

Digital distraction, vocabulary size and grammatical accuracy of Grade 10 learners

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ABSTRACT

This study examined the relationships among digital distraction, vocabulary size, and grammatical accuracy of Grade 10 students in the Province of Capiz for the school year 2025 to 2026. Using a mixed methods design that combined survey correlational research with a focus group discussion, the study gathered data from 388 students selected through stratified random sampling from a total population of 12,941 Grade 10 learners across the province. Three researcher made instruments were used, namely a 20 item Digital Distraction Questionnaire, a 25 item Vocabulary Size Test, and a 25 item Grammatical Accuracy Test, all of which underwent expert validation and reliability testing through Cronbach's Alpha. Results showed that students exhibited a high level of digital distraction, a moderate level of vocabulary size, and a moderate level of grammatical accuracy. Analysis of variance revealed a significant difference in grammatical accuracy when students were grouped according to levels of digital distraction and according to levels of vocabulary size. Pearson r results indicated a significant relationship between digital distraction and grammatical accuracy, while no significant relationship was found between digital distraction and vocabulary size, nor between vocabulary size and grammatical accuracy. Findings from the focus group discussion affirmed and enriched these quantitative results, revealing that students perceive vocabulary knowledge and grammatical accuracy as related yet distinct skills, and that digital engagement affects language performance differently depending on individual self-regulation and study habits. The study concludes that digital distraction significantly influences grammatical performance, while vocabulary size functions independently of grammatical accuracy. These findings underscore the need for balanced technology integration, focused instructional strategies, and combined vocabulary and grammar interventions to strengthen the English language proficiency of Grade 10 learners in digitally mediated classrooms.

Keywords: Digital distraction, vocabulary size, grammatical accuracy.

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INTRODUCTION

In secondary education, students are expected to demonstrate competence in reading, writing, and communication, making English language proficiency a fundamental requirement for academic achievement. Among the essential components of English competency,

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grammatical accuracy and vocabulary size play significant roles in students' ability to communicate effectively. Grammatical accuracy enables learners to organize clear, coherent, and correct expressions in both written and spoken communication, while vocabulary knowledge allows students to comprehend academic materials, express ideas effectively, and participate meaningfully in learning activities. Consequently, students' mastery of grammatical structures and breadth of vocabulary significantly influence their performance in academic tasks and overall language development.

However, the rapid integration of digital technologies in the twenty first century has transformed the educational landscape and reshaped how students learn and interact with information. Learners who frequently use computers, tablets, and smartphones for academic and non-academic purposes are considered digital natives, particularly students at the Grade 10 level who have grown alongside technological advancements. While these digital tools provide extensive access to educational resources, communication platforms, and instructional materials, they also introduce challenges that may interfere with learning processes. One emerging concern is the increasing prevalence of digital distraction, wherein students shift their attention from academic responsibilities toward non-academic digital activities such as social media engagement, online gaming, entertainment applications, and continuous messaging.

Recent studies emphasize that vocabulary size and grammatical expertise significantly influence learners' language performance, particularly in reading comprehension, academic writing, and overall communication ability (Nation, 2016; Quines, 2022; Ridwan, 2024). In the Province of Capiz, Grade 10 learners are increasingly dependent on digital devices, with technology becoming deeply embedded in their everyday routines. Although these devices provide immediate access to information and learning opportunities, excessive and uncontrolled usage may redirect students' attention away from language related activities. When digital devices are primarily used for entertainment and social interaction, learners may spend less time engaging with reading materials, practicing grammar, and developing vocabulary, which may negatively influence their English language proficiency.

Digital distraction occurs when learners' attention is diverted from academic activities toward digital content unrelated to learning. While technology can enhance educational experiences through online resources, communication tools, and interactive learning platforms, excessive use may reduce students' ability to maintain concentration and engage deeply with academic tasks. Sustained attention is essential for developing language competencies such as vocabulary acquisition and grammatical mastery; however, frequent exposure to notifications, social media, and online entertainment may weaken students' focus and reduce opportunities for meaningful language practice. Rosen et al. (2017) noted that excessive multitasking and continuous digital engagement reduce learners' sustained attention, academic engagement, and productivity. Similarly, Martin, Long, and Haywood (2025) explained that multitasking negatively affects the use of cognitive strategies required for learning and knowledge retention by dividing attention and increasing demands on working memory.

When students engage in non-academic digital activities, their cognitive resources become divided, making it more difficult to concentrate on academic requirements. Research by Rosen et al. (2017) revealed that excessive multitasking, frequent notifications, and constant connectivity reduce learners' ability to maintain focus, process information effectively, and complete academic tasks successfully. Similarly, Throuvala et al. (2021) reported that digital distraction contributes to reduced classroom engagement, incomplete assignments, and decreased comprehension among learners. These patterns are evident among Grade 10 students who experience difficulties maintaining attention during English classes, resulting in lower participation, limited comprehension, and weaker academic performance.

Vocabulary size is one of the most important components of English language competency, particularly among secondary learners who encounter increasingly complex

academic texts and concepts. Vocabulary size refers to the number of words students understand, recognize, and effectively use in communication. Learners with extensive vocabulary knowledge are more capable of comprehending academic materials, expressing ideas clearly, and actively participating in classroom discussions. According to Nation (2016), vocabulary knowledge strongly contributes to reading comprehension, writing effectiveness, and general language ability. Quines (2022) further emphasized that vocabulary development is essential for successful language learning, particularly among second language learners.

Students with limited vocabulary often experience difficulties understanding textbooks, interpreting complex concepts, and expressing their ideas effectively. Nation (2016) argued that vocabulary knowledge serves as a foundation for academic performance because learners require sufficient word knowledge to comprehend and produce meaningful language. Moreover, Webb and Nation (2017) highlighted that regular exposure to reading materials and active engagement with written language tasks are important predictors of vocabulary development. However, this exposure may be reduced when students spend excessive amounts of time on digital platforms unrelated to learning.

As Grade 10 students encounter increasingly complex academic vocabulary, limited word knowledge may hinder their ability to understand lessons, participate in discussions, and achieve academic success. Crossley et al. (2020) found that insufficient vocabulary knowledge restricts learners' comprehension, classroom participation, and academic performance. The widespread use of digital devices may further contribute to this challenge because excessive non-academic technology use reduces time spent on language rich activities such as reading and writing. Rosen et al. (2017) and Rogers and Cheung (2021) reported that frequent multitasking and mobile phone engagement negatively affect vocabulary acquisition by reducing learners' attention toward meaningful linguistic input. Recent Philippine studies also indicate that vocabulary remains a significant factor influencing students' English comprehension and performance, highlighting the need to examine how digital distraction affects vocabulary development.

Beyond vocabulary knowledge, grammatical accuracy represents another essential dimension of English language proficiency. Grammatical accuracy refers to learners' ability to construct meaningful and correct sentences through appropriate application of syntax, morphology, and grammatical structures. It enables students to communicate ideas clearly, maintain coherence, and convey accurate meanings in both written and oral contexts. According to Crossley et al. (2020), grammatical competence is necessary for effective communication because it supports learners' ability to produce organized and comprehensible language. Errors in grammar, fragmented sentences, and inaccurate structures may limit students' ability to express ideas effectively and perform successfully in academic environments.

Developing grammatical accuracy requires consistent practice, sustained attention, and continuous interaction with language materials. However, learners who frequently experience divided attention due to digital multitasking may struggle to consistently apply grammatical rules. Cheung et al. (2021) reported that reduced attention caused by digital activities may contribute to difficulties in maintaining grammatical accuracy in communication. Similarly, Haywood et al. (2025) emphasized that digital distractions limit opportunities for intentional language practice and focused engagement with academic activities. In the Philippine educational setting, classroom assessments and teacher observations indicate that many learners continue to struggle with constructing coherent paragraphs, producing syntactically accurate sentences, and communicating ideas effectively due to vocabulary limitations and grammatical difficulties (Crossley et al., 2020).

The relationship between digital distraction, vocabulary size, and grammatical accuracy highlights the importance of examining these variables together. Although previous studies have investigated digital technology use and language proficiency separately, limited research has explored how attention related digital behaviors influence both vocabulary development and grammatical competence among Filipino Grade 10 learners. Understanding this relationship is essential in developing interventions and instructional strategies that improve English proficiency while promoting responsible and purposeful technology use in learning environments.

