

## Mini-Tasks #6-12 - Texting, techspeak, and tweens: The relationship between text messaging and English grammar skills

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### Introduction

Throughout the world, cell phones have become commonly found in classrooms, cafeterias, and hallways. This boom in popularity has led to different uses by adolescents, like to send text messages (Jones and Schieffelin, 2009). Research has indicated that Americans use cell phones to send text messages more than they use them to place phone calls (Mindlin, 2008). A 2009 report by the International Association for the Wireless Telecommunications Industry found that 1.5 trillion text messages were sent and received in the United States in 2009 alone (CTIA, 2010). In addition, a 2010 report by the Nielsen Company found that American adolescents ages 13–17 send more text messages than any other age group, averaging 3,339 a month, a rise of 8% over the past year. 43% of teenagers indicated that they got a cell phone primarily for text messaging (The Nielsen Company, 2010). This dramatic rise in popularity has led parents and teachers to question the effect of texting on adolescents' understanding of English grammar during a period when they are developing language skills.

The speed and ease of text messaging have created a perfect opportunity for adapting the English language. This texting habit has led to an evolution in grammatical usage, which we will call “techspeak.” This language differs from English in that it takes normal English words and modifies them (what we call ‘word adaptation’), using conventions of abbreviation, such as initialisms (lol for laughing out loud), omission of non-essential letters (wud for would), and the substitution of homophones (gr8 for great). In addition, techspeak adapts standard conventions of structure by lessening the importance of proper punctuation and capitalization, all in the interest of quickness. These adaptations have found their way into day-to-day use of language in modern society, however, there is much debate among leaders in education, teachers, and parents as to the effects of techspeak on the grammar and writing skills of adolescents in the classroom setting.

Since some of the writing that occurs in school is relatively informal in nature, it is not too surprising that techspeak has begun to enter the classroom setting. Daily, adolescents are asked to write in journals or take notes, which are considered to be more informal modes of writing. On the other hand, writing activities such as essay composition is considered a more formal mode of writing because they are often used for assessment

purposes (Lenhart et al., 2008). However, a recent Pew survey for the National Commission on Writing found that American adolescents who own a cell phone were more likely to use informal writing styles in other electronic communications, such as instant messaging and email, than adolescents who did not own a cell phone. Survey results indicate that the more adolescents use electronic communication to speak with their friends, the more likely they are to ignore punctuation and capitalization rules (70 percent) or use text shortcuts, like abbreviations (57 percent) in electronic communications (Lenhart et al., 2008).

This study will explore the previously untested relationship between text messaging and grammar among adolescents in a correlational manner. With sixth, seventh, and eighth grade students as a sample, a group that has grown up using both normal English grammar and techspeak, we used the following research questions to guide this study:

Q1: What is the relationship between the number of text messages an adolescent sends (and receives) and his/her scores on a grammar test?

Q2: Is the use of different styles of adaptation common in text messages (word and structural) related differently to the grammar assessment scores of adolescents?

## Method

A self-report survey of texting behaviors and message characteristics, along with an in-class grammar assessment, was conducted with middle school students to address the research questions of our study. Participants were sixth, seventh, and eighth grade middle school students from a mid-sized school district on the east coast of the United States. In all, 542 surveys were administered to students in the classroom; 228 completed surveys were returned, for a response rate of 42.1 percent. Of this final sample, 36.8 percent were from sixth grade, 21.5 percent from seventh grade, and 41.7 percent were from eighth grade. Ages ranged from 10 to 14, with a mean of 12.48. Males represented 39.1 percent of the final sample.

### *Survey Features*

*Usage.* Participants were asked to self-report the number of text messages they send and receive on an average day. In addition, respondents were asked to indicate the amount of time they spend studying, watching television, listening to music, and reading for pleasure. Finally, they were asked for the amount of free time they have each day.

*Attitudes toward text messaging.* Next, the survey asked adolescents to record their attitudes toward text messaging by using a 5-point scale, where an answer of 1 showed that the respondent strongly disagreed and an answer of 5 showed strong agreement. They were asked questions regarding the convenience and purpose of using technology, such as ‘The speed of text messaging makes it convenient to use.’ Questions were also included to determine if an adolescent’s use of these technologies is primarily driven by parents or friends.

*Textual adaptation.* Finally, participants were asked to self-check their last three sent and received text messages to separate individuals, recording the number of text adaptations present in each message. This was done to ensure a wider range of message lengths. It also increased the chances of the text messages involving different groups of individuals, such as friends, parents, or siblings. For each of the three sent and received text messages, participants were asked to list their relationship to the sender. Participants then self-reported the number of adaptations they found in each text message and classified the adaptation into one of five categories. The five categories of common text message adaptation identified in the survey were use of abbreviations or initialisms, omission of non-essential letters, substitution of homophones, punctuation adaptations, and capitalization adaptations.

