# SMS Language and Vocabulary Learning for EFL Senior High School Students: A Preliminary Study

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Abstract: The goal of the present study attempts to investigate the participants' perceptions toward learning vocabulary through the different types of short messaging service (SMS) language. Over the last decade, mobile phones have grown to be a popular communication tool for adults and children. Due to this trend, an issue concerning the nonconventional language use in text messages has begun to concern scholars. Text messages, also known as textese, have been condemned of influencing children's literacy skills in a negative way [6][8][11][12]. Nonetheless, according to previous studies, results have revealed negative and positive [18] influence on children's literacy skills. Moreover, SMS language is not equally the same in terms of orthography. Different types of SMS language may lead to different effects. Thus, the main objective of the present study aims to investigate the effects of different word forms of SMS language on English as foreign language (EFL) learners. The participants of the study consisted of 51 EFL senior high school students. A SMS language pretest was administered at the prior stage. After the participants' exposure to the SMS language list, a posttest was administered, followed by a perception questionnaire. Results of the pretest showed that the participants performed better on reduction of word type, followed by phonetically related type, then initialization type. According to the questionnaire, the results revealed that 55% of the participants believe that phonetically related type can better help them pick up target words, their second preference is reduction of words type, and last is initialization type. Results of the present study showed that the different types of SMS language may have different effects on users. Moreover, the majority of participants believe that phonetically related SMS language will better help them learn vocabulary.

Keywords: SMS, textese, texter, vocabulary

#### Introduction

Text messaging has become a trend in mobile communication [7]. With the occurrence of this trend is an issue regarding the non-conventional language use in text messaging. This has aroused concerns by scholars, educators, and parents.

Mobile phone users tend to spell out words in a non-standard form in text messages. This kind of language has been condemned of influencing children's literacy skills [6][8][11][12]. This form of text messaging is also known as textese. Generally, textese allows texters to insert the fewest number of letters to produce concise words to cope with the limited space, time, and cost constraints of text messaging through mobile phones. This allows the sender or texter to type fewer words and to communicate more quickly. SMS language has grown to be a common language for communication in conversations through text messaging and social networking sites.

However, according to previous studies, results have revealed both positive and negative influence on children's literacy skills. Nonetheless, textese is not equally the same in terms of word form. Different types of textese may lead to different effects. Thus,

the focus of the present study is to look into the participants' perceptions toward the different types of textese.

# 1. Short Messaging Service (SMS) Language

Short messaging service (SMS) language is a phrase used to indicate messages abbreviated as non-standard written forms [19], for example, C U 2nite. According to Leung (2007) [13], it is a largely sound-based, or phonological form of spelling that can reduce the time and cost of texting. From a broader perspective, Drouin (2011) [7] explained textese as "an abbreviated vocabulary that consists of initialisms, letter or number homophones, contractions or shortenings, emoticons, and the deletion of unnecessary words, vowels, punctuation, and capitalization" (p. 67). According to previous scholars, some of the most commonly and frequently used textese consist of four categories, including (1) phonetically related [1], for example, ur=your; b4=before; agr8=accurate; 2day=today; w8=wait; (2) reductions of words or non-conventional spellings, for example, *nth=nothing*; *msg=message*; *kok=knock*; *thks=thanks*; *pls=please* [18][21]; (3) initializations, for example, LOL=laugh out loud; YOYO=vou're on your own; OMG=oh my god; TTG=time to go; RN=right now; and (4) emittons, which are symbols representing emotions, for example, : ( sad; : -) smiley; :-D laughing; \*\0/\* cheerleading; :- & tongue-tied. From the four different categories above, most of the related research has focused on the first category—phonetically related type. Results from relevant studies have shown positive learning effects from this type of textese. This is mainly because of its phonetic features, which provides opportunities to enhance learners' awareness of letter-sound rules (e.g., [17] [19]) and retention. This may portray as one of the most important characteristics of enhancing awareness and memorization of target words.

# 2. Literature Review

### 2.1 Studies on SMS Language

Empirical studies on SMS language have focused on the impact of using SMS language through mobile phones on learners' vocabulary retention and reading comprehension [15] and the influence of frequent usage of text messaging on undergraduates' academic writing [20].