The increasing use of digital technology in classrooms has changed the way students acquire language skills. Digital tools provide valuable opportunities for learning; however, they may also create distractions that redirect attention from academic tasks toward entertainment and social activities. Notifications, social networking platforms, and entertainment applications used during study periods may interfere with concentration and reduce time spent on important language activities, thereby restricting vocabulary growth and grammar practice (Agustiani et al., 2025). These challenges may become more pronounced among learners with limited support systems at home, where opportunities for shared reading, educational interaction, and language exposure may be restricted (Forget Dubois et al., 2009; Raikes et al., 2006; Richman & Colombo, 2007; Sundqvist et al., 2024).

Digital distraction influences academic performance through observable behaviors such as reduced engagement, incomplete academic activities, and decreased comprehension (Throuvala et al., 2021; McCoy, 2016). Vocabulary knowledge remains essential for understanding complex texts, communicating ideas, and participating in academic discussions. Nevertheless, many learners continue to experience vocabulary limitations that affect comprehension and academic achievement (Nation, 2016; Webb & Nation, 2017; Li & Kirby, 2018; Crossley et al., 2020). Excessive non-academic digital usage may further hinder vocabulary development by reducing learners' exposure to meaningful linguistic input (Rosen et al., 2017; Rogers & Cheung, 2021). Likewise, grammatical accuracy requires sustained attention, regular practice, and engagement with language activities. Students who are frequently distracted by digital media may demonstrate recurring grammatical errors because they experience difficulty applying language rules consistently in writing and speaking (Rogers & Cheung, 2021; Agustiani, Ramdha, & Rery, 2025).

The interconnected relationship among digital distraction, vocabulary size, and grammatical accuracy can be understood through several theoretical perspectives. This study is anchored on Cognitive Load Theory proposed by Sweller (1988), which explains that working memory has limited capacity. When learners engage in multitasking or receive excessive information simultaneously, their cognitive resources become overloaded, reducing learning efficiency and retention. This theory provides a foundation for understanding why students who frequently engage with digital distractions may experience difficulties processing and remembering language information.

The study is also supported by the Limited Capacity Model of Attention by Lang (2000), which explains that attention is a limited cognitive resource that must be distributed among competing stimuli. When students divide their attention between academic tasks and digital activities, their ability to process language information decreases, resulting in weaker comprehension and performance. Furthermore, Attention Control Theory explains that learners are vulnerable to digital disruptions because anxiety, distractions, and competing stimuli interfere with goal directed attention (Kim et al., 2023). Digital notifications, online interactions, and constant connectivity may interrupt cognitive focus and negatively influence language learning outcomes.

Constructivist Learning Theory of Bruner (1960) further supports the study by emphasizing that learners construct knowledge through meaningful experiences and active

participation. Effective learning occurs when students actively engage with information rather than passively receive knowledge. However, digital distractions may interrupt meaningful engagement and limit opportunities for cognitive processing. Previous research indicates that students frequently use digital devices for non-academic activities such as entertainment and browsing, which diverts attention from learning tasks and decreases academic focus (Taneja, Fiore, & Fischer, 2015).

Attention Control Theory further explains that learning requires coordination between stimulus driven attention and goal directed attention. Digital distractions activate stimulus driven responses that compete with the focused attention required for academic activities. Agustiani, Ramdha, and Rery (2025) found that smartphone notifications, social media engagement, and multitasking significantly disrupt vocabulary learning among English learners due to reduced self-regulation and attentional control. Research on self-regulation and distractive multitasking also emphasizes the importance of learner control in managing digital distractions and maintaining academic focus (Education and Information Technologies, 2024).

Together, these theoretical perspectives provide a framework for understanding how digital distraction may influence vocabulary size and grammatical accuracy. Cognitive Load Theory and the Limited Capacity Model explain how divided attention and excessive cognitive demands reduce learning efficiency, while Attention Control Theory explains how external digital stimuli interfere with focused learning. Constructivist Learning Theory reinforces the importance of meaningful engagement in developing language competencies. Collectively, these theories suggest that frequent digital distraction may contribute to reduced attention, cognitive overload, limited language exposure, and weaker opportunities for vocabulary and grammar development.

Digital distraction, vocabulary size, and grammatical accuracy are therefore viewed as interconnected factors affecting English language development among Grade 10 learners. Digital distraction represents students' tendency to shift attention from academic responsibilities toward digital platforms such as social media, games, and entertainment applications. Prolonged exposure to these distractions may negatively affect working memory, concentration, and engagement, which are essential for vocabulary acquisition and grammar development. Vocabulary size reflects the number of words learners understand and use effectively, influencing reading comprehension, speaking, and writing performance. Meanwhile, grammatical accuracy refers to students' ability to construct correct sentences using appropriate language structures and rules.

This study assumes that digital distraction negatively affects students' vocabulary size and grammatical accuracy. Specifically, higher levels of digital distraction are expected to be associated with lower vocabulary knowledge and reduced grammatical correctness among Grade 10 learners. As technology becomes increasingly integrated into students' daily lives, understanding how digital behaviors influence language learning is essential for developing strategies that promote focused learning, responsible technology use, and improved English proficiency.

Despite existing research on digital distraction and language learning, limited studies have examined the combined relationship between digital distraction, vocabulary size, and grammatical accuracy among Grade 10 students in the Philippine context. This gap highlights the need to investigate how technology related distractions influence major components of English proficiency. By examining these relationships, educators may develop targeted interventions that support language development while addressing challenges associated with digital learning environments.

Thus, this study focuses on digital distraction and vocabulary size as independent variables and grammatical accuracy as the dependent variable. Through examining the relationship among these variables, the study aims to determine the extent to which digital distraction influences the English language competence of Grade 10 students in the Province of Capiz. The findings may provide valuable insights for teachers, learners, and educational stakeholders in developing strategies that strengthen vocabulary development, improve grammatical accuracy, and promote effective technology management in contemporary learning environments.

Statement of the problem

The study aimed to determine the levels of digital distraction and vocabulary size and the grammatical accuracy of Grade 10 students in the Province of Capiz for the School Year 2025-2026.

Specifically, this study sought to answer the following questions:

1. What is the level of digital distraction among Grade 10 students?
2. What is the level of vocabulary size of Grade 10 students?
3. What is the level of grammatical accuracy of Grade 10 students?
4. Is there a significant difference in the grammatical accuracy among the levels of digital distraction among Grade 10 students?
5. Is there a significant difference in the grammatical accuracy among the levels of vocabulary size among Grade 10 students?
6. Is there a significant relationship among digital distraction, vocabulary size, and grammatical accuracy of Grade 10 students?

METHODOLOGY

This study aimed to ascertain the influence of socioeconomic status and self-esteem on the academic behavior of Junior High School students in the province of Capiz for the School Year 2025-2026, and toward this end a mixed-methods research strategy combining qualitative and quantitative approaches was employed. A mixed-methods research design, according to Creswell (2012), is a strategy for gathering, evaluating, and mixing quantitative and qualitative research techniques in a single study in order to comprehend a research problem, and it requires gathering, analyzing, interpreting, and reporting both qualitative and quantitative data in order to address research issues in a suitable and ethical manner. Quantitative research, in contrast to qualitative research, which relies on participant opinions, asks broad, general questions, gathers data primarily in the form of words or text from participants, and describes and analyzes these words for themes in a subjective, biased manner, instead decides what to study, asks specific, narrow questions, collects quantifiable data from a large number of participants, analyzes these numbers using statistics, and conducts the inquiry in an unbiased, objective manner (Creswell, 2012).

The quantitative component of this study made use of the survey-correlational research design. The survey method obtains data to determine the specific characteristics of a group, with the purpose of a survey being to get a general picture of the characteristics of a study population at a particular time. Correlational research, meanwhile, was defined by David (2004, as cited in Sabid, 2014) as an attempt to explain the nature of association or relationship between two or more quantifiable variables, the purpose of which is to establish a relationship, or the lack of one, or to use a relationship in making predictions. The qualitative component of the study, on the other hand, made use of the Focus Group Discussion (FGD), an informal in-depth discussion in which a small number of participants, ranging from six to twelve, under

the guidance of a moderator or facilitator, talk about topics of special importance to a particular research issue (Creswell, 2012). The FGD was used to explain and interpret more fully the results of the surveys and to further confirm and verify the result of the quantitative data obtained from the study.

The independent variables in this study were digital distraction and vocabulary size, while the dependent variable was the grammatical accuracy of grade 10 students. The data were analyzed using descriptive statistics, specifically the mean and standard deviation, to describe the level of each variable, and inferential statistics, specifically the Pearson r , to determine the strength and direction of the relationships among digital distraction, vocabulary size, and grammatical accuracy. The statistical tools used in the study were frequency count, percentage, mean, and standard deviation, while the inferential statistics used were the Analysis of Variance and the Pearson r , with the alpha level of significance set at 0.05.

