

# Generational Differences In The Use Of Textisms

Tyus Liu  
AP Research at Thousand Oaks High School

## 1 Abstract

The design of the following research was initially intended to find the impact of the use of textisms (abbreviated language used in text messages) on literacy across generations. It was later found, however, that in order to find the effects of textisms on one's literacy across generations, one must first consider the generational differences in the use of textisms. Thus, the intent of the following study is to discover more about the motivations and mindsets behind using textisms as it may vary across different generations. A naturalistic study was conducted, collecting a total of 1,000 text messages, 500 each from both Generation X (48-50 year olds) and Generation Z (14-16 year olds). Once this data was collected, a ratio of textism density was calculated by comparing the number of textisms to the total number of words. This ratio was then compared with results from a survey that asked a range of questions about participants' texting habits and perceived usage of textisms. In both Generation X and Generation Z, it was found that the use of textisms is prompted by a number of social queues. For Generation X, those that use textisms, do so mostly in order to fit in with a certain social group. On the other hand, Generation Z uses textisms because there is no need for them to fit in with any social groups. While there are social reasons to explain the use of textisms across both generations, the social reasons vary in each generation.

## 2 Methods

### Generation X & Z

Those who qualified to be a part of Generation X had to be between 48-50 years old and have at least a four year college degree. Those who qualified to be a part of Generation Z had to be 14-16 years old and be concurrently enrolled in high-school.

In order to increase the chances of obtaining varied data, age groups for each generation were specified so that there would be the greatest difference in experience with textisms. For example, those in Generation X (age 48-50) would have been born in the late 1960s, which would put them in the era right before the release of the first commercially successful personal computer, the Altair 8800 (1975). This is important because computers were the first devices to introduce computer mediated communication, meaning that those in Generation X grew up in a world without textisms, then later got introduced to them.

In contrast, those who qualified to be a part Generation Z (age 14-16) were born in the early 2000s, a time where cell phones were rapidly rising in popularity. By the time they reached about age 10, many kids were given cell phones with access to texting. The contrast being made is the difference in available technology between the generations.

While Generation Z barely knows a world without text-capable cell phones right in their pocket, Generation X grew up in a time where personal computers and the beginnings of CMC gave birth to the first use of textisms.

### Naturalistic Data

In the naturalistic data, text messages were collected from 40 total participants. With 10 males and 10 females in each generation, and 25 text messages collected per participant, this amounted to a total of 1,000 text messages (7,581 words).

In order to collect participants' text messages, each participant sent screenshots of their texting conversations to one phone number.

After receiving the screenshots of participants' texting conversations, each of the participants' messages were manually transcribed into an Excel spreadsheet, where the number of words per text could be calculated using Excel formulas.

In addition to participants sending a screenshot of their texting conversations, they were also instructed to categorize each of their conversations based on their relationship between them and the person they were texting. Relationships were categorized on a scale from one to six: unrelated (1), acquaintance (2), friendship (3), significant other (4), family (5), co-worker (6).

After each screenshot, participants sent a number one through six indicating a specific relationship for that conversation. Based on the relationship category of the given conversation, each text from that conversation was put into the corresponding relationship category in the Excel spreadsheet.

By using participants' collected text messages, textism density was calculated by making a ratio of total textisms to total words as done in similar naturalistic studies done in the past (Thurlow & Brown, 2003; Ling & Baron, 2007; Drouin & Driver, 2014). In addition, similar to Drouin & Driver's naturalistic study, textism category density was found by calculating the proportion of textisms per category to the total number of textisms. Not only was textism category density calculated, but also text relationship category frequency was also calculated by making a ratio of the number of texts sent with textisms in a specific relationship category to the total number of texts sent to that relationship category. This was calculated in both generations in order to discern differences in how often texts with textisms are sent to each relationship.

### Survey Data

Using the same 40 participants who took part in the naturalistic data collection, participants were also prompted to respond to a survey distributed through Google Forms. The survey was divided into two sections: the textism translation section and the questionnaire section.

**Textism translation section.** The textism translation section of the survey was modeled after similar studies done in the past (Plester et. al, 2008; De Jonge & Kemp, 2012). While some studied participants' translations of standard English into textisms (De Jonge & Kemp, 2012), others also measured participants' performance on translating textisms into standard English (Plester et. al, 2008; Drouin & Davis, 2009). The following research focused mainly on the aspect of translating textisms into standard English because it can offer concrete data on participants' understanding of textisms. While there could be an infinite number of correct answers translating standard English into textisms, there can only be one answer that correctly translates textisms into standard English. Additionally, translating standard English into textisms doesn't provide much insight into one's use of textisms because similar data that could be found from translations could also be found in naturalistic data of this study (such as textism category density).