A recent study conducted by Motallebzadeh (2011) [15] examined the influence of SMS on mobile phones on Iranian EFL learners' vocabulary retention and reading comprehension ability. Results revealed that SMS language can facilitate learners' reading comprehension. The researcher [15] also supported the employment of mobile phones as a learning tool to facilitate vocabulary instruction. Thus, compared to learning with paper and pencil, taking use of learners' mobile phones to send and receive L2 vocabulary through text messages produces positive results. Hulstijn and Laufer (2008) [10] also agrees with this by stating that mobile phones are effective medium for learning L2 vocabulary, especially for self-learning. Furthermore, Cavus and Ibrahim (2009) [3] believed that learning vocabulary via SMS aroused learners' positive attitudes and led to the increase in vocabulary retention. Results of the study provided evidence that mlearning (learning assisted by mobile technologies) has potential in the increase of exposure to the target context and learners can have more opportunities for self-learning [14].

Studies have shown that mobile phones are beneficial for vocabulary learning and self-learning. However, Shafie et al.'s (2010) [20] findings were contradictive to previous studies. Shafie et al. (2010) [20] investigated the effects of frequent usage of text messaging on undergraduates' academic writing performances. Results revealed that although the participants were exposed to SMS language, they were aware of the appropriateness of writing style for both formal situations (e.g., class assignments and examinations) and informal situations (e.g., sending text messages). Nonetheless, the researchers discovered many spelling errors and grammatical errors in the participants' class assignments and examinations. The researchers claimed that this is mainly due to the participants' frequent usage of SMS language as well as a result of frequent exposure to different orthographic forms of SMS language. The written forms of SMS language are presented differently, thus, according to the researchers' explanation, exposure to the different forms may also be a reason why the participants were unable to recall the accurate spellings in formal writing situations. Another interesting finding from the study revealed that texted language mainly influenced those who have weak proficiency in English. In other words, low proficient learners are greater victims of texted language.

#### 2.2 Positive Features Textese

Previous studies have shown contradictive results on the usage of textese through mobile phones. Yet, without the usage of technology, the orthographic forms of SMS language portray an influential role to learners at a certain level. There have been two sides supporting the learning effects of textese on texters. One side consists of researchers who believe that textese poses an adverse effect on texters. They support that there were negative relationships between texting behavior, such as frequency of text-messaging, and language and literacy skills among young adults and children [6][8][11][20].

From a different perspective, a research conducted by Plester, Wood, and Joshi (2009) [18] investigated children's use of textese in text messages and found that textese correlated positively with word reading ability and phonological awareness. There were several possible explanations for this result, listed as follows.

- (1) Frequent usage of textese is another means of increasing exposure to the written words, which was known as a positive predictor of success to reading [4].
- (2) Textese provides the opportunity for young adults and children to play with words or use the words in a context in an interesting way. This leads to increased engagement with conventional standard spelling and reading as well [18].
- (3) Textese, some are often based on phonology, may provide opportunity to enhance children's awareness of the letter-sound rules necessary for traditional standard spelling and reading proficiency [17]. Moreover, many of the contracted linguistic forms of textese resemble children's early spellings, where only salient sounds of words are encoded (e.g., *pls* for please) [9].

Another explanation supported by Crystal (2006) [5] was the written feature of textese, discussed below.

(4) The written features of textese are similar to the features of Standard English (SE) [5]. Those who do not know the vocabulary may still be able to decode it (e.g., *Ur gr8* into 'You're great') mainly because the contractions are relatively transparent and contain partial SE features.

According to the explanations above, the features of textese include increase of interest and engagement of word usages, phonological characteristics leading to awareness of letter-sound rules, and orthographic features relative to SE. These features of textese may portray as some of the most important elements of enhancing awareness and memorization of target words.

In terms of the influence of textese on EFL learners, many studies have examined SMS language as a whole while there are different and common types of textese that are frequently used by texters. Thus, it is of interest to investigate the different types of textese and whether the features of different types of textese may enhance awareness, memorization, or learning of target words or phrases. The research questions of the present study are presented as follows.

- 1. Which type of textese did the participants perform better on?
- 2. What are learners' preferences for vocabulary learning with textese? From which aspects?

# 3. Methodology

# 3.1 Participants

The participants of the present study were selected from a senior high school in northern Taiwan. There were 51 EFL senior high school students who were currently studying in their second academic school year. Their ages were ranged from 16 to 18 years old (average age was 17). There are 32 female students and 19 male students.