The participants of this study were 388 respondents drawn from a total population of 12,941 grade 10 students in the province of Capiz. The distribution of the sample across the various schools in the province was as follows: Adlawan Integrated School, with a population of 31, had a sample of 1; Bago National High School, with a population of 27, had a sample of 1; Balijuagan National High School, with a population of 67, had a sample of 2; Cogon Integrated School, with a population of 25, had a sample of 1; Congressman Ramon A. Arnaldo NHS, with a population of 281, had a sample of 9; Culasi National High School, with a population of 121, had a sample of 4; Don Amado Bayot Sr. IS, with a population of 58, had a sample of 2; Don Canuto Fuentes IS, with a population of 19, had a sample of 1; Don Jose Acevedo IS, with a population of 24, had a sample of 1; Don Juan B. Celino IS, with a population of 30, had a sample of 1; Don Ynocencio A. Del Rosario NHS, with a population of 210, had a sample of 7; Dumolog National High School, with a population of 74, had a sample of 2; Inzo Arnaldo Village IS, with a population of 130, had a sample of 4; Lawaan Integrated School, with a population of 155, had a sample of 5; Loctugan Integrated Farm School, with a population of 50, had a sample of 2; Marcos Fuentes IS, with a population of 104, had a sample of 3; Milibili National High School, with a population of 61, had a sample of 2; Olotayan Integrated School, with a population of 20, had a sample of 1; President Manuel Roxas South IS, with a population of 156, had a sample of 5; President Manuel Roxas IS SPED, with a population of 17, had a sample of 1; Roxas City School of Craftsmen, with a population of 202, had a sample of 6; Sofronio A. Cordero IS, with a population of 54, had a sample of 2; Tanque National High School, with a population of 159, had a sample of 5; Agkawayan IS, with a population of 17, had a sample of 1; Aglalana IS, with a population of 67, had a sample of 2; Aglanot IS, with a population of 30, had a sample of 1; Antonio Belo Memorial IS, with a population of 45, had a sample of 1; Bago Chiquito IS, with a population of 20, had a sample of 1; Bailan IS, with a population of 69, had a sample of 2; Bilao IS, with a population of 53, had a sample of 2; Bula IS, with a population of 30, had a sample of 1; Bungsuan NHS, with a population of 40, had a sample of 1; Camburanan NHS, with a population of 188, had a sample of 6; Canapian IS, with a population of 32, had a sample of 1; Candelaria NHS, with a population of 501, had a sample of 16; Capiz NHS, with a population of 674, had a sample of 6; Casanayan NHS, with a population of 83, had a sample of 3; Col. Patrocenio Artuz NHS, with a population of 846, had a sample of 26; Commissioner Luis R. Asis NHS, with a population of 179, had a sample of 6; Concepcion Castro Garcia NHS, with a population of 194, had a sample of 6; Cuartero NHS, with a population of 370, had a sample of 12; Dao NHS, with a population of 97, had a sample of 3; David Moises Memorial NHS, with a population of 261, had a sample of 8; Dayhagan IS, with a population of 24, had a sample of 1; Don Felix Balgos Memorial NHS, with a population of 274, had a sample of 9; Dr. Vicente V. Andaya

Sr. NHS, with a population of 152, had a sample of 5; Dulangan NHS, with a population of 65, had a sample of 2; Duluan IS, with a population of 23, had a sample of 1; Dumalag Central NHS, with a population of 387, had a sample of 12; East Villa Flores NHS, with a population of 140, had a sample of 4; Estefania Montemayor NHS, with a population of 314, had a sample of 10; Feliciano Yusay Consing NHS, with a population of 94, had a sample of 3; Felixberto Dicon Dorado Sr. IS, with a population of 30, had a sample of 1; Florentina B. Degala NHS, with a population of 45, had a sample of 1; Guinbalian IS, with a population of 17, had a sample of 1; Guise IS, with a population of 17, had a sample of 1; Ishmael Orillos NHS, with a population of 86, had a sample of 3; Ivisan NHS, with a population of 128, had a sample of 4; Jagnaya NHS, with a population of 316, had a sample of 10; Jamindan NHS, with a population of 457, had a sample of 14; Jose Diva Avelino Memorial NHS, with a population of 255, had a sample of 8; Leodegario D. Deocampo Sr. NHS, with a population of 126, had a sample of 4; Lucero NHS, with a population of 370, had a sample of 12; Luis Escuton NHS, with a population of 61, had a sample of 2; Maayon NHS, with a population of 72, had a sample of 2; Macario Bermejo NHS, with a population of 47, had a sample of 1; Maindang NHS, with a population of 365, had a sample of 11; Malonoy NHS, with a population of 128, had a sample of 4; Mambusao East NHS, with a population of 143, had a sample of 4; Mambusao NHS, with a population of 96, had a sample of 3; Manuel F. Onato Memorial NHS, with a population of 98, had a sample of 3; Manuel Ganzon Advincula IS, with a population of 27, had a sample of 1; Marciano Patricio NHS, with a population of 236, had a sample of 7; Mianay NHS, with a population of 107, had a sample of 3; Panitan NHS, with a population of 296, had a sample of 9; Pawa NHS, with a population of 115, had a sample of 4; Pontevedra NHS, with a population of 110, had a sample of 3; Presentacion Diez Gregorio NHS, with a population of 42, had a sample of 1; Putian NHS (duplicate entry), with a population of 480, had a sample of 15; Ramon A. Benjamin Sr. NHS, with a population of 56, had a sample of 2; Rev. Tomas Conejar NHS, with a population of 42, had a sample of 1; San Antonio NHS, with a population of 139, had a sample of 4; San Nicolas NHS (Pilar), with a population of 35, had a sample of 1; Sapien NHS, with a population of 49, had a sample of 2; Sinamongan IS, with a population of 30, had a sample of 1; Tapaz NHS, with a population of 324, had a sample of 10; Tapulang IS, with a population of 26, had a sample of 1; Tuburan NHS, with a population of 136, had a sample of 4; and Yating NHS, with a population of 94, had a sample of 3. In total, these schools accounted for a combined population of 12,941 grade 10 students, from which a total sample of 388 participants was drawn.

The required number of participants for this study was determined using Cochran's formula, a widely used statistical method for determining the sample size required to represent a given population accurately, ensuring that the chosen sample is large enough to yield reliable and valid results, particularly when the goal is to estimate proportions or percentages in a population. The study utilized stratified random sampling to determine the number of participants from the different schools, a method that involves the division of the population into smaller groups known as strata, with the strata formed based on members' shared attributes or characteristics; a random sample from each stratum was then taken in a number proportional to the stratum's size when compared to the population, and these subsets of the strata were pooled to form a random sample. The participants were selected at random using the drawing of lots, meaning that all the names of students per school were written on rolled slips of paper and placed in a box, from which the required number of respondents was drawn, with the names of the students drawn from each box serving as the participants in the study. The proportional allocation formula was used to obtain the appropriate sample size from each school involved in the study.

Three separate instruments were used in this study to gather the needed quantitative data. The first instrument gathered the digital distraction of the participants, the second

instrument aimed at gathering data on the vocabulary size of students, and the third instrument gathered the grammatical accuracy of grade 10 students. To determine the digital distraction of the participants, a researcher-made Digital Distraction Survey Questionnaire was used, which included students' duration of gadget use, frequency of gadget use, attention control, and cognitive preoccupation. The reliability coefficient of 0.893 indicates that the researcher-made questionnaire has a high level of consistency, meaning that the 20-item test is strongly related and consistently measures the same competence; the value of 0.80 shows that the instrument is valid and acceptable for research use. Prior to the use of the instrument, it underwent content validation by a panel of experts, and all suggestions and recommendations were incorporated into the assessment tools. For statistical purposes, the following numerical weights were assigned to respective responses: 5 for Always, 4 for Often, 3 for Sometimes, 2 for Seldom, and 1 for Never. For the descriptive interpretation of the mean score, the following scale was arbitrarily used: a mean of 4.21-5.00 was described as Highly distracted, 3.41-4.20 as Moderately distracted, 2.61-3.40 as Slightly distracted, 1.81-2.60 as Less distracted, and 1.00-1.80 as Not distracted.