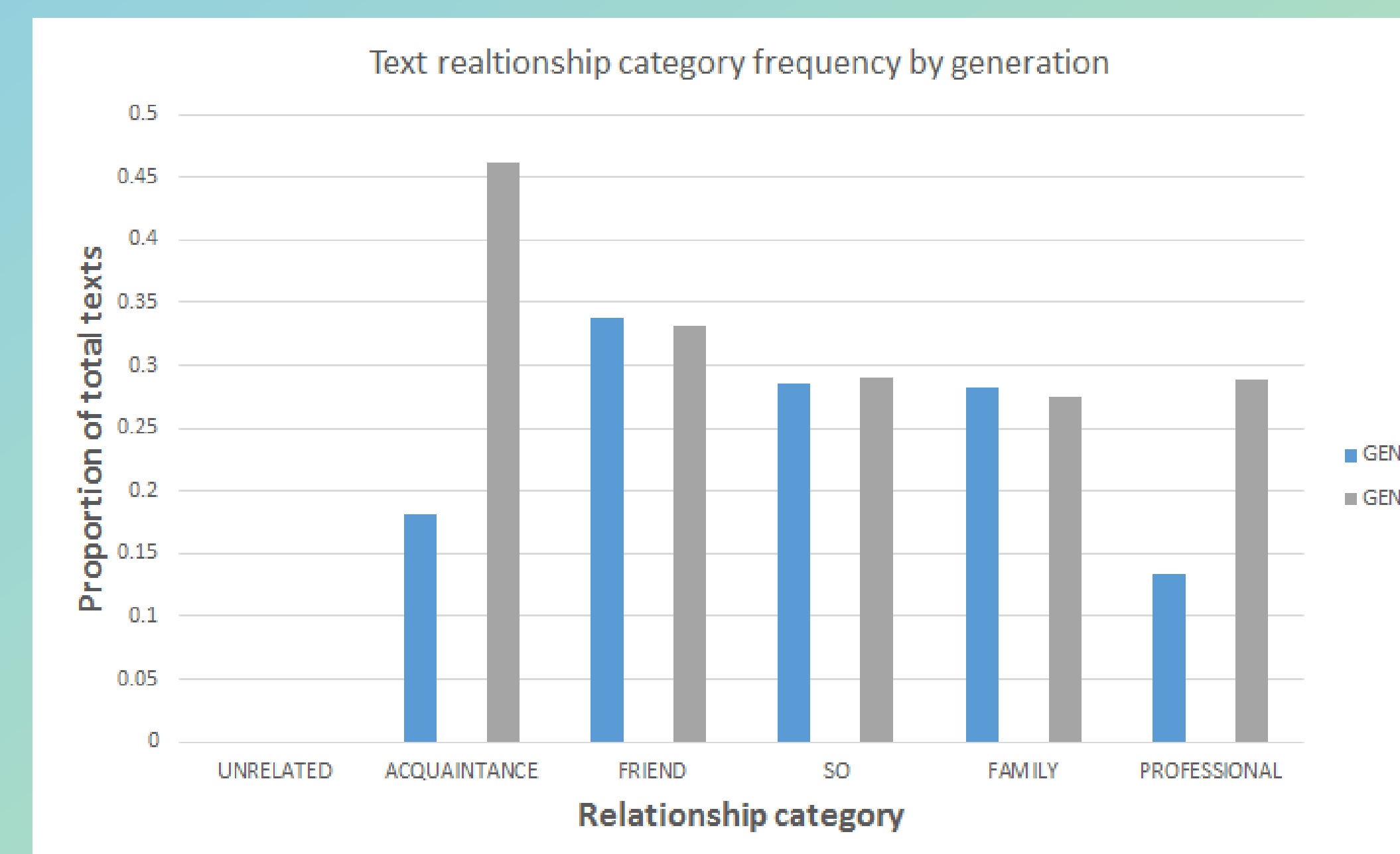
In terms of how the translation section was set up, each question was put into groups of two. Each group of questions tested only one aspect textisms, whether that be contractions, single letter/number homophones, symbols, etc. The first question was "easy," containing a low number of textisms (=1), and the second question was "hard," containing a greater number of textisms (>1). With only six categories defining a textism, there were 12 translation questions to cover each category of a textism. There were also two more questions added, and these were "wildcard" questions, which covered a wide variety of textism categories and did not follow the "easy" and "hard" conventions as done in the prior questions. These two wildcard questions were taken directly from Plester et. al's (2008) study in order to keep the data similar and comparable.

**Questionnaire section.** Participants were also given a questionnaire in the second half of the survey which collected basic demographic data and information regarding general text and textism usage. This data is important to keep in mind when considering the results.