# 3.2 Instruments

## 3.2.1 SMS language pretest

To collect the data needed for the present study, a pretest was administered at the beginning of the study to measure the participants' prior knowledge towards the target items (textese). The pretest consisted of 30 target items. The participants were required to check whether they were familiar with each target item. If the participants were familiar with the items, the participants were asked to check "Know" and write its meaning either in Chinese or English. If the participants did not know the meaning of the item nor have ever seen it before, they were asked to check "Don't know." Another category was provided if the participants were slightly familiar with the target item, yet, were not familiar with its meaning; then, they can check "Seen Before." The participants were required to select "Know," "Don't Know," or "Seen Before" for each item.

# 3.2.2 Immediate vocabulary posttest

The immediate vocabulary posttest was administered to check the participants' memory of the textese. The immediate posttest consisted of six items from the three types of SMS language, including phonetically related type, reduction of words type, and initialization type. There were a total of 18 target items randomly selected from the pretest.

## 3.2.3 Perception questionnaire

To elicit the participants' perceptions toward the different types of textese, a perception questionnaire was distributed to the class after the participants completed the immediate posttest. The questionnaire was presented in the participants' native language so they can better understand the meaning for each question.

### 3.3 Material

Each participant received the textese language list, which contained ten items from each of the three categories—phonetically-related, reduction of words, and initialization. The language list provided the standard spellings as well as the Chinese definitions of each

target item. The participants were asked to study the list carefully while their English teacher slightly described the special features of each textese item and its relationship to the standard spelling.

## 3.4 Data Analyses

The results of the immediate posttest were graded according to four different scoring systems. First, one point was given if an answer was spelled completely correct in English, if there were any misspellings, no scores were given. Second, one point was given if an answer was spelled partially correct in English. Third, one point was given if the participant provided a completely correct meaning or definition in Chinese. Fourth, one point was given if the participant provided a partially correct meaning or definition in Chinese.

#### 4. Results

#### 4.1 Pretest

According to the results of the pretest, the ten most unfamiliar textese items reported by the participants were *CUL8r*, *TTYL*, *BRB*, *fwd*, *G2G*, *xlnt*, *1drfl*, *BTW*, *TOY*, and *J4F* (from most unfamiliar to least unfamiliar). Among the ten most unfamiliar items, five items belonged to the phonetically related category, four items belonged to the initialization type, and one item belonged to the reduction of word type.

## 4.2 Immediate Posttest

After studying the textese language list, the participants were required to take an immediate posttest. The results of the posttest were graded according to four different grading systems. The total score of the posttest was 18 points for each grading system. The participants received an average of nine points for providing a perfectly spelled answer; the participants received an average of two points for partially correct answers in English. As for the Chinese meanings, the participants received an average of nine points. None of the students provided partially correct Chinese interpretations. According to the participants' answers, those who provided Chinese interpretations were completely correct.

According to the participants' scores for each item, results revealed that the participants performed the best on the reduction of words type, and performed the weakest on initializations type. This indicates that reduction of words and phonetically related type of textese might have provided cues to help the participants recall the standard form of the target words. On the other hand, initializations might not provide as much information compared to the other two types, thus may have caused more difficulties for the participants to recall.

# 4.3 Results of the Perception Questionnaire

# 4.3.1 Frequent usage of text messaging

The beginning of the questionnaire explored the frequent usage of text messaging among the participants. Results reported that nearly 30% of the participants in the present study send an average of seven texts or more per week. Moreover, approximately 29% of senior high school students log on to social networking sites (e.g., MSN, Facebook, Twitter) once

to twice each week, and around 25% of the participants log on seven times or more each week.

# 4.3.2 First language preference

Next, according to the results of the questionnaire, a large proportion of participants reported that they do not often use English textese when sending text messages (49%) nor do they often use English textese when chatting or leaving messages through social networking sites (47%). Although the participants use text messaging quite frequently, the results revealed that they rarely text in English nor do they use English textese. One possible explanation is that the participants prefer or are used to using their native language when sending text messages to others or chatting through social networking sites.

## 4.3.3Features of textese can enhance vocabulary learning

The majority of participants reported in the perception questionnaire that the vocabulary presented in textese form can enhance their vocabulary learning. Approximately 45% of the participants reported that it *will help a little* while 29% reported that it *will help.* To further understand the participants' perceptions toward textese and vocabulary learning, responses for questions six to eight show the participants' perceptions towards the effect of vocabulary learning through different types of textese.

According to the results, over half of the students (60%) believe phonetically related features of textese can improve their learning. Meanwhile, slightly over half of the students (51%) believe initialization type of textese can promote their learning. Last, a larger proportion of participants (66%) chose reduction of words type. To be short, the majority of participants believe that the features of the three types of textese can enhance their vocabulary learning.