To measure the level of vocabulary size of students, a 25-item researcher-made Vocabulary Test aligned with the MELCs of the K to 12 curriculum was used. Before the use of the instrument, it underwent content validation by a panel of experts, and all suggestions and recommendations were incorporated into the assessment tools; it was then pilot tested on 30 learners who were not included as participants of the study. The result of the reliability testing using the Statistical Package for Social Science (SPSS) software served as the basis for whether items were retained, revised, or discarded. The reliability and construct validity of the instrument were assessed using Cronbach's Alpha and Exploratory Factor Analysis (EFA), respectively, to ensure internal consistency, with reliability coefficients (α) > 0.70 and factor loadings > 0.50 generally accepted; the reliability test resulted in a Cronbach's alpha value of .893, showing that the instrument was highly reliable. For the descriptive interpretation of the mean score, the following scale was arbitrarily used: a mean of 20.01-25 was described as Very High, 15.01-20 as High, 10.01-15 as Moderate, 5.01-10 as Low, and 0-5 as Very Low.

To measure the level of grammatical accuracy of students, a 25-item researcher-made Grammatical Accuracy Test aligned with the DepEd K to 12 MELCs, with components of sentence completion, error recognition, and sentence transformation, was used. Prior to the use of the instrument, it underwent content validation by a panel of experts, and all suggestions and recommendations were incorporated into the assessment tools; it was then pilot tested on 30 learners who were not included as participants of the study, and the result of the reliability testing using SPSS software served as the basis for whether items were retained, revised, or discarded. The reliability of the grammatical accuracy test was assessed using Cronbach's Alpha to ensure internal consistency of the test items, with a reliability coefficient of α > 0.70 generally considered acceptable, and content validity was established through expert validation to ensure that the test items adequately measure grammatical accuracy; the reliability test resulted in a Cronbach's alpha value of .854, showing that the instrument was highly reliable. For the descriptive interpretation of the mean score, the following scale was arbitrarily used: a mean of 20.01-25 was described as Very High, 15.01-20 as High, 10.01-15 as Moderately, 5.01-10 as Low, and 0-5 as Very Low.

The qualitative data needed in the study were gathered using the Focus Group Discussion. Grade 10 students from the different schools in the province of Capiz were invited to the focus group discussion, a planned, facilitated discussion among a small group of stakeholders designed to obtain perceptions in a defined area of interest in a permissive, non-threatening environment (Slocum, 2005, as cited in Crespo, 2018). The researcher constructed

a focus group discussion guide for the participants, consisting of 12 questions, and submitted it to a jury for suggestions and recommendations; the 12 questions aimed to elicit the discussants' views and perceptions on the challenges encountered, the effectiveness of the MELCs, and English proficiency.

Before the actual conduct of the study, the researcher sought permission from the Dean of the Graduate School of Filamer Christian University and the Schools Division Superintendents of the Capiz and Roxas City Divisions through a letter. After the letter was approved, the researcher then sought permission from the school heads to allow the researcher to utilize some of the learners in their schools. After this approval was secured, the researcher then sought the permission of parents and students to be part of the present study, and informed consent was secured to orient the participants to the purpose of the study and to affirm that their participation was voluntary. Prior to the collection of the qualitative data and in order to ensure ethical research, the participants were informed that they were participating in research, that there are benefits when the study is completed, that the nature of research participation is voluntary, and of the procedures used to ensure confidentiality.

The researcher personally distributed the instruments to the participants with the help of their respective teachers, allowing enough time for the students to answer all the questions; when all the items in the research instruments were answered, the researcher then retrieved them. The data gathered by the researcher were then tallied, tabulated, computer-processed, analyzed, and interpreted using the Statistical Package for Social Science software (SPSS). The information gathered from the participants followed the guidelines stipulated in the Data Privacy Act, and data privacy was strictly implemented to ensure the confidentiality of the information gathered from the participants; proper health protocol was also observed for the whole duration of the research process. A Focus Group Discussion was also conducted using the FGD guide, with a moderator or facilitator serving as a guide through the essential topics regarding the research study; the participants were determined from the target populations to obtain their ideas and opinions relevant to the research problem. The Focus Group Discussion was scheduled on March 24, 2026, at Capiz National High School, Roxas City, Capiz, via Google Meet, and was participated in by eight student discussants from different schools in the province of Capiz. The proceedings of the FGD activities were recorded through an audio and video recorder, as well as still photos for documentation, and all recorded responses during the focus group discussion were transcribed to derive meaning, interpretation, and information from them. The focus groups also elicited information in a way that allows researchers to find out why an issue was salient, as well as what was salient about it (Lian and Tan, 2001, as cited in Crespo, 2018).

The data gathered from this study were analyzed using the Statistical Package for the Social Sciences (SPSS) software. The mean was used to determine the level of digital distraction, vocabulary size, and grammatical accuracy of the grade 10 students. The standard deviation was used to determine the variability of the respondents' scores, indicating the consistency or dispersion of their responses in terms of digital distraction, vocabulary size, and grammatical accuracy. The Analysis of Variance, set at a 0.05 alpha level, was used to determine the significant difference in the grammatical accuracy of students when grouped according to their levels of digital distraction and vocabulary size. Post hoc tests were used after obtaining a significant result in the Analysis of Variance to identify which specific groups significantly differ from each other. Finally, the Pearson *r*, set at a 0.05 level of significance, was used to determine the significant relationships among digital distraction, vocabulary size, and grammatical accuracy of the respondents.

RESULTS AND DISCUSSION

Chapter 4 presents the results and discussion of this investigation, drawing from data gathered from 388 Grade 10 students in the Province of Capiz, determined through a total degrees of freedom of 387 as reflected in the analysis of variance computations. The study employed a descriptive correlational research design complemented by a qualitative focus group discussion component, utilizing standardized survey instruments to measure digital distraction, vocabulary size, and grammatical accuracy, with data analyzed through descriptive statistics including means and standard deviations, inferential statistics through analysis of variance (ANOVA), and Pearson *r* correlation analysis to determine relationships among the variables. The discussion that follows is grounded entirely in the data gathered and is interpreted in direct relation to the objectives of the study, which sought to determine the levels of digital distraction, vocabulary size, and grammatical accuracy among Grade 10 students, examine differences in grammatical accuracy across levels of digital distraction and vocabulary size, and establish the relationships among digital distraction, vocabulary size, and grammatical accuracy. This chapter is organized into two parts, namely Descriptive Data Analysis, which presents the descriptive data analyses of the socioeconomic, self-esteem, and academic behavior variables among Junior High School students as measured in this investigation, and Inferential Data Analysis, which presents the significant differences in academic behavior and the relationships among the variables under study.

Data on the level of digital distraction of Grade 10 students reveal that the students in general have a high level of digital distraction, with a mean score of 3.77, which falls within the range of 3.41 to 4.20, described as high. This result implies that the students experience a high level of digital distraction because of frequent use of gadgets and engagement in social media, online browsing, and games, which affects their ability to accomplish academic tasks. This further proves that exposure to gadgets could impair students' ability to concentrate on academic work. The standard deviation of 0.88 shows that most of the students have similar levels of digital distraction, with only slight differences in how often they are distracted by digital devices. Generally, this suggests that digital distraction is a common experience among the students and may significantly influence their learning behavior, emphasizing the need for proper guidance, time management strategies, and appropriate use of digital devices to help students maintain focus and improve academic performance.

This quantitative result closely matches the ideas, perceptions, and experiences shared by the students during the focus group discussion. Participants generally described digital distraction as the frequent use of mobile phones, social media, online games, and other digital platforms that divert attention away from academic tasks, emphasizing that while digital devices are helpful for communication and learning, they often become sources of interruption, especially during studying or completing schoolwork. This implies that students' frequent use of gadgets and digital platforms is a contributing factor to reduced focus and attentional control during academic performance, which can affect their learning behavior and output. In terms of self-assessment, most students rated themselves between 3, 4, and 5, indicating that they perceive themselves as moderately to highly distracted, explaining that consistent notifications, entertainment applications, and prolonged screen time make it difficult for them to maintain focus. This supports the quantitative finding that digital distraction is prevalent among learners. When discussants were asked whether they agree with the result that digital distraction has a high level of engagement among learners, the majority expressed agreement, confirming that many students are highly engaged with digital devices and prioritize it more than their academic responsibilities, although a few students noted that the level of distraction may vary depending on personal discipline and study habits.

