lived in the Philippines is 0.27, showing that this variable does not significantly differ in this study.

Furthermore, the p-values for the number of years they have been enrolled in MHCS and the number of years they have been enrolled in the ESL program are 0.34 and 0.36, respectively, signifying that these variables do not significantly affect the study's outcome.

In summary, the grade level of the student, the number of years they have been in the Philippines, the number of years they are enrolled

in school, and the number of years they are enrolled in the ESL program do not affect their English comprehension.

Table 1. Comparing the Demographic Characteristics of Participants Between the Three Groups.

	Uncontrolled	Control A	Control B	p-value
<i>Grade</i>				
7	2 (50.0%)	2 (40.0%)	2 (40.0%)	0.98 [†] ($\chi^2 = 0.93$; df=6)
8	1 (25.0%)	1 (20.0%)	1 (20.0%)	
9	0	1 (20.0%)	1 (20.0%)	
10	1 (25.0%)	1 (20.0%)	1 (20.0%)	
<i>Years in the Phils.</i>	2 (50.0%)	3 (60.0%)	4 (80.0%)	0.27 [†] ($\chi^2 = 7.58$; df=6)
1 – 2	1 (25.0%)	0	1 (20.0%)	
3 – 4	0	2 (40.0%)	0	
5 – 6	1 (25.0%)	0	0	
>6				
<i>Years in MHCS</i>				
1 – 2	3 (75.0%)	4 (80.0%)	5 (100%)	0.34 [†] ($\chi^2 = 4.49$; df=4)
3 – 4	0	1 (20.0%)	0	
5	1 (25.0%)	0	0	
<i>Years in ESL</i>				
1	2 (50.0%)	4 (80.0%)	5 (100%)	0.36 [†] ($\chi^2 = 4.36$; df=4)
2	1 (25.0%)	0	0	
3	1 (25.0%)	1 (20.0%)	0	

* $p > 0.05$ - Not significant; $p \leq 0.05$ -Significant

[†]Chi-square test

The cumulative scores of all three groups for their pretest and posttest show a significant increase after the eight-week intervention. Comparing the percentage change in the scores of the three groups, the Uncontrolled Group experienced the smallest change, with 20.571%, while Control Group A received 47.520% and Control Group B 80.555%.

Amin et al. (2020) noted that the use of social media sites can be effective in providing lessons in a second language and the attainment of proficiency. Additionally, Desta, Workie, Yemer, Denku, and Berhanu (2021) highlighted that the use of social media platforms could provide advantages in improving their level of English proficiency.

Table 2. Pretest and Posttest scores for four exams.

Respondent	Grade Level	Group	Parts of Speech		Vocabulary		Verb Tenses		Reading Comprehension		TOTAL	
			Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pretest	Posttest
Student 1	Grade 7	Uncontrolled	0	9	0	9	0	0	0	5	0	23
Student 2	Grade 7	Control A	29	29	15	19	12	16	1	6	57	70
Student 3	Grade 7	Control B	8	17	4	19	7	9	5	8	24	53
Student 4	Grade 7	Uncontrolled	22	13	17	6	10	15	9	9	58	43
Student 5	Grade 7	Control A	6	7	3	18	5	9	3	5	17	39
Student 6	Grade 7	Control B	10	19	7	19	11	11	5	18	33	67
Student 7	Grade 8	Uncontrolled	21	18	17	17	16	18	12	13	66	66
Student 8	Grade 8	Control A	19	20	15	18	16	20	0	13	50	71
Student 9	Grade 8	Control B	4	14	4	13	3	8	3	6	14	41
Student 10	Grade 9	Control A	15	15	8	29	23	29	5	22	51	95
Student 11	Grade 9	Control B	19	22	7	19	19	22	7	20	52	83
Student 12	Grade 10	Uncontrolled	13	15	15	20	15	26	8	18	51	79
Student 13	Grade 10	Control A	14	19	20	24	18	26	15	13	67	82
Student 14	Grade 10	Control B	19	21	18	21	14	19	6	20	57	81

Table 3 depicts the comparison of the p-value, otherwise the significant difference, between the pretest and posttest scores on the Parts of Speech examination between the three groups. Comparing the parts of speech pretest score between the three groups, there was no significant difference noted, as shown by the p-value of 0.69 ($F = 0.38$; $df=2,11$). With a significance of ≤ 0.05 , the p-value obtained implies that the assessments of the three groups for their pretest are statistically on the same level.