### 5. Discussion

### 5.1 Which Type of Textese Did the Participants Perform Better on?

According to the results of the immediate posttest, the participants performed better on reduction of words, followed by phonetically-related category, then initialization. The first two types share a similar feature, which is providing partial clues to the target word (or words). In terms of orthography, one reason why the participants performed better on reduction of words category is probably because it is easier to spell out compared to the other three categories. As for the phonetically-related category, this type of SMS language may also provide some information on the standard form of the word (or words) due to its phonetic features. Adams (1990) [1] mentioned that this type of textese can allow the participants to understand the target items by accessing phonology. Furthermore, the results are also consistent with Crystal's (2006) [5] suggestion that some textese features are similar to the features of SE. Those who do not know the word or words may also be able to decode it mainly because the abbreviations are relatively transparent and because they contain SE features.

This also explains why the participants did not perform as well in the initialization category. The lack of signals provided and the more words that this type contained may have caused more difficulties for the participants to spell out the target words correctly.

5.2 What are Learners' Preferences for Vocabulary Learning with Textese? From Which Aspects?

According to the results of the questionnaire, more than half of the participants believe that the three features of textese may help them to learn vocabulary (74%). Moreover, among the three types of testese, results revealed that 55% of students think that phonetically related feature can better help them learn vocabulary, followed by reduction of words, then initialization. Another small proportion of participants (27%) prefer initialization type more than reduction of words type. Consequently, according to the participants' perceptions, results indicate that the majority prefer learning with phonetically related type of textese.

Next, the participants reported their perspectives on how the three categories can help them learn vocabulary, specifically in terms of memorization, spelling, pronunciation, understanding, and usage. In terms of pronunciation, results revealed that 40% of the participants believe that the phonetically related feature can help their pronunciation while 10% of the participants think that reduction of words can help their pronunciation, and only a small proportion (4%) think that initialization can help their pronunciation. The results relatively correspond to Adams (1990) [1] and Plester et al.'s (2009) [18] findings in which knowledge of textese can positively correlate with phonological features and awareness.

As for orthography, the participants (27%) believe that reduction of words type can help their spelling for the target word. A fewer proportion of participants (20%) believe that initialization type can help their spelling, and only 12% of participants think that phonetically related type can help their spelling for the target word. The results show that reduction of words and initialization provide more information on spelling while phonetically related type of textese provides less information on orthography.

Moreover, the type of textese that can better enhance the participants' memorization was initializations. Approximately 27% of the participants think that providing the initials of the target words can help them to memorize the words. Although the results are contradictory with the vocabulary posttest, the written form of the initialization type might still be more effective if the category is consisted of more than one word. For instance, *TTYL* signals learners of the number of words in this phrase as well as the first letter of each word. A fewer percentage of participants (24%) reported that reduction of words can also help their memorization of the target word, followed by phonetically related type (23%).

Last but not least, another discovery found in the present study was the participants' habit of text messaging. Nearly 30% of senior high school students from the participants in the present study send an average of seven texts or more per week. The results are similar to the results reported from Australia and United Kingdom. The statistics reported in Australia in 2008 [2] revealed that around 90% of Australian teenagers uses text-messaging at an average of 11 texts per week. Moreover, in the United Kingdom, the 2010 statistics reported about one-third of eight to 11 year old children regularly use a mobile phone and send an average of 22 text messages a week [16]. The results show that a large popularity of young adults uses text messaging every week. According to the results of the questionnaire, the participants reported not using SMS language very often through text messaging (49%) and social networking sites (47%). This may due to their priority of using first language (L1) when texting messages.

Over half of the participants (74%) feel that SMS language may help them learn English vocabulary. One reason for this is probably because SMS language is playful and learners might feel interested in using it. Another reason is probably because of the way the SMS language is presented. Some are presented in a way which can help learners to memorize the word or expression clearly.

# 6. Conclusions and Implications

The participants in the present study reported not using SMS language in English very often. This is probably due to their habit of using their native language. However, according to the participants' perceptions, results showed that using SMS language may not always bring negative effects. Nevertheless, results also reveal that different types of textese may provide distinct effects. According to results of the questionnaire, the participants believe that the phonetically-related feature can help their pronunciation and memorization of the target word, reduction of words can help their spelling and memorization, and initialization can help their memorization, spelling, and usage of the target word.