Several discussants elaborated on their individual experiences with digital distraction. Discussant 1 expressed her frequent interruptions from social media notifications that resulted in unfinished academic tasks, sharing that "Digital distraction is when I use my phone too much especially when I am scrolling to social media, I almost spend all my leisure time watching trends on tiktok or scrolling my facebook account and most of the time chatting my friends in messenger, instead of studying or reading my notes or review my lesson, once I heard message notification, I always stop doing my school task and tend to open my cellphone for that notification. I rate myself 4 because I often get distracted. I agree with the result because almost all of the students are always active on our phones." Discussant 2 stated that he is highly engaged in online games and that this affects his performance in the classroom, particularly in oral participation, noting, "For me, digital distraction means losing focus because of online games and videos. I always play games and allot all my spare time playing because I really enjoy, that even during class time when I feel bored, I keep playing because it is really fulfilling to be with my peer playing games. That's why during class time when I am ask some question, I can't immediately answer it because I am not giving much attention to the lesson. I rate myself 5 because I spend a lot of time playing. I agree because many students are really engaged in gadgets." Discussant 3 added that she uses gadgets with moderation and ensures that she gives time to her academic responsibilities, explaining, "when notifications interrupt my concentration while studying. I always open my Instagram or messenger every time there is notification and I focus my concentration reading messages and post. I often follow some well-known personalities I admire. But I also make sure to give attention to the task assigned to me especially when it is related to school task. I make sure to balance my study and learn from my teacher. I rate myself 3 because sometimes I control some digital activities and do it on my vacant time. I agree with the result since distractions are common and it is tempting to students like me."

Discussant 4 reflected on the dual nature of gadgets, noting both a positive and a negative effect depending on the extent of engagement in online gaming, stating, "Digital distraction is both helpful and harmful. I can say it is helpful because it makes my researches easy. I can easily have an access to the topics I want to search because of internet and other applications that helps me especially in my research subject and other academic task or performance but also distract me when I am engage in playing games to the extent that most of the time I use gadget in playing games until midnight. when my classmate sent messages in the messenger I always active in replying those messages. I rate myself 4. I agree because I am always very active online." Student 5 shared that the use of gadgets is primarily for entertainment, but that more exposure to it reduces academic preparation, expressing, "It means using gadgets more for entertainment than learning, I often watch reels and short movies because I can relax my mind and I can also learn some lessons. If I watch movies in the Netflix I will not stop until the end that's why I forgot to do my assignment or my performance task and I failed to pass it on time. During exam, I don't have enough time to review my lessons and even during class time, I feel sleepy because I am awake late at night watching movies. And while watching my favorite movies, I can learn words which helps me enrich my vocabulary. I rate myself 5 because I easily get distracted of my engagement to gadgets. I agree with the findings because I spent most of my times in my cellphone, I believe it is already program to my daily routine to use gadget when I am awake." Student 6 expressed that although the use of gadgets is a temptation, self-discipline and prioritization of academic tasks can regulate gadget use, noting, "Digital distraction is when I cannot focus because of my phone, I always use my phone for games, watching reels, shared post and chat with friends. The most time I spent is through online games like Minecraft, roblox and many more that makes me enjoy but I also try to manage myself and give time to my studies or other tasks assigned to me. I rate myself 3 since I try to limit my usage. I still agree because most of the students are distracted when using

gadgets." Student 7 stated that gadget use has become programmed into daily routine and affects academic performance, sharing, "It is about spending too much time on social media and using gadget all the time. It is also the divert of my attention instead of doing important activities related to household chores or school work, I tend to use my cellphone all the time. I rate myself 4 because digital devices are part of my daily life, without gadget I almost lost my positive energy. Therefore, I agree with the result." Finally, Student 8 emphasized that a high level of gadget use can truly affect academic studies, stating, "For me, it is when gadgets take my attention away from schoolwork. Instead of studying my lesson or doing my assignment, I use my gadget and use it all the time. I feel bored without gadget and can't concentrate because my attention is in the activities with my gadget. I can freely express my thoughts to my friends through messages and I really enjoying it. I rate myself 5. I agree with the result because students are highly engaged in technology nowadays." These responses indicate that students have a clear understanding of digital distraction and recognize its impact on their learning, and their self-ratings and agreement with the results further validate the quantitative findings of the study.

Results of this study corroborate the findings of Lepp et al. (2015), who found that frequent mobile phone use among students is significantly associated with higher levels of distraction and reduced academic performance, revealing that students who spend more time on their phones tend to experience difficulty maintaining focus on academic tasks due to constant engagement with digital activities such as messaging, social media, and online browsing. Similarly, Ravizza et al. (2016) reported that students who use digital devices during learning activities are more likely to divide their attention, resulting in decreased comprehension and retention of information, emphasizing that even minimal exposure to digital interruptions can negatively affect students' concentration and overall learning outcomes. In addition, Samaha and Hawi (2016) observed that excessive engagement with smartphones contributes to higher levels of distraction and is linked to lower academic performance among students, with findings highlighting that digital distraction is not only common but also a significant factor influencing students' study habits and ability to focus, which supports the high level of digital distraction identified in this study. Thus, the convergence of quantitative and qualitative data strengthens the conclusion that digital distraction is a significant factor influencing students' learning experiences.

With respect to the level of vocabulary size of Grade 10 students, results reveal a mean score of 14.57 and a standard deviation of 3.37. Based on the interpretation scale used in this study, this mean score falls within the range of 10.01 to 15.00, described as moderate, indicating that the Grade 10 students possess a moderate level of vocabulary knowledge. This finding suggests that students have a fair understanding of English vocabulary and are able to recognize and use a number of words in communication and academic tasks, although the moderate level also indicates that their vocabulary is not yet highly developed and still requires further enhancement. The standard deviation of 3.37 shows some variation in the vocabulary knowledge of the students, meaning that while some students demonstrate higher vocabulary proficiency, others still show limited vocabulary knowledge. The overall result implies that although the students demonstrate an acceptable level of vocabulary knowledge, additional language exposure, reading activities, and vocabulary building strategies may further enhance their lexical development and overall language proficiency.

The focus group discussion revealed that students generally have a moderate vocabulary size, which influences their understanding of words across different subjects. When asked about topics or subjects where vocabulary is harder to understand, Discussant 1 stated that Math and Science are harder because of technical terms that are difficult to understand

despite being taught, sharing, "I find Math and Science harder because there are many technical terms that I don't really understand. I sometimes struggle with these words because the term used in my own understanding is complicated. Although terms and its concept in this subject is given but still, I feel it hard to understand. I agree with the result because my vocabulary I have an average level of vocabulary knowledge maybe because I am not a wide reader and I just learn the meaning of words when it is being discussed by my teacher. I think I need to read more books and engage in activities that can enhance my vocabulary skills, because of this, some words are challenging." Discussant 2 shared that parental support at home contributes greatly to vocabulary formation, explaining, "My parents often read books or newspapers and sometimes explain new words to me, and their support helps me learn more words. At home, in our conversation with my parents and siblings, when I feel it hard to understand the words, they explain and elaborate to me the meaning of those words. I agree with the result since my vocabulary is just fair, and with my family guidance makes it easier for me to understand new words." Discussant 3 expressed that learning new words is enjoyable and that gadgets assist in vocabulary learning, noting that although her vocabulary is not wide, using gadgets and watching movies and entertainment helps her encounter new words and improve, with possibilities for continued growth despite the moderate result. Discussant 4 stated that memorizing lists of words is not an effective way of learning, explaining, "Sometimes Ma'am, I don't enjoy it if I just have to memorize long lists of words for exams. I agree with the result because memorizing alone doesn't always help my vocabulary grow. I really need to read more informative reading materials to learn new words. As a student, I need to exert effort and actively engage in the activities related to improve my vocabulary skills. Reading is the best way of learning the meaning of words." Discussant 5 mentioned that daily conversation helps improve vocabulary skills, sharing, "I enjoy using new words in conversations with friends and family. I agree because practicing words actively helps improve my vocabulary and communication skills." Discussant 6 stated that she struggles when encountering difficult words because of limited vocabulary knowledge, rating her vocabulary as moderate because while she can communicate, she still needs improvement in understanding advanced words. Discussant 7 stated that she finds it difficult to nourish difficult words and needs to engage more in reading tasks, rating her vocabulary as moderate because she is still learning new words regularly. Finally, Discussant 8 emphasized that limited vocabulary becomes a problem when assigned higher level tasks, explaining, "I can express my ideas in simple English, but I often struggle when I need to use higher-level vocabulary in writing or speaking tasks. I rate my vocabulary as moderate because I am still building my word knowledge. I agree with the result because my vocabulary is not yet strong enough for advanced language use."