## Results

Researchers first tested the relationship between perceived use and total number of text messages sent and received. This resulted in a significant relationship, indicating support for the prediction that adolescents high in perceived use of text messaging would in turn send more text messages. The prediction that adolescents who receive more text messages from their friends will report higher levels of textual adaptations in their own text messages was tested next. The answer was no. However, the average number of adaptations in sent text messages was significantly related to the average number of received adaptations. Importantly, a negative association was found between the total number of text messages (sent and received) and the grammar assessment score.

To further understand this relationship with the grammar score, adaptations were split into two groups: word adaptations (abbreviations or initialisms, omissions of non-essential letters, and homophones) and structural adaptations (punctuation and capitalization changes). These two groups were then used as predictors of grammar scores. Interestingly, average sent word adaptation became a stronger predictor of grammar assessment score but the grade remained the most significant predictor.

## Discussion

The results of this study lend support to a general negative relationship between text messaging and adolescent grammar skills. First, adolescents who find text messaging to be a useful technology will use it more often. Furthermore, those who perceive text messaging to be high in utility report sending and receiving more textual adaptations. This suggests that most adolescents encounter grammatical adaptations while text messaging on a daily basis. Although the freedom to use adaptations of language in text messages may make an adolescent perceive it to be a more useful tool for communication, results of this study show clearly that these adaptations are negatively related to an adolescent's grasp of standard English grammar.

Our findings also show that the number of reported adaptations in received text messages was significantly related to the number of adaptations in sent text messages and to grammar assessment scores. Specifically, average sent word adaptation, consisting of abbreviations, letter omissions, and homophones, was found to negatively predict grammar score. Average structural adaptation, consisting of capitalization and punctuation adaptations, was not found to be a significant predictor of grammar score. This relationship could be due to a push in younger grades to ensure that students know a good sentence starts with a capital and ends with a period. This may have made it easier for participants in our study to know and use the difference between writing a text message and using appropriate English grammar in terms of punctuation and capitalization.

Perhaps the most interesting result of this study is that the average number of sent word adaptations in relationship with the number of received word adaptations and grammar assessment score. Here, the data would seem to indicate that adolescents use adaptations of language in their sent messages based on what they have seen in their received text messages.

The overall findings of this study are important since the continuing trend in schools to use new forms of electronic technologies for educational purposes and the trend that adolescents use them at higher rates. There is no question that techspeak has crept into classrooms; however, the question to date was whether or not adolescents were able to switch between writing text messages and using correct English grammar for class work. The results of this study indicate that most adolescents are not able to do so.

One classroom implication is that adolescents should be educated to understand the differences between techspeak and standard English grammar, recognizing that there is a time and a place for both forms of communication. It is unreasonable to stop techspeak entirely since it is a very useful form of communication, when formalita takes the back seat and quick and easy is the intended purpose. Electronic technology usage

for the purposes of teaching should be monitored to ensure that this does not allow adolescents to further practice building techspeak habits in the classroom.

### *Limitations*

A major limitation of our study is that we asked adolescents to estimate their usage of a number of different media. This was done to help ensure a greater response rate, since it required each participant to fill out the section only once, rather than having to return to a diary or journal each day over the course of a week. Since participants did not receive compensation for their time, every effort was made by the researchers to craft an instrument that was easy for adolescents to complete quickly.

To ensure that our respondents remained anonymous, they were asked to self-assess their own text messages, rather than submitting the text messages to the researcher for coding. This implies the possibility of adolescents not correctly self-assessing their text messages for these types of adaptations as precisely as researchers would have. This, however, would only serve to underestimate the number of adaptations actually present in the text messages. It would seem that adolescents with poor grammar skills would report a lower estimate while adolescents with strong grammar skills would report an estimate closer to the true number of adaptations present. Participants were also asked to record an adaptation into the one category of a provided table in which it best fit, so as to not overestimate the number of adaptations present in text messages. Further, participants were instructed to only count an adaptation if they were sure that it was, in fact, an adaptation. This again would seem to provide a more conservative estimate of the number of adaptations actually present in respondents' text messages. In hindsight, since significant results were found in regard to the relationship between adaptations and grammar skills, this does not appear to be a major limitation either.

### *Directions for future research*

This research lays the groundwork for future studies. It would be helpful to more closely examine those who do use word adaptations in their text messages but whose grammar skills do not seem to be affected, so that we can understand the strategies used by these adolescents to cope with the tension between the use of these adaptations and standard English grammar. This research could be used by teachers in the classroom to help those students who do use these adaptations in English writing. These and other related lines of investigation can help uncover the mechanisms governing the role of text messaging in shaping grammar and writing skills at a developmentally critical time for adolescent learners.