Similarly, no significant difference was noted in the parts of speech posttest scores with a p-value of 0.41 ($F = 0.97$; $df= 2,11$). This is an improvement from the pretest assessment but their assessments during the posttest remain statistically on the same level.

Comparing the difference in the pretest and posttest scores between each group, it can be noted that there is a trend towards a significant level, as evidenced by the p-value of 0.12 ($F = 2.63$; $df=2,11$). As the number of respondents is small, this significance level is expected to improve if the experiment is applied to a larger number of students, suggesting that the same method be replicated with more participants.

Within each group, no significant difference is reported in the pretest and posttest scores in the Uncontrolled Group ($p=0.95$) and Control Group A ($p=0.20$). But a significant increase in the score was noted in Control Group B ($p=0.01$). This means that using TikTok videos from multiple content creators was highly useful in learning Parts of Speech.

The research findings suggest that the use of social media has a positive effect on the development of ESL students' proficiency in terms of the Parts of Speech aspect, as supported by Khan, Ayaz, Khan, and Khan (2016).

Table 3. Comparing the Parts of Speech Pretest and Posttest Scores Between the Three Groups.

Parts of Speech Test Scores	Uncontrolled	Control A	Control B	p-value
Pretest Score				0.69 [‡]
Mean ± SD	14.00 ± 10.16	16.60 ± 8.39	12.00 ± 6.75	(F = 0.38; df=2,11)
Posttest Score				0.41 [‡]
Mean ± SD	13.75 ± 3.78	18.00 ± 8.00	18.60 ± 3.21	(F = 0.97; df=2,11)
Difference in Pre and Post Scores				0.12 [‡]
Mean ± SD	-0.25 ± 6.63	1.40 ± 2.07	6.60 ± 3.78	(F = 2.63; df=2,11)
p-value (comparing pre and post)	0.95 [§] (t=0.06; df=3)	0.20 [§] (t=-1.51; df=4)	0.01 [§] (t=-3.90; df=4)	

* $p > 0.05$ - Not significant; $p \leq 0.05$ -Significant [‡]ANOVA; [§]Paired t-test

Table 4 depicts the comparison of the vocabulary pretest and posttest scores between the three groups. Comparing the vocabulary pretest score between the three groups, no significant difference was noted, as shown by the p-value of 0.56 (F = 0.61; df=2,11). With a significance of ≤ 0.05 , the p-value obtained implies that the assessment of the three groups for their pretest is statistically on the same level.

However, there is a marginally significant difference in the vocabulary posttest scores with a p-value of 0.06 (F = 3.48; df= 2,11). As the number of respondents is small, the significance level will improve if the experiment is applied to a larger number of students.

Furthermore, the difference in the vocabulary pretest and posttest scores between the three groups is trending toward a significant level, with a p-value of 0.15 (F = 2.26; df= 2,11). As the number of respondents is small, the significance level will improve if the experiment is applied to a larger number of students.

Within each group, no significant difference was noted in the vocabulary pretest and posttest scores in the Uncontrolled Group (p=0.87). This implies that despite the increase in the posttest score compared to the pretest, the difference cannot be perceived as valuable.

However, there is a marginally significant difference in Control Group A (p=0.06). As the number of respondents is small, the significance

level is expected to improve if the experiment was applied to a larger number of students. This implies that the use of social media, particularly TikTok videos from a single content creator, in teaching ESL students vocabulary can be beneficial and effective.

The score in Control Group B significantly increased ($p=0.007$). This means that watching videos on vocabulary from multiple content creators is helpful in developing and improving English language learners' skills.

The research findings suggest that the use of social media has a positive effect on the development of the vocabulary proficiency of ESL students.

Masuram and Lizy (2023) support this data in their research wherein the use of social media affected vocabulary development. Students who were exposed to social media videos significantly improved their vocabulary knowledge compared to those students who strictly followed teacher directions from the book in a classroom. As such, educators should investigate incorporating TikTok videos in their lessons and class presentations as an entertaining yet educating way of improving the vocabulary skills and the English proficiency of ESL students.

Table 4. Comparing the Vocabulary Pretest and Posttest Scores Between the Three Groups.

