

TEXT MESSAGING AS A PREDICTOR OF ORTHOGRAPHIC PROCESSING OF BS-CRIMINOLOGY STUDENTS AT UNIVERSITY OF MINDANAO TAGUM COLLEGE: BASIS FOR AN INTERVENTION PROGRAM

Genesis G. Genelza

University of Mindanao Tagum College, Philippines

College of Teacher Education & Junior High School Department

genesis.genelza@umindanao.edu.ph

Orcid: 0000-0001-5577-7480

ABSTRACT

There is a plethora of reasons for why exposure to misspelled words has a great stimulus on learners' capacity to integrate orthographic information, predominantly in this time where electronic communication is growing. Mobile phones, online gaming, text messaging, and social media are just a few of the communication technology advancements that are opening up new channels for social engagement and contact. The descriptive correlation study is aimed to determine the significant relationship between text messaging and orthographic processing of BS-Criminology Students at University of Mindanao Tagum College. The results revealed that there is a great correlation between the two variables with a p-value of 0.0051. The evidence supporting the claim that text messaging has a negative influence on language abilities and orthographic processing has been transparent and observable at some point or occasion. With this, teachers and students take on particular identities and roles in their interactions with one another, which aids in the development of their conceptions of what learning is as a process and as a body of knowledge through implementing the suggested speaking improvement exercises created by the researcher, and so the students will be equipped to use the language appropriately at any occasions.

Keywords: Abbreviation, Code-switching, Orthographic Processing, Shortened Method of Texting, Spelling, Text Messaging

Biographical notes: Genesis G. Genelza is currently a faculty member at the University of Mindanao Tagum College teaching Junior High School subjects, General Education, Professional Education, and Major Subjects in English. He has been a Model United Nations ambassador and a delegate, receiving major awards for best position paper for UNHRC, UNICEF, and UNESCO; a special mention for WHO and UNESCO; and an honorable mention for UNICEF. Furthermore, his passion for learning and commitment to growing professionally, spiritually, and personally has been his constant priority and consideration.

INTRODUCTION

There is a plethora of reasons for why exposure to misspelled words has a great influence on learners' capacity to assimilate orthographic information, particularly in this time where electronic communication is increasing. Mobile phones, online gaming, text messaging, and social media are just a few of the communication technology advancements that are opening up new channels for social engagement and contact. Understanding the upward, modern

communication dynamic forces that border these devices and expertise can give us crucial building blocks for the education of today's learners. The cell phone and its text messaging feature have grown popular among these developing technologies, especially among teenagers. Hence, it impacts the ability of a learner to process orthography to the prescribed letter-word formation.

Wood, Meacham, Bowyer, Jackson, Tarczynski-Bowles, and Plester (2011) gathered longitudinal data from 119 8–12-year-olds who owned their own phones over the course of an academic year. This study demonstrated that, after adjusting for individual differences in age, verbal IQ, phonological awareness, and the children's spelling ability at the beginning of that year, textism use at the beginning of the year could predict spelling ability at the end of that year, similar to concurrent studies. In contrast, the use of textisms in messaging has increased, which cannot be explained by spelling proficiency at the start of the year. The association among textism use and spelling skill appears to be unidirectional rather than reciprocal, and it is possible that textism use is influencing children's acquisition of conventional spellings in unexpected ways.

Cingel and Sundar (2012) conducted a study to investigate the relationship between sixth, seventh, and eighth grade students' text message usage and their results on an offline, age-appropriate grammatical assessment test. The findings provided strong evidence that there is a link between the usage of technical language in text messages and assessment scores for grammar.

De Jonge & Kemp (2012) looked into the relationship between textism usage and reading skills in Australian adolescents and young adults as well as the use of text-message abbreviations (textisms). Textism use was negatively connected with reading, non-word reading, spelling, and morphological awareness scores; however, some of these correlations could be explained by individuals' typical text-messaging frequency.

In a recent study, Janin-Starr (2014) found that most professors thought texting was a legitimate mode of communication, even though some thought it had negatively impacted students' writing skills. She was interested in how professors assessed the effect of texting on students' writing skills. The pupils believed that texting might have a negative impact on someone's writing skills. The author advised school administrators to maintain policies prohibiting cell phone use during class hours and implement a rule requiring that all text messages between students and professors use formal language rather than slang, symbols, or phone apps in order to minimize any potential detrimental effects of texting on students' writing skills. University teachers are encouraged to clearly state their cell phone usage restrictions in the course syllabuses and to enforce formal language in text message conversation without the use of slang, symbols, or phone apps.