The focus group discussion results align with the study's finding that students possess a moderate vocabulary size, which influences their comprehension across subjects. Students reported greater difficulty understanding subject specific or academic vocabulary, such as terms in science, mathematics, and social studies, and emphasized that supportive family members, through reading, explaining words, or encouraging conversation, help improve their vocabulary, whereas a noisy or distracting home environment may limit vocabulary growth. Students also reported that they enjoy learning new words most when it is interactive or meaningful, such as through games, conversations, or reading stories, noting that memorization alone is less motivating while using new words actively enhances retention and communication skills. This suggests that moderate vocabulary breadth limits students' ability to fully grasp complex or unfamiliar terms, consistent with research showing that vocabulary knowledge is fundamental to reading comprehension and academic performance, and that learners with limited vocabulary experience challenges in text comprehension and language use when encountering unfamiliar words. Further, studies indicate that effective vocabulary instruction, whether through engaging digital tools or context based activities, can enhance vocabulary

development and motivation, highlighting the importance of meaningful, interactive learning methods that go beyond rote memorization. Students' moderate vocabulary size is influenced by subject difficulty, family support, and motivation, and while digital distractions exist, students believe these do not prevent learning new words, complementing the quantitative data on vocabulary size, grammatical accuracy, and the relationship with digital distraction. While students experience digital distractions, they perceive that these do not significantly limit their vocabulary acquisition, supporting the quantitative finding of no significant relationship. The result of the study affirms the findings of Tangsakul (2024) that students' vocabulary size has a significant correlation with reading achievement, indicating that stronger vocabulary knowledge supports better performance in reading related academic tasks, and corroborates with the findings of Zano (2022), which reveal that learners' vocabulary breadth and depth are closely linked to reading comprehension, emphasizing the importance of vocabulary knowledge in understanding academic texts. Furthermore, it supports the findings of Royeras and Sumayo (2024) that senior high school students with higher vocabulary knowledge tend to perform better in inferential reading comprehension tasks, demonstrating the role of vocabulary in academic understanding. These studies collectively illustrate that students' vocabulary size, whether moderate or more extensive, plays an important role in academic language comprehension.

Regarding the level of grammatical accuracy of Grade 10 students, results revealed that grammatical accuracy is generally moderate, with a mean score of 14.88 and a standard deviation of 3.60. The data implies that the moderate level of grammatical accuracy of students in the Province of Capiz reveals that students need to enhance their skills in the use of correct grammar in their language output, and that students may need to give more attention and focus to reading in order to improve grammar skills. The focus group discussion revealed that students perceived vocabulary knowledge and grammatical accuracy as related but distinct components of language learning. Although a moderate vocabulary size with a mean of 14.57 and standard deviation of 3.37 provides students with a foundation for understanding and constructing sentences, students emphasized that knowing words alone does not automatically ensure grammatical correctness.

Discussant 1 stated that vocabulary learning is helpful but does not necessarily improve grammar structure, noting, "I think vocabulary helps me in constructing sentences, but even if I know a lot of words, I sometimes make mistakes in grammar especially the rules in subject verb agreement, although wide vocabulary is also helpful but it is not related with how the word is being transform or how it is written in correct order. I agree with the result because knowing words doesn't always mean I can use them correctly in sentences." Discussant 2 shared that she experienced difficulty in using correct grammar despite understanding words, agreeing that vocabulary level does not affect grammatical accuracy because grammar rules operate independently from vocabulary learning. Discussant 3 expressed that even with a moderate vocabulary, she still makes punctuation or sentence structure mistakes, emphasizing that grammatical accuracy requires proper attention to structure and mastery of rules beyond having a wide vocabulary. Discussant 4 stated that organization of ideas makes sentence construction difficult, noting that she rates herself 3 because she still makes noticeable errors, and agreeing that grammar requires consistent practice, attention to detail, and repeated application rather than mere vocabulary knowledge. Discussant 5 mentioned that she often combines or misuses words in sentences, especially when rushing through writing assignments, rating herself 3 and affirming that grammar demands more than word knowledge, requiring regular practice and attention to detail. Discussant 6 added that losing attention because of gadgets affects the way she writes correct sentences, explaining that switching between gadgets

or social media while writing causes her to forget sentence patterns and grammar standards, frequently resulting in errors in word order, verb usage, and punctuation. Discussant 7 stated that constant practice helps her improve grammar, sharing that writing essays and receiving feedback from teachers helps her recognize and fix common mistakes, and that consistent writing practice and teacher comments gradually improve her ability to create grammatically correct phrases. Lastly, Discussant 8 expressed that self-study through reading and constant grammar review improves language performance, noting that reading books, learning correct sentence structures, and engaging in grammar exercises help her correct mistakes and improve writing accuracy.

Additional student responses reinforced these patterns. Student 1 noted that despite having a reasonable vocabulary, errors in sentence construction still occur, suggesting that grammatical accuracy depends on the ability to apply rules rather than simply knowing word meanings. Student 2 reported difficulties with verb tenses and subject-verb agreement, indicating that grammatical structures require focused practice and understanding separate from vocabulary acquisition. Student 3 highlighted that sentence structure errors occur even with a moderate vocabulary, reflecting that knowledge of words does not guarantee mastery over the mechanics of writing. Finally, Student 4 emphasized that grammar requires deliberate application and practice, reinforcing that vocabulary and grammar operate as complementary but independent aspects of language competence. These responses are consistent with the quantitative finding involving a mean of 14.88 and standard deviation of 3.60, and the qualitative insights suggest that while vocabulary provides students with the building blocks of language, grammar is a skill that must be learned and reinforced through structured practice, feedback, and active usage. The focus group discussion confirms that students recognize the importance of grammar as a separate component of language learning, and this distinction helps explain why vocabulary size alone does not predict differences in grammatical accuracy, supporting the statistical result of no significant relationship between these variables. Students commonly expressed that even with a moderate vocabulary, they still experience difficulties in applying grammatical rules such as verb tenses, subject-verb agreement, punctuation, and sentence structure, indicating that grammar requires a deeper level of language processing involving rule application, practice, and conscious effort rather than mere word recognition. In terms of the effect of digital distraction on writing performance, students reported that digital distractions influence the carefulness of their writing and speaking, which can affect grammatical accuracy.

This qualitative finding is affirmed by Zhang (2019), who found that vocabulary knowledge and grammatical competence, while related, develop differently, and learners may possess sufficient vocabulary but still struggle with accurate grammatical usage. It also corroborates with the findings of Teng (2018), which indicate that vocabulary breadth does not necessarily translate into grammatical accuracy, as grammar requires explicit instruction and continuous practice in sentence construction. In addition, it supports the findings of Crossley, Salsbury, and McNamara (2016) that lexical knowledge and grammatical development are distinct aspects of language proficiency, and learners may demonstrate growth in vocabulary without corresponding improvement in grammatical accuracy. Furthermore, the result of the study confirms that while vocabulary provides the foundation for communication, grammatical accuracy depends on mastery of structural rules and consistent practice, reinforcing the need to teach vocabulary and grammar as complementary but separate components of language learning.

Turning to the inferential data analysis, the difference in the grammatical accuracy of learners among the levels of digital distraction was examined using analysis of variance, which showed a significant difference between groups, with $F(3.401^*)$ equal to 0.009, p less than 0.05, among the students. Specifically, the between-groups sum of squares was 171.848 with

4 degrees of freedom and a mean square of 42.962, yielding an F value of 3.401 and a significance level of 0.009, while the within-groups sum of squares was 4837.458 with 383 degrees of freedom and a mean square of 12.63, resulting in a total sum of squares of 5009.307 across 387 degrees of freedom. This result showed that there was a significant difference in grammatical accuracy among the levels of digital distraction of students, meaning that digital distraction has a greater impact in shaping students' language performance. Students' ability to concentrate on language norms and sentence formation is impacted by several forms of distraction, such as frequent gadget use, continuous notifications, multitasking, and cognitive preoccupation, and since digital device use always distracts focus and cognitive processing, students with different levels of exposure do not perform equally well on grammar-related tasks. The result further implies that learners with higher levels of digital distraction may also show higher grammatical accuracy in some cases, which may be explained by the reality that technology and gadgets expose learners to a complex style of written communication through social media platforms, messaging apps, online news, and educational content, so that through frequent exposure students may acquire grammatical patterns, vocabulary structures, and sentence formations without being explicitly aware of doing so, which can enhance their grammatical awareness. However, this does not guarantee that digital distraction is always beneficial, as high exposure to gadgets may lead to incidental learning while extreme distraction may also decrease students' attention or focus, leading to inconsistencies in language performance. This may be attributed to the fact that students exposed to frequent digital distractions often face interruptions that reduce their concentration and cognitive resources needed to apply grammar rules effectively, whereas students without distractions can focus their attention on grammatical structure, be meticulous in sentence construction, and more easily recognize errors in writing. Additionally, learners dependent on informal digital communication, such as social media messaging, may adopt non-standard grammar patterns that further affect their academic writing and speaking accuracy, though learners with high levels of digital distraction may still demonstrate correct grammatical accuracy because they use digital tools that help them complete tasks using correct language structure.