Vocabulary Test Scores	Uncontrolled	Groups Control Group A	Control Group B	p-value
<i>Pretest Score</i>				
Mean ± SD	12.25 ± 8.22	12.20 ± 6.69	8.00 ± 5.79	0.56 [‡] (F = 0.61; df=2,11)
<i>Posttest Score</i>				
Mean ± SD	13.00 ± 6.58	21.60 ± 4.83	18.20 ± 3.03	0.06 [‡] (F = 3.48; df=2,11)
<i>Difference in Pre and Post Scores</i>				
Mean ± SD	0.75 ± 8.66	9.40 ± 8.14	10.20 ± 4.55	0.15 [‡] (F = 2.26; df=2,11)
p-value (comparing pre and post)	0.87 [§] (t= -0.17; df=3)	0.06 [§] (t=-2.58; df=4)	0.007 [§] (t=-5.01; df=4)	

* $p>0.05$ - Not significant; $p \leq 0.05$ -Significant [‡]ANOVA; [§]Paired t-test

Table 5 depicts the comparison of the verb tenses pretest and posttest scores between the three groups. Comparing the verb tenses pretest score between the three groups, no significant difference was noted, as shown by the p-value of 0.54 ($F = 0.64$; $df=2,11$). With a significance of ≤ 0.05 , the p-value obtained implies that the assessments of the three groups for their pretest are statistically on the same level.

Additionally, there is no significant difference in the verb tenses posttestpost-test scores between groups with a p-value of 0.48 ($F = 0.78$; $df= 2,11$). With a significance of ≤ 0.05 , the p-value obtained implies that the assessments of the three groups for their posttest are statistically on the same level.

Lastly, there is no significant difference in difference in the verb tenses pretest and posttest scores between the three groups with a p-value of 0.52 ($F = 2.26$; $df= 2,11$). With a significance of ≤ 0.05 , the p-value obtained implies that the assessment of the three groups for their difference in their pretest and posttest are statistically on the same level.

Looking within each group, there is no significant difference in the pretest and the posttest scores in the Uncontrolled Group ($p=0.16$). This implies that despite achieving the highest percentage of change among the three groups, this increase is not valuable in identifying and explaining the perceived positive or negative effect of social media on the language acquisition of ESL students.

However, there is a significant increase in Control Group A ($p=0.003$) and Control Group B ($p=0.03$). This means that the utilization of TikTok videos, either from a single content creator or from multiple content creators, is helpful in developing and improving the verb tense skills of second language learners.

Muico (2021) reported this increase in the posttest scores in English syntax compared to the pretest scores of college students in Mindanao after watching YouTube videos. The moderate level of scores from their first exam, according to Muico (2021) can be accounted for through the interference of their first language - in this case, Cebuano - to their second language. Alimemaj (2010), as cited by Muico (2021), claimed that language teachers may utilize YouTube videos to improve their students' learning skills. With this, the research can be used as a basis

for ESL teachers and English educators that the use of social media, particularly TikTok, can be effective in developing and improving the English proficiency of language learners.

Table 5. Comparing the Verb Tenses Pretest and Posttest Scores Between the Three Groups.

Verb Tenses Test Scores	Uncontrolled	Groups Control Group A	Control Group B	p-value
<i>Pretest Score</i>				
Mean ± SD	10.25 ± 7.32	14.80 ± 6.76	10.80 ± 6.18	0.54 [‡] (F = 0.64; df=2,11)
<i>Posttest Score</i>				
Mean ± SD	14.75 ± 10.87	20.00 ± 7.97	13.80 ± 6.30	0.48 [‡] (F = 0.78; df=2,11)
<i>Difference in Pre and Post Scores</i>	4.50 ± 4.80	5.20 ± 1.78	3.00 ± 2.12	0.52 [‡] (F = 0.69; df=2,11)
Mean ± SD				
<i>p-value (comparing pre and post)</i>	0.16 [§] (t= -1.88; df=3)	0.003 [§] (t=-6.50; df=4)	0.03 [§] (t=-3.90; df=4)	

* $p>0.05$ - Not significant; $p \leq 0.05$ -Significant [‡]ANOVA; [§]Paired t-test

Table 6 depicts the comparison of the reading comprehension pretest and posttest scores between the three groups. Comparing the reading comprehension pretest scores between the three groups, no significant difference was noted, as shown by the p-value of 0.71 (F = 0.35; df=2,11). With a significance of ≤ 0.05 , the p-value obtained implies that the assessments of the three groups for their pretest are statistically on the same level.