Although some studies demonstrated a detrimental influence, the bulk of investigations conducted on the research study confirmed its beneficial impact on language users' literacy skills. Determining the connection between text messaging and orthographic processing of second-year BS-Criminology students at University of Mindanao Tagum College is the objective of the study. Additionally, our research seeks to close this research gap.

THEORETICAL FRAMEWORK

The study is anchored to the Behaviorist theory of BF Skinner (1988) states that the core to all behaviorism is the assumption that human is determined by learning and reinforcement. People act according to what they learned. They acquire new skills, depending on the effects these skills have on the environment. He assumed that if an individual's action proves to have a positive effect, then he would more likely continue his behavior. On the other hand, if an individual's action has a negative outcome, he would likely stop this specific behavior.

Stetson's (2010) argument is used to support Skinner's theory. According to his claim that not enough people read. They use computers far too frequently, many of them spell words according to how they are said, and the advent of text messaging has encouraged them to simplify terms. Because of the technology available to today's pupils, they struggle to function well when forced to employ their orthographic processing skills without a computer or thesaurus. As a result of people's growing reliance on technology, reading and writing abilities have gradually gotten worse. With the advent of all phones and emails, there is also less of a focus on face-to-face contact.

In relation to the aforementioned assertions, a study by Garrido (2011) found that abbreviation, code-switching, and shorter texting are the main causes of orthography's severe impact, which will negatively affect students' written performance. Thus, text messaging has an impact on how kids process orthographic information.

The study also lends support to Ehri's (1999) Phase Theory, which contends that pupils need a basic understanding of the alphabet that develops and evolves as they learn to read words and use orthographies. Therefore, before children can create a written language when learning to spell, they must draw from their vocabulary and their comprehension of the rules and sounds involved in their vocal language.

OBJECTIVES

The study attempts to determine the relationship between Text Messaging and Orthographic Processing of Second Year BS-Criminology Students in University of Mindanao Tagum College. The objectives presented below are considered for thorough discussion:

1. To describe the level of Text Messaging of BS-Criminology students in terms of:
 - 1.1 Code-switching;
 - 1.2 Shortened Method of Texting;
 - 1.3 Abbreviation?
2. To describe the level of Orthographic Processing of BS-Criminology students?
3. To determine if there is a significant relationship between Text Messaging and Orthographic Processing of BS-Criminology students at University of Mindanao Tagum College.
4. To give probable intervention/s to address the Text Messaging and Orthographic Processing of BS-Criminology students at University of Mindanao Tagum College.

Null Hypothesis:

1. There is no significant relationship between Text Messaging and Orthographic Processing of BS-Criminology students at University of Mindanao Tagum College.

MATERIALS AND METHODS

This research study employed quantitative, non-experimental design. Moreover, a descriptive-correlational method is utilized in unfolding: the level of Text Messaging in terms of code-switching, shortened method of texting and abbreviation; and the level of orthographic processing. Also, this method also determined the significant relationship between Text Messaging and Orthographic Processing of BS-Criminology students at University of Mindanao Tagum College.

Furthermore, the respondents of this research study are the BS-Criminology Students at the University of Mindanao Tagum College done by means of random sampling method. There were 300 students who are the sole respondents of this research study.

The survey questionnaire and spelling test that the researcher generated were used in this investigation. This was accomplished with a simple method and a succinct, precise comment. The researcher was given permission by the college dean to do research at UM Tagum. Once the petition was approved, the researcher asked the responders to complete the survey in person and assured the students that any information gathered would be treated in confidence and used only for educational purposes.

The data gathered by the research instruments were totaled, tabulated, interpreted, and evaluated using the descriptive statistics listed below:

Mean was used to identify the level of Text Messaging and Orthographic Processing of BS-Criminology students at University of Mindanao Tagum College.

Pearson r was used to measure the significant relationship of Text Messaging and Orthographic Processing of BS-Criminology students at University of Mindanao Tagum College.