This finding is supported by studies suggesting that multitasking and constant exposure to digital gadgets can impair language processing and academic performance, and it corroborates cognitive theories explaining that attention is a limited resource and that distractions may lead to learning deficiency. The result of the study corroborates insights shared by the discussants during the focus group discussion, who shared that exposure to mobile phones, social media, and multitasking greatly affects their ability to write and speak accurately. Discussant 2 explained that she is distracted by notifications while writing, sharing that when she hears a notification she keeps reading and scrolling through her messenger and newsfeed until she can no longer concentrate on her written task, ultimately relying on ChatGPT or AI, with such distraction leaving her work messy and incorrect. Similarly, Student 5 observed that frequent checking of mobile phones while doing assignments causes her to forget grammar rules and misuse punctuation, noting that digital interruptions negatively affect attention control and interfere with memory recall of grammatical structures, affecting the quality of written output. Discussant 3 emphasized that focused writing without distraction produces the best results and quality output, ensuring correct grammatical structure, though when phone notifications are on she becomes careless and makes more mistakes, agreeing that digital distraction has great influence on her language development. On the other hand, Discussant 6 shared a contrasting experience, noting that avoiding frequent phone use during study time helps her remember and apply correct grammatical patterns in constructing

sentences and writing academic studies, and that she strongly believes excessive gadget use leads to incorrect written outputs.

This result is supported by the findings of Martin et al. (2025), which state that digital distractions in educational settings significantly affect learners' academic performance, as constant interruptions reduce their focus and ability to use and apply language rules effectively. It also corroborates the study of Pérez-Juárez, González-Ortega, and Aguiar-Pérez (2023), which highlights that although technology is useful, it often divides attention and reduces concentration of learners during academic tasks. Furthermore, the result aligns with the study of Algabre et al. (2025), who found that language use in digital environments, particularly in social media, is frequently characterized by grammatical inaccuracies, suggesting that constant exposure to informal digital messages can affect students' grammatical accuracy in academic contexts. These findings imply that digital distraction is a critical factor affecting students' grammatical performance, and that students who manage their digital distraction and lessen exposure to multitasking are better able to focus on grammar rules, sentence construction, and overall language accuracy. Thus, the null hypothesis which states that there is no significant difference in the grammatical accuracy among the levels of digital distraction is rejected.

The difference in the level of grammatical accuracy among the levels of vocabulary size was likewise examined through analysis of variance, which showed a significant difference in grammatical accuracy when classified according to the levels of vocabulary size, F approximately equal to 8.387*, p less than 0.05. The between-groups sum of squares was 403.443 with 4 degrees of freedom and a mean square of 100.861, yielding an F value of 8.387 and a significance level of 0.000, while the within-groups sum of squares was 4605.864 with 383 degrees of freedom and a mean square of 12.026, resulting in a total sum of squares of 5009.307 across 387 degrees of freedom. The results showed that grammatical accuracy depends on the level of vocabulary size, implying that vocabulary knowledge plays an important role in the grammatical accuracy of students, since students with a strong foundation of vocabulary knowledge are more competent in constructing correct sentences, choosing appropriate word forms, and applying correct grammatical rules in writing, whereas students with limited vocabulary knowledge may struggle in writing correct sentences and often commit mistakes in their writing tasks.

This result was confirmed by recent studies emphasizing the strong relationship between vocabulary knowledge and grammatical performance of students. It was cited from the study of Crossley et al. (2015) stating that lexical knowledge contributes to writing quality, especially in grammatical accuracy and coherence, as students with strong vocabularies are able to produce deeper and more accurate sentences. Furthermore, Nation (2022) stated that vocabulary knowledge is an important component of language proficiency, as it precisely supports learners' ability to use correct grammar in communication, and Lin and Sukying (2023) further stated that vocabulary size is a strong predictor of writing performance, including grammatical accuracy. These studies collectively support the idea that learners with greater vocabulary size tend to have higher grammatical accuracy, further confirming that vocabulary knowledge is a strong foundation for grammatical development and overall language proficiency, and suggesting that the ability to understand and use more words correctly contributes to constructing grammatically accurate sentences. These findings are further supported by insights from the focus group discussion, which revealed how students' vocabulary size affects their grammatical accuracy, with the ANOVA results indicating a significant difference in grammatical accuracy across students with different levels of vocabulary size, wherein students with larger vocabularies achieved higher mean scores in grammatical accuracy while those with smaller vocabularies showed lower scores, suggesting that vocabulary size plays a significant role in the correct construction of sentences.

Discussant 1 noticed that deeper vocabulary knowledge resulted in improved grammar construction because of the wide use of words, sharing that a wider concept of words allows correct grammatical sentence construction and further idea explanation without the limitations that come with limited vocabulary. Discussant 2 shared that knowing the basic idea of words helps her combine them into correct sentences following grammar rules, noting that knowing the meaning of words alone is not enough to produce grammatically correct sentences, and that her vocabulary level still affects how she formulates sentences. Discussant 3 expressed that a wide vocabulary makes her confident in participating in classroom activities, sharing that when her vocabulary is wide she can create longer and stronger sentences and feels more confident answering and participating in class discussions because she knows how to use the right words to express her ideas clearly and logically. Moreover, Discussant 4 stated that vocabulary learning affects grammatical performance, noting that vocabulary and grammar are interrelated because knowing more words improves writing when combined with proper knowledge of basic grammar rules applied in both speaking and writing.

The result of this study is supported by Sukying (2023), who stated that both vocabulary size and grammar were significantly correlated with second language writing performance, indicating that learners with larger and deeper vocabularies tend to produce more accurate and effective written texts. The increase in vocabulary size contributes to correct sentence patterns, fluency, and confidence of students in producing accurate grammatical performance, highlighting that vocabulary serves as the basic foundation for constructing correct grammar and applying rules in constructing meaningful sentences. The finding implies that students with greater vocabulary levels exhibit superior grammatical accuracy than those with lower vocabulary levels, according to the ANOVA results showing significant variations in grammatical correctness across the various vocabulary size levels, with the substantial F value of 8.387 and significance of 0.000 demonstrating that these differences are not the result of chance, supporting the argument that a bigger vocabulary gives students the linguistic tools needed to form grammatically correct sentences and communicate more effectively. Thus, the null hypothesis which states that there is no significant difference in the grammatical accuracy among the levels of vocabulary size is rejected.

Finally, the relationship among digital distraction, vocabulary size, and grammatical accuracy of Grade 10 students was examined through Pearson r correlation analysis. Data reveal that there was a significant relationship between digital distraction and grammatical accuracy, r equal to 0.130, p equal to 0.011. There was no significant relationship between digital distraction and vocabulary size, r equal to negative 0.037, p equal to 0.470. There was no significant relationship between vocabulary size and grammatical accuracy, r equal to negative 0.025, p equal to 0.618. The result implies that there was a significant relationship between digital distraction and grammatical accuracy because frequent use of gadgets significantly affects students' attention and focus during writing tasks and language performance, since exposure to social media notifications, multitasking, and frequent gadget use divides students' concentration, reducing focus and leading to common errors in grammar, particularly incorrect sentence structure, missing punctuation, and misuse of rules. Because learners' attention is closely linked to their accuracy in language use, higher distraction is correlated with changes in grammatical performance, resulting in a significant relationship. The finding reveals that there was no significant relationship between digital distraction and vocabulary size because vocabulary knowledge develops mainly through structured learning activities such as frequent reading, learning word meanings, and other classroom activities, whereas even though digital platforms expose students to new words, this exposure is often passive and does not follow correct grammatical rules, meaning students may see and read new

words online without always learning or retaining their meaning. Data showed that there was no significant relationship between vocabulary size and grammatical accuracy, indicating that students with a rich vocabulary do not necessarily achieve better grammar performance, and the negative value of r equal to negative 0.025 implies that the relationship is extremely weak, where learners with higher vocabulary size do not necessarily show better performance in grammar, since some learners may have enough vocabulary but do not know how to apply it in grammatically correct sentences, focusing instead on memorizing word meanings without applying grammar rules, which require application and constant practice rather than mere memorization of words.