Furthermore, there is no significant difference in the reading comprehension posttest scores with a p-value of 0.74 (F = 0.31; df= 2,11). With a significance of ≤ 0.05 , the p-value obtained implies that the assessments of the three groups for their posttest are statistically on the same level.

Additionally, there is no significant difference in difference in the reading comprehension pretest and posttest scores between the three groups with a p-value of 0.49 ($F = 0.76$; $df = 2,11$). With a significance of ≤ 0.05 , the p-value obtained implies that the assessment of the three groups for their difference in their pretest and posttest are statistically on the same level.

Looking within each group, there is no significant difference in the reading comprehension pretest and posttest scores in the Uncontrolled Group ($p = 0.18$). This implies that despite the increase in the posttest score compared to the pretest, the difference cannot be perceived as valuable to this group of ESL students.

However, there is a trend towards a significant level in Control Group A ($p = 0.12$). As the number of respondents is small, the significance level is expected to improve if the experiment was applied to a larger number of students. This implies that the use of social media, particularly TikTok videos from a single content creator, in teaching ESL students' vocabulary can be beneficial and effective.

Additionally, there is a significant increase in Control Group B ($p = 0.02$). This means that watching TikTok videos from multiple content creators on reading comprehension is helpful in developing and improving students' English language skills and comprehension.

The same result was discovered by Hayikaleng and Krishnasamy (2017) on vocational students in Thailand when an experimental group was exposed to YouTube videos containing reading comprehension materials compared to the control group, which was not exposed to any YouTube videos. There was a significant difference in the mean score for reading comprehension, using lower-order thinking skills questions and higher-order thinking skills questions. With this, the research can be used as a basis for ESL teachers and English educators that the use of social media, particularly TikTok, can be effective in developing and improving the English proficiency of language learners.

Table 6. Comparing the Reading Comprehension Pretest and Posttest Scores Between the Three Groups.

Reading Comprehension Test Scores	Control	Control Group A	Control Group B	p-value
Pretest Score				
Mean ± SD	7.25 ± 5.12	4.80 ± 6.02	5.20 ± 1.48	0.71 [‡] (F = 0.35; df=2,11)
Posttest Score				
Mean ± SD	11.25 ± 5.56	11.80 ± 6.83	14.40 ± 6.84	0.74 [‡] (F = 0.31; df=2,11)
Difference in Pre and Post Scores				
Mean ± SD	4.00 ± 4.54	7.00 ± 7.84	9.20 ± 5.68	0.49 [‡] (F = 0.76; df=2,11)
p-value (comparing pre and post)	0.18 [§] (t= -1.76; df=3)	0.12 [§] (t=-1.99; df=4)	0.02 [§] (t=-3.63; df=4)	

* $p > 0.05$ - Not significant; $p \leq 0.05$ -Significant

[‡]ANOVA; [§]Paired t-test

Table 7 depicts the comparison of the cumulative pretest and posttest scores between the three groups. Comparing the cumulative pretest score between the three groups, no significant difference was noted, as shown by the p-value of 0.68 ($F = 0.40$; $df=2,11$). With a significance of ≤ 0.05 , the p-value obtained implies that the assessments of the three groups for their pretest are statistically on the same level.

Additionally, there is no significant difference in the cumulative posttest scores with a p-value of 0.44 ($F = 0.89$; $df= 2,11$). With a significance of ≤ 0.05 , the p-value obtained implies that the assessments of the three groups for their posttest are statistically on the same level.

Furthermore, there is a marginally significant difference in the cumulative pretest and posttest scores between the three groups with a p-value of 0.10 (using a Kruskal Wallis test). As the number of respondents is small, the significance level is expected to improve if the experiment is applied to a larger number of students. This implies that the use of social media, particularly TikTok videos, in teaching ESL students vocabulary can be beneficial and effective to the learners.

Looking within each group, there is no significant difference in the cumulative pretest and posttest scores in the Uncontrolled Group ($p=0.44$). This implies that improving their scores from the pretest to posttest, the posttest is not valuable in identifying and explaining the perceived positive or negative effect of social media on the language acquisition of ESL students.