RESULTS AND DISCUSSIONS

The Level of Text Messaging of BS-Criminology Students at University of Mindanao Tagum College

Table 1 showed the level of text messaging of BS-Criminology students at University of Mindanao Tagum College. Based on the result of the study, among the three indicators of this variable, **code-switching** had the highest mean with **4.39** described as very high. This was followed by the indicator **shortened method of texting** with a mean score of **4.33** which can be interpreted as very high.

Table 1. The Level of Text Messaging of BS-Criminology students at University of Mindanao Tagum College

Indicators	Mean	Description
Code-switching	4.39	Very High
Shortened method of texting	4.33	Very High
Abbreviation	4.26	High
Over-all	4.32	Very High

Legend:

4.30 – 5.00	Very High
3.50 – 4.20	High
2.70 – 3.40	Moderate
1.90 – 2.60	Low
1.00 – 1.80	Very Low

Furthermore, among the three indicators of this variable, the indicator **abbreviation** was the lowest with a mean score of **4.26**. However, this result can be interpreted as high descriptive equivalent based on the parameter of the study. Overall, the level of **text messaging** based on the result of the study is **4.32** mean score described as very high. This mean that the respondents have certain awareness regarding their text messaging ability and approach.

Leung (2008) asserts that college students utilize text messaging for sociability, convenience, amusement, and escapism. Addiction is regarded to have an escape motive. So, if you frequently text to escape, do you have a text message addiction? According to Lee and Perry (2007), text messaging is a sort of escapism since users tend to concentrate on the mobile phone interface when communicating, oblivious to their surroundings. They engage in frequent daily messaging, which is ritual, and regulate the frequency, location, and topic of text messages as recompense. As a result, texting might be addictive.

Johansson (2014) stated that in bilingual societies where people can converse in two or more languages, a process known as code-switching, abbreviating and other problems occur. Bilinguals can code-switch and use their languages as resources to find more effective methods to communicate because they are able to speak more than one language. In upper secondary school English classes, code-switching happens daily.

According to McDougald (2013) as cited by Genelza (2022), utilizing social networking sites and text messaging in the classroom promotes learning by enabling students to interact in a more relaxed and natural setting. It's time to begin developing educational networks, or, even better, to make a name for oneself in existing networks for academics. This information is abundant in social networks, allowing the education system to be an active agent in these network systems with the responsibility of filtering information, allowing the educational community to exploit the communication potential for academic purposes within the classroom but with a global impact. However, because learning must adapt to circumstances that occur in the real world, where learning primarily works with knowledge, this information abounds in social networks (Vidal, Martnez, Fortuo, & Cervera, 2011).

The Level of Orthographic Processing of BS-Criminology students at University of Mindanao Tagum College

Table 2 presented the level of orthographic processing of BS-Criminology students at University of Mindanao Tagum College. The table showed that the **spelling test** had a mean score of **4.25** which can be described as high. This means that a learner can spell the word if he/she has an orthographic processing.

The student must comprehend the internal structure of words in order to correctly spell. The student must specifically comprehend the morphophonemic structure of words, which is the idea that phonetic components mix to create morphemes, which then combine to create inflected and derived word forms. Although spoken language proficiency may just require an implicit awareness of morphophonemic structure, written language proficiency necessitates both an implicit and explicit understanding of morphophonemic structure (Moats & Tolman, 2016 as cited by Genelza, 2021).

Table 2. The Level of Orthographic Processing of BS-Criminology students at University of Mindanao Tagum College

Indicator	Mean	Description
Spelling Test	4.25	High

Legend:

- 4.30 – 5.00 Very High
- 3.50 – 4.20 High
- 2.70 – 3.40 Moderate
- 1.90 – 2.60 Low
- 1.00 – 1.80 Very Low

According to Gagen (2013), children base their orthographic structure on translating spoken word sounds into print, which is a method known as phonemic spelling. The letters of the word follow this pattern. He also underlines that students' spelling skills gradually improve if they learn to 'spell' words through phonemic processing. There are certain English words that are spelt differently from how they sound. These terms are crucial and perplexing to speakers of second languages, making them challenging to spell. Additionally, the symbol-sound relationships for some English words have been proved to be inconsistent. Additionally, he reaffirmed that one of the key subskills of efficient written communication in the English language system is spelling.

