

# IDK how to Feel about this TXT MSG: Absence of Emotion when Processing Acronyms

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## Abstract

Text messaging has increased substantially and with it the use of acronyms. Even so, little is known about the way acronyms and their emotional contents are processed. We used a variant of the Stroop task in which participants named the colors of words and acronyms that had either emotional or neutral content. Response times and error rates were higher for emotional words than for neutral words, but no differences were found between emotional and neutral acronyms. These data suggest that the emotions attached to words are not conveyed through acronyms even though the literal meanings of the acronyms are known.

## Introduction

\* Of 76 MWSU students surveyed, 89% reportedly text at least once a day, 57% reported texting hourly.

\* Limited research on acronym processing; no research examining emotional acronyms.

\* Acronyms and abbreviations are processed as words (Laszlo & Federmeier, 2007; McWilliam, Schepman & Rodway, 2009).

**FBI**

Slower color naming

**TRS**

Faster color naming

\* Emotional Stroop: color naming is slower for emotional stimuli (Cothran & Larsen, 2008).

**Death**

Slower color naming

**Floor**

Faster color naming

**Are text-messaging acronyms processed similarly to the words and phrases they represent?**

Emotional

**BFF**

Neutral

**BTW**

**best friends forever**

**by the way**

## Methods

### Participants

30 college students (8 male, 22 female) participated in the experiment. The average age was 25 years, all participants began speaking English before 5 years of age and none were colorblind.

\* 93% reported text messaging at least once daily

\* 75% considered themselves to be experienced or an expert at text messaging

### Materials

A separate survey was used to select stimuli. Participants rated familiarity with and emotionality of 200 acronyms.

#### Familiarity

1 2 3 4  
Don't know it Seen it Know Meaning Use it

#### Emotion

1 2 3 4 5  
Very Negative Neutral Very Positive

Stimuli used in the experiment were familiar to at least 70% of those surveyed. Emotional items were rated as negative or positive by at least 60% of those surveyed; Neutral items were rated as neutral by at least 60% of those surveyed.

### Procedure

500 ms + **BFF** Until response  
Yellow

52 trials in which two variables were manipulated:

\* Emotionality: 1/2 emotional, 1/2 neutral

\* Display Type: 1/2 phrases, 1/2 acronyms

Responses faster than 200ms were excluded from all analyses as were responses 3 standard deviations slower than the participant mean response time.

## References

Cothran, D. L. & Larsen, R. (2008). Comparison of inhibition in two timed reaction tasks: The color and emotion Stroop tasks. *The Journal of Psychology*, 142, 373-385.

Laszlo, S. & Federmeier, K. D. (2007). Better the DVL you know: Acronyms reveal the contribution of familiarity to single-word reading. *Psychological Science*, 18, 122-126.

McWilliam, L., Schepman, A., & Rodway, P. (2009). The linguistic status of text message abbreviations: An exploration using a Stroop task. *Computers in Human Behavior*, 25, 970-974.

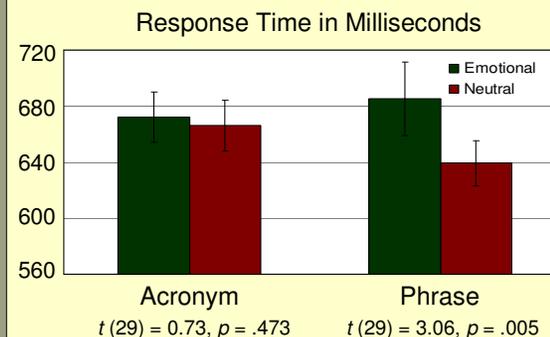
## Results

### Response Times

Within-subjects, repeated measures ANOVA

Emotion  $F(1, 29) = 8.47, p = .007$

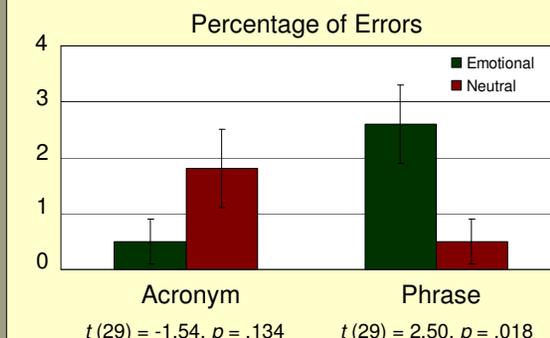
Emotion X Display  $F(1, 29) = 5.20, p = .030$



### Error Rates

Within-subjects, repeated measures ANOVA

Emotion X Display  $F(1, 29) = 7.65, p = .010$



## Conclusions

\* An emotional Stroop effect was obtained for words and phrases.

\* No emotional Stroop effect for acronyms.

Even though acronyms are lexical stimuli, their emotional content is not processed the same as emotional content attached to written words.

\* Acronyms do not seem to convey the intended emotion.