However, there is a significant increase in Control Group A ($p=0.01$) and a significant increase in Control Group B ($p=0.000$). This implies that the use of TikTok videos from a single content creator and multiple content creators is helpful in developing and improving the English language comprehension of ESL students, focusing on the parts of speech, vocabulary, verb tenses, and reading.

Ibrahim (2023)⁵¹ came to the same findings in his study and noted that the use of TikTok videos is helpful because of the various animations, graphics, and other visual elements that provide a more engaging and interactive learning experience for learners.

Furthermore, Abdullah, Mohamad, Kamal, and Isa (2023) revealed in their study that college students in Malaysia showed that the perceived usefulness and ease of use of TikTok have a positive impact on their language learning.

Table 7. Comparing the Cumulative Pretest and Posttest Scores Between the Three Groups.

Total Test Scores	Uncontrolled	Control Group A	Control Group B	p-value
<i>Pretest Score</i>				
Mean ± SD	43.75 ± 29.80	48.40 ± 18.81	36.00 ± 18.26	0.68 [‡] (F = 0.40; df=2,11)
<i>Posttest Score</i>				
Mean ± SD	52.75 ± 24.80	71.40 ± 20.74	65.00 ± 18.06	0.44 [‡] (F = 0.89; df=2,11)
<i>Difference in Pre and Post Scores</i>				
Mean ± SD	9.00 ± 20.12	23.00 ± 12.35	29.00 ± 3.81	0.10
p-value (comparing pre and post)	0.44 [§] (t= -0.90; df=3)	0.01 [§] (t=-4.16; df=4)	0.000 [§] (t=-17.03; df=4)	

* $p>0.05$ - Not significant; $p \leq 0.05$ -Significant [‡]ANOVA; [§]Paired t- test; ^{||} Kruskal Wallis test

Conclusion and Recommendations

The higher the exposure to TikTok with English language content videos, the more proficient the English language comprehension among high school ESL students will be. Moreover, higher exposure to TikTok with English language content videos from multiple creators will result in a higher English language proficiency of high school ESL students compared to students who are exposed to a single TikTok video creator only. Based on the findings of the research, the use of TikTok videos containing English language content is helpful to English language learners, as evidenced by the increase in pretest and posttest scores.

With the findings highlighted in this study, the researcher recommends that the institution adopt the use of TikTok in their English lessons for their foreign students and in other subjects. The innovations in the media and communication landscape can help achieve the school's goal of providing quality education to students of different cultures in response to Sustainable Development Goals 4 (Quality Education) and 9c (Industry, Innovation, and Infrastructure). The school can develop

facilities and other capacities that will support learning outside the borders of the school.

As the direct recipients of this study, the researcher recommends that the students, particularly those who do not speak English as their first or second language, explore the use of TikTok not only as part of their curriculum but also during their leisure time. The use of a particular social media platform not only as a form of entertainment but also as a form of learning beyond the scope of their classroom can be beneficial for them.

Similarly, teachers should investigate improving their teaching methods by using new media devices as a supplement to their instructional materials.

It is recommended that parents use media, particularly TikTok, to help their children acquire a second language. With careful selection and parental guidance on the content of the videos their child watches, English proficiency can be developed even inside the confines of the home.

The government, through its education sector, is recommended to adopt policies that will ensure that Sustainable Development Goals 4 (Quality Education) and 9c (Industry, Innovation, and Infrastructure) are addressed by incorporating the use of social media and emerging communication technologies in its programs and projects. This may aid in improving the PISA results and ranking of Filipino students in the next assessment periods.

The researcher also recommends that the future researchers study the following variables:

1. The same experiment be conducted on Filipino students on how their English proficiency can be improved using TikTok.
2. Other learning content in TikTok, such as Mathematics, Filipino, Science, and Social Studies, and how these subjects can utilize the platform to ease the students' understanding of their lessons.
3. Other language-based content in TikTok, such as Chinese, Spanish, French, and Korean, among others, and how Filipinos can utilize the platform to learn another language.

4. A longer period of experiment for students, particularly a whole school year with ten months of teaching, to see the difference in the scores of the students from the first day of classes and the last day of classes.
5. A larger sample size would yield a greater difference in the p-value of the ANOVA and t-test and would provide more generalizable information.

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