Hence, in English, tasks involving irregularly spelled words and pseudowords with unusual letter combinations are used to test a reader's orthographic sensitivity rather than their ability to translate each letter into its corresponding sound, as is the case with decoding. Orthographic skills are frequently studied in opposition to phonological skills (measured with words and pseudo words with regular spellings) (Rakhlin, Mourgues, Cardoso-Martins, Kornev, & Grigorenko, 2019).

Significant Relationship between Text Messaging and Orthographic Processing of BS-Criminology students at University of Mindanao Tagum College

As shown in the Table 3 is the significant relationship between text messaging and orthographic processing of BS-Criminology student at University of Mindanao Tagum College. It was been decided based on the findings of the study that there indeed a great correlation between the

two variables of the study with a p-value of 0.0051 and an r-value of 0.41. Therefore, the null hypothesis of the research study is hereby rejected.

The production of incorrect grammar and spelling is therefore less likely to reflect the learner's representations of those forms in memory, according to Dixon and Kaminska's (2007) theory. This may be because learners' representations of grammar and orthography are more flexible and possibly less well integrated than those of adults. Adults may have more well integrated receptive and productive language systems, as well as representations of spelling, grammar, and orthographic rules. Encoding and decoding processes are interconnected and cross multiple domains of literacy activity, and the patterns of association between the various literacy variables show that the learner had very flexible, completely integrated literacy processing systems. Hence, this affects their text message with the widespread of technology nowadays.

Table 3. Significant Relationship between Text Messaging and Orthographic Processing of BS-Criminology students at University of Mindanao Tagum College

Variables	Mean	r – value	p – value	Decision $\alpha = 0.05$
Text Messaging	4.32			
Orthographic Processing	4.25			
		0.41	0.0051	Ho rejected

* $p < 0.05$

When given hypothetical situations to respond to, Plester, Wood, and Joshi (2009) invited 10–12-year-olds to write text messages in response. They discovered that those who used more textisms tended to have better word reading, vocabularies, and phonological awareness. Plester et al. hypothesized that this result was due to the fact that most textisms require a certain level of phonological awareness, a skill that is known to be essential for successful literacy development. They consequently anticipated that once individual variations in phonological awareness had been taken into account, the association between textism use and reading ability would vanish. Even after accounting for factors like as age, short-term memory, phonological awareness, vocabulary, and the length of time the children had held a mobile phone, they discovered that textism use might still predict distinctive diversity in reading ability.

Kreiner and Davis (2011) found that while text frequency was not connected with spelling scores, abbreviation knowledge was positively correlated with spelling scores, supporting the pattern of results from this research. This shows that the substance of messages, namely the amount of text slang utilized, is more significant than the quantity of messages sent.

In order to create safe and sound learning environments that are founded on common objectives, resources, and structures as well as norms for involvement as true students of the school, both teachers and learners must cooperate and work together in their classrooms. Teachers and students take on particular identities and roles in their interactions with one another, which

aids in the development of their conceptions of what learning is as a process and as a body of knowledge (GENELZA, 2022).

In summation, there is growing evidence that phonological processing abilities and decoding alone are insufficient for the development of fluent reading and that orthographic processing abilities play a crucial independent role thereby text messaging pave the way for learners to grasp the correct formation of the words when texting. The process of combining single-letter strings into whole-word units that are quickly and effortlessly recognized by skilled readers is known as unitization, and it is one aspect of orthographic learning whose significance has been acknowledged but not sufficiently addressed in reading acquisition research.

CONCLUSION

The result of the study clearly stated that there is a significant relationship between text messaging and orthographic processing. These orthographical violations most likely included both instances of accidental or uninformed grammatical blunders as well as fun, intentional textisms that just so occurred to contravene standard grammar. It is possible to determine whether the generation of such linguistic faults warrants concern by comparing it to literacy-related skills.

For many senior struggling students and speakers who never learned to "crack the code," years of scholastic failure led to alienation from school and demotivation, therefore it is crucial to evaluate and identify kids who are still having difficulty with fundamental phonological decoding skills. Through the use of nonword and sight word tests, these abilities are effectively isolated, ensuring that older, struggling readers and speakers who have decoding problems receive the specialized, intensive teaching they need to get back on track to successful comprehension. As a result, it is very advised to become aware of phonemics in order to properly interpret words through consistent practice and teacher support (Genelza, 2022).