## 3 Results

### Naturalistic Data

Although 1,000 text messages were collected, two text messages were discounted from the data because they were written in a language other than English. On average, text messages were 7.6 words per text and 37.2 characters per text. In total, there were 7,581 words and 426 textisms collected in the corpus. This came out to a total textism density ratio of 0.0562 (5.6%) for both Generation X and Generation Z. In Generation X, the textism density ratio was 0.0522 (5.2%) and for Generation Z it was 0.0615 (6.2%).



**Figure 1.** Ratio of total texts sent with textisms in each relationship category to the total number of texts in that relationship category.

In Generation X, the highest measured text relationship category frequency was "Acquaintance" with a ratio of 0.462 (46%). Because of the fact that there were only a total of 6 text messages sent to "Acquaintance," this ratio would be likely to be considered an outlier in the data. Assuming this, the next highest text relationship category frequency was "Friend," with a ratio of 0.331 (33%) and 52 texts sent to this relationship category.

In Generation Z, The highest measured text relationship category frequency was also "Friend," with a ratio of 0.338 (34%) and 113 texts sent to this relationship category.

### Survey Data

**Questionnaire section.** When prompted with the question "Why do/don't you use textisms?" participants explained why they do or do not use textisms. In Generation X, 45% responded that they do use textisms, while the other 55% responded that they do not. In Generation Z, 75% of participants do use textisms, while 25% do not.

In addition to stating whether or not they do or do not use textisms, participants also explained why. In Generation X, it was found that out of all participants who do use textisms, 89% use textisms because they are faster to type than standard English and they save time when typing. In a similar sense, 100% of participants in Generation Z who do use textisms also responded that they use textisms because they are faster to type than standard English. Out of both generations, 96% of all participants who do use textisms do so because of the belief that they are faster to type than standard English and they save time.

Participants were also asked whether or not they use textisms differently when texting different age groups. It was found that there was a majority of participants who responded with "yes" in both Generation X (65%) and Generation Z (90%). Those who responded with "yes" then got redirected to a set of questions that asked about tendencies when texting individuals younger or older than them.

In Generation X, 53.8% of participants who do use textisms differently when texting different age groups use "more textisms than average" when texting individuals younger than them, while the other 46.2% use "about the same" amount of textisms.

Generation Z, on the other hand, received more varied responses than those in Generation X. Thirty-three point three percent of participants who do use textisms differently when texting different age groups use "more textisms than average" when texting individuals younger than them, another 33.3% use "about the same" amount of textisms, 27.8% use "fewer textisms than average," and 5.5% use "no textisms at all."

## 4 Discussion

The goal of this study was to discover more about people's use of textisms and how they vary across generations. Fueled by inconclusive findings in previous research, this study also hopes to provide means for future research to be carried out studying the impacts of textisms on literacy across generations.

### Textism Density Ratio

Interestingly, it was found that the textism density ratio was similar in both generations. With a ratio of 0.0522 (5.2%) in Generation X, and 0.0615 (6.2%) in Generation Z, this amounts to only a one percent difference. Statistically speaking, one percent is negligible, and the results can be seen as the same textism density ratio across both generations.

Although both generations may have similar textism density ratios, this only accounts for how many textisms are used per word, and doesn't fully explain generational differences in the use of textisms. In looking at the survey data, there are other means to help determine differences in the use of textisms across generations.

### Textism Motivations

According to data collected in surveys, the reason why people favor the use of textisms is because it saves time. On the other hand, taking into account textism density, only about 5% of an individual's words are going to be textisms, and if the average text is only 7.6 words long, it becomes clear that there isn't much time to save by using textisms. From this point alone, one can see that people's perceptions on why they use textisms are flawed. While many use textisms in order to save time, it is debateable whether or not the time saved is significant enough to warrant the use of textisms. Perhaps further research examining the time saved when using textisms would be helpful in confirming whether or not textisms save a significant enough amount of time to explain their use.

### Comparing Generation X & Z

While both generations received the highest text relationship category density ratio in the "friends" category, Generation Z responded with "more textisms than average," "about the same," "fewer textisms than average," and "no textisms at all" when asked about their use of textisms with younger age groups. In comparison, Generation X only received responses for "more textisms than average" or "about the same." These results have the implication that age-gaps are the reason why different generations use textisms differently. Looking more closely at age-gaps, these results can be attributed to the fact that there are a number of social differences between the "young" and the "old." Thus, one can come to the reasonable conclusion that there are social reasons to explain the differing use of textisms across generations.

In terms of specific social differences, it can be assumed, but not concluded with definition or certainty, that Generation X uses textisms for reasons of "fitting-in" with the younger generation. On the other hand, Generation Z feels no need to "fit in" because they are the most socially updated individuals—the trend-setters.

### Acknowledgements

Dr. Naomi Susan Barron (American University)  
Dr. Larry Rosen (California State University, Dominguez Hills)  
Dr. Swanson and AP Research class  
Parents  
40 research participants