These results are corroborated by insights from the focus group discussion, which demonstrate that students occasionally maintain concentration on creating proper sentences despite distractions. Discussant 5 stated that even though she is always engaging with digital devices, this does not affect her grammatical accuracy, sharing, "Even though I always check my phone during study time, it is not a hindrance to write sentences in a grammatically correct sentence. I am also distracted but I try my best to discipline myself so that I can do my assigned task correctly. It's just a matter of discipline to yourself because as a student's our life do not just stops in engaging digital tools alone but we need to really apply what we learn especially in grammar." Discussant 9 shared that digital tools are helpful when used properly, explaining that internet connection is not a distraction when used positively, as it helps with research assignments by allowing her to find sources and word meanings easily, indicating that distraction does not always affect her grammar. Discussant 10 expressed that management in using gadgets is helpful in improving grammar, sharing that despite daily gadget use, she manages her tasks properly and that a strong foundation of vocabulary helps her construct grammatically correct sentences, believing that with proper discipline and eagerness to learn, students can write effectively with correct grammar. These responses demonstrate that digital distraction does not always result in reduced grammatical performance for all students, as some learners are able to control distractions and use digital gadgets positively while relying on their stock knowledge to perform tasks effectively.

This result corroborates the study of Qian (2018), which found that learners' overall writing quality and syntactic complexity were predicted by greater vocabulary sizes, and Aldossari (2021), who noted that writing accuracy was positively impacted by vocabulary knowledge, highlighting the importance of vocabulary size. The positive relationship between digital distraction and grammatical accuracy, however, is consistent with more recent research on the use of technology in educational settings, according to Lin and Lan (2020) and Wu and Wang (2022), who found that students may counteract the detrimental effects of distraction and even improve language performance when they intentionally use digital tools such as online dictionaries, grammar checkers, or reference materials, implying that the effects of digital engagement are complex, as it can be both helpful and distracting depending on use. This finding implies that vocabulary size itself does not significantly affect students' grammatical accuracy, while digital distraction, despite its potential to divert attention, may help students complete grammatical tasks successfully, perhaps by giving them access to digital resources or encouraging them to carefully review their work. This result corroborates the study of Smith (2020), which reported that digital interaction can have a minor positive effect on students' grammatical performance, suggesting that certain types of digital engagement may slightly enhance language related tasks. These findings are further supported by Godwin-Jones (2018), who asserted that incidental exposure to digital media does not necessarily enhance vocabulary acquisition unless learners are deliberately engaged in language learning tasks. Thus, the null hypothesis which states that there was no significant relationship between digital distraction and grammatical accuracy was rejected, while the null hypothesis which states that there was no significant relationship between digital distraction and vocabulary size was

accepted, and the null hypothesis which states that there was no significant relationship between vocabulary size and grammatical accuracy was also accepted.

Taken together, the descriptive and inferential findings of this chapter establish that Grade 10 students in the Province of Capiz exhibit a high level of digital distraction, with a mean of 3.77 and standard deviation of 0.88, alongside moderate levels of vocabulary size, with a mean of 14.57 and standard deviation of 3.37, and moderate grammatical accuracy, with a mean of 14.88 and standard deviation of 3.60. The inferential analyses further reveal that grammatical accuracy differs significantly across levels of digital distraction, F equal to 3.401, p equal to 0.009, and across levels of vocabulary size, F equal to 8.387, p equal to 0.000, while correlational analysis confirms a significant relationship between digital distraction and grammatical accuracy, r equal to 0.130, p equal to 0.011, alongside the absence of significant relationships between digital distraction and vocabulary size, r equal to negative 0.037, p equal to 0.470, and between vocabulary size and grammatical accuracy, r equal to negative 0.025, p equal to 0.618. These results directly address the objectives of the study by demonstrating that while digital distraction is pervasive among learners and meaningfully associated with variation in grammatical performance, vocabulary size operates as a largely independent linguistic competency that does not translate automatically into grammatical accuracy, underscoring the need for instructional approaches that address language mechanics and digital self-regulation as distinct but interconnected areas of intervention. The convergence of quantitative results with the qualitative insights gathered from the focus group discussions strengthens the credibility and contextual grounding of these findings, offering a fuller understanding of how digital engagement, lexical knowledge, and grammatical competence interact within the everyday academic lives of Filipino junior high school learners, and providing a foundation for the summary, conclusions, and recommendations presented in the succeeding chapter.

CONCLUSION

The findings of this study, taken together, reveal a nuanced relationship among digital distraction, vocabulary size, and grammatical accuracy among Grade 10 students in the province of Capiz. Students who exhibited high levels of digital distraction demonstrated a tendency to lose focus inside the classroom, struggle to follow instructions, and commit more grammatical errors when completing assigned tasks, since divided attention appears to hinder the ability to recall and apply vocabulary and grammar rules accurately in writing. At the same time, the moderate vocabulary size recorded among the participants suggests that while they possess a functional vocabulary sufficient for everyday communication and comprehension of ordinary words and phrases, they continue to encounter difficulty in understanding complex texts, articulating deeper thoughts, and accomplishing higher level academic tasks. This indicates that although their language foundation is adequate, there remains considerable room for improvement, particularly in the expression of complex ideas and the use of a wider range of vocabulary in both spoken and written communication.

Despite the moderate levels observed in both vocabulary size and grammatical accuracy, the results showed that vocabulary knowledge alone does not guarantee stronger grammar skills. Vocabulary appears instead to support reading comprehension and communicative expression, allowing students to interpret texts, derive meaning from unfamiliar words, and convey ideas clearly even when their grammatical structures remain underdeveloped. This suggests that vocabulary and grammar, while related in the broader process of language acquisition, function somewhat independently in terms of skill

development, a conclusion further reinforced by the absence of a significant relationship between vocabulary size and grammatical accuracy, as well as between vocabulary size and digital distraction. Similarly, the extent or frequency of students' digital device use did not appear to produce meaningful variation in their grammatical performance, implying that grammatical accuracy is shaped less by the amount of digital exposure and more by how well students understand, internalize, and apply grammar rules through practice and effective learning strategies, even amid continuous exposure to gadgets and digital platforms.

Nevertheless, the significant relationship established between digital distraction and grammatical accuracy underscores the meaningful influence that digital engagement exerts on students' language performance, particularly in writing. This finding suggests that as students experience heightened levels of digital distraction, their grammatical performance is affected in ways that depend on their existing command of grammatical structures, and that the degree to which their attention during learning tasks is diverted by social media and similar digital activities directly bears upon their capacity to apply grammar rules correctly. Collectively, these findings affirm that digital distraction plays a more decisive role than vocabulary size in shaping grammatical accuracy, highlighting the need for focused attention and effective self-regulation of digital engagement as critical factors in language learning success.

In light of these findings and conclusions, several courses of action are recommended for the relevant stakeholders. Students are encouraged to manage their digital engagement more deliberately during learning activities by setting specific schedules for social media, gaming, and other non-academic digital pursuits, and by using planners, alarms, or focus applications to minimize interruptions while completing academic tasks; they are likewise urged to apply newly learned vocabulary in meaningful contexts through sentence construction, paragraph writing, and peer discussion, and to continue enriching their vocabulary through reading, vocabulary journals, word games, and other independent language enrichment activities, while also practicing focused writing and speaking tasks that minimize multitasking with digital devices and demand careful attention to grammar. Teachers, for their part, may integrate technology meaningfully into instruction by establishing guidelines that limit non-academic device use while promoting educational tools that enhance learning, and by designing lessons that connect vocabulary acquisition with grammar practice through sentence-building exercises, error correction activities, story writing, and context-based writing assignments that provide immediate feedback on word choice and grammatical correctness; they may further introduce vocabulary-based games and structured writing tasks, alongside guided grammar practice and peer editing exercises, that collectively reduce digital distractions and strengthen students' language competence. Parents are encouraged to support their children by monitoring screen time at home, encouraging scheduled study sessions and offline reading or writing exercises, modeling responsible digital habits, and fostering discussions and storytelling sessions that require the application of vocabulary and proper sentence structure, while coordinating with teachers to better understand how digital distractions affect their children's learning. School administrators, meanwhile, may develop digital literacy programs, workshops, and campaigns that promote responsible device use, establish supervised spaces for productive technology use, and support curriculum initiatives, language resource centers, writing clubs, reading competitions, and language workshops that provide students with sustained opportunities to strengthen both vocabulary and grammatical accuracy. Finally, given the absence of a significant relationship between vocabulary size and grammatical accuracy, it is recommended that future initiatives deliberately combine vocabulary instruction with grammar practice through integrated activities such as error detection exercises, sentence expansion, and collaborative writing projects, and that subsequent research replicate this study using different variables to further examine and validate these relationships among a broader population.

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