First, the pedagogical implications suggested from the present study is that SMS language can be included in casual practices and language activities, moreover, presented in dialogues for speaking practices or short passages for reading practices.

Second, teacher guidance is essential. This is to guide learners of the special features of the SMS language and explain how it relates to the target word. Furthermore, teachers can provide explanations regarding usage of textese, for example when, to whom, and how it can be used.

Last but not least, phonetic features of textese can help learners to pronounce and memorize the target word. This may also show that providing similar phonetic features or symbols of the target word can enhance learners' pronunciation and memory.

#### References

- [1] Adams, M. J. (1990). Beginning to read: Thinking and learning about print. Cambridge, MA: MIT Press.
- [2] Australian Bureau of Statistics, 2008. *Census at school*. Retrieved 30 September 2010 from http://www.abs.gov.au/ websitedbs/cashome.nsf/Home/Teacher+Resources
- [3] Cavus, N., & Ibrahim, D. (2009). M-learning: An experiment in using SMS to support learning new English language words. *British Journal of Educational Technology*, 40(1), 78-91.
- [4] Cipielewski, J., & Stanovich, K. E. (1992). Predicting growth in reading ability from children's exposure to print. *Journal of Experimental Child Psychology*, *54*, 74-89.
- [5] Crystal, D. (2006). Language and the Internet (2<sup>nd</sup>). Cambridge, UK: Cambridge University Press.
- [6] De Jonge, S., & Kemp, N. (2012). Text-message abbreviations and language skills in high school and university students. *Journal of Research in Reading*, 35, 49-68.
- [7] Drouin, M. A. (2011). College students' text messaging, use of textese and literacy skills. *Journal of Computer Assisted Learning*, 27, 67-75.
- [8] Drouin, M. A., & Davis, C. (2009). Ru txting? Is the use of text speak hurting your literacy? *Journal of Literacy Research*, 41, 46-67.
- [9] Gentry, J. R. (1982). An analysis of developmental spelling in gnys at wrk. *The Reading Teacher*, *36*, 192-200.
- [10] Hulstijn, J. H., & Laufer, B. (2001). Some empirical evidence for the involvement load hypotheses in vocabulary acquisition. *Language Learning*, 51, 539-558.
- [11] Kemp, N. (2010). Texting vs. txtng: Efficiency in reading and writing text messages, and links with other linguistic skills. *Writing Systems Research*, 2, 53-71.
- [12] Lenhart, A., Arafeh, S., Smith, A., & Macgill, A. R. (2008). Writing, technology and teens. Retrieved May 1, 2012 from http://www.pewinternet.org/~/media//Files/Reports/2008/PIP\_Writing\_Report\_FINAL3.pdf.pdf
- [13] Leung, L. (2007). Unwillingness to communicate and college students' motives in SMS mobile messaging. *Telematics and Informatics*, 24, 115-129.
- [14] Lu, M. (2008). Effectiveness of vocabulary learning via mobile phones. *Journal of Computer Assisted Learning*, 24, 515-528.
- [15] Motallebzadeh, K. (2011). SMS: Tool for L2 vocabulary retention and reading comprehension ability. *Journal of Language Teaching and Research*, 2(5), 1111-1115.
- [16] Ofcom. (2010). *UK children's media literacy*. Retrieved May 21, 2012 from http://stakeholders.ofcom.org.uk/binaries/research/media-literacy/ukchildrensml1.pdf
- [17] Plester, B., & Wood, C. (2009). Exploring relationships between traditional and new media literacies: British preteen texters at school. *Journal of Computer-Mediated Communication*, 14, 1108-1129.

- [18] Plester, B., Wood, C., & Joshi, P. (2009). Exploring the relationship between children's knowledge of text message abbreviations and school literacy outcomes. *British Journal of Developmental Psychology*, 27, 145-161.
- [19] Powell, D., & Dixont, M. (2011). Does SMS text messaging help or harm adults' knowledge of standard spelling? *Journal of Computer Assisted Learning*, 27, 58-66.
- [20] Shafie, L. A., Azida, N., Osman, N. (2010). SMS language and college writing: The languages of the college texters. *International Journal of Emerging Technologies in Learning*, 5(1), 26-31.
- [21] Thurlow, C. (2003). Generation Txt? The sociolinguistics of young people's text-messaging. Discourse Analysis Online. Retrieved May 14, 2012 from http://extra.shu.ac.uk/daol/articles/v1/n1/a3/thurlow2002003-paper.html