Despite media concerns, it seems that frequent grammatical errors when sending text messages are not associated with any apparent reductions in grammatical understanding, at least among leaners. For adults, there is some indication of a correlation, but it is a lone finding in the midst of a number of other linguistic factors that have nothing to do with texting grammar mistakes. As a result, the researcher believes that the evidence supporting the claim that text messaging has a negative influence on language abilities and orthographic processing has been transparent and observable at some point or occasion.

INTERVENTION PROGRAM

The University of Mindanao Tagum College's BS-Criminology students have a thorough understanding of text messaging as a predictor of having orthographic processing skills. The researcher thought about and anticipated the following actions and activities to assist the students and teachers. Four macro skill improvement activities for students and a seminar-workshop for language teachers make up this intervention program.

These activities will help teachers deliver the lesson to the class and strengthen and sustain the students' capacity for learning. The aforementioned tasks are to be carried out by the English language educators with the students' participation. This further implies that by

implementing the suggested speaking improvement exercises created by the researcher, the students will be equipped to use the language appropriately.

ACKNOWLEDGEMENT

University of Mindanao Tagum College supported this study. I want to express my gratitude to my colleagues, close friends, family, and God for giving me the knowledge and skills that were so beneficial to this study. Without them, this would not be possible. Thank you!

REFERENCES

1. Cingel, D. P., & Sundar, S. S. (2012). Texting, techspeak, and tweens: The relationship between text messaging and English grammar skills. *New Media & Society*, 14(8), 1304-1320.
2. De Jonge, S., & Kemp, N. (2012). Text-message abbreviations and language skills in high school and university students. *Journal of Research in Reading*, 35(1), 49-68.
3. Dixon, M., & Kaminska, Z. (2007). Does exposure to orthography affect children's spelling accuracy? *Journal of Research in Reading*, 30(2), 184-197.
4. Gagen, M. (2013). Effective spelling instruction. *Right track reading*. (pp. 4-6.).
5. Genelza, G. G. (2021). Morphophonemic Awareness and Word Recognition Skill of Second Year BS-Criminology Students. *Proceedings International Education Webinar of IAIN Palopo (PROCEEDINGS IEWIP)*, 1(1), 56-70. Retrieved from <https://proceeding.ftik-iainpalopo.ac.id/index.php/proceeding/article/view/9>
6. Genelza, G. (2022). Facebook as a communication tool on language learning proficiency of college students. *International Journal of Multidisciplinary Research and Explorer*, 2(1), 16-26. <https://doie.org/10.0221/IJMRE.2022774088>
7. Genelza, G. (2022). Phonemic Awareness as Predictor of Word Decoding Ability among Bachelor of Science in Information Technology Students. *REiLA: Journal of Research and Innovation in Language*, 4(1), 24-40.
8. GENELZA, G. G. (2022). Soft Skills Communication and Cognitive Development of First-Year Purposive Communication Students. *Langua: Journal of Linguistics, Literature, and Language Education*, 5(2), 81-92.
9. Janin-Starr, L. M. (2014). An examination of texting's impact on writing (Doctoral dissertation, Keiser University).
10. Johansson, S. (2014). Code-switching in the English classroom: What teachers do and what their students wish they did.
11. Leung, L. (2007). Unwillingness-to-communicate and college students' motives in SMS mobile messaging. *Telematics and informatics*, 24(2), 115-129.
12. McDougald, J. S. (2013). The use of new technologies among in-service Colombian ELT teachers. *Colombian Applied Linguistics Journal*, 15(2), 247-264.
13. Moats, L., & Tolman, C. (2016). English gets a bad rap.
14. Perry, S. D., & Lee, K. C. (2007). Mobile phone text messaging overuse among developing world university students. *Communication*, 33(2), 63-79.

20. Rakhlin, N. V., Mourgues, C., Cardoso-Martins, C., Kornev, A. N., & Grigorenko, E. L. (2019).
21. Orthographic processing is a key predictor of reading fluency in good and poor readers in a transparent orthography. *Contemporary Educational Psychology*, 56, 250-261.
22. Skinner, B. F. (1988). *The selection of behavior: The operant behaviorism of BF Skinner: Comments and consequences*. CUP Archive.
23. Wood, C., Meachem, S., Bowyer, S., Jackson, E., Tarczynski-Bowles, M. L., & Plester, B.
24. (2011). A longitudinal study of children's text messaging and literacy development. *British Journal of Psychology*, 102(3), 431-442.