



# Text Messaging as a Distraction in an Academic Setting

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## Introduction

- Text messaging is a mode of conversation in which the sender types in a message of less than 160 characters on a mobile phone or other unit and sends it to another mobile receiver.
- On average, people send and receive more text messages than phone calls (Neilson, 2008).
- Instant messaging on a computer, is positively correlated with academic distractibility (Levine, et al., 2007).
- According to survey data, text messaging is correlated with a low GPA in 13-year-olds (Craig, 2008).

## Questions

- Does text messaging distract students in an academic setting?
- What are the general attitudes of students concerning text messaging in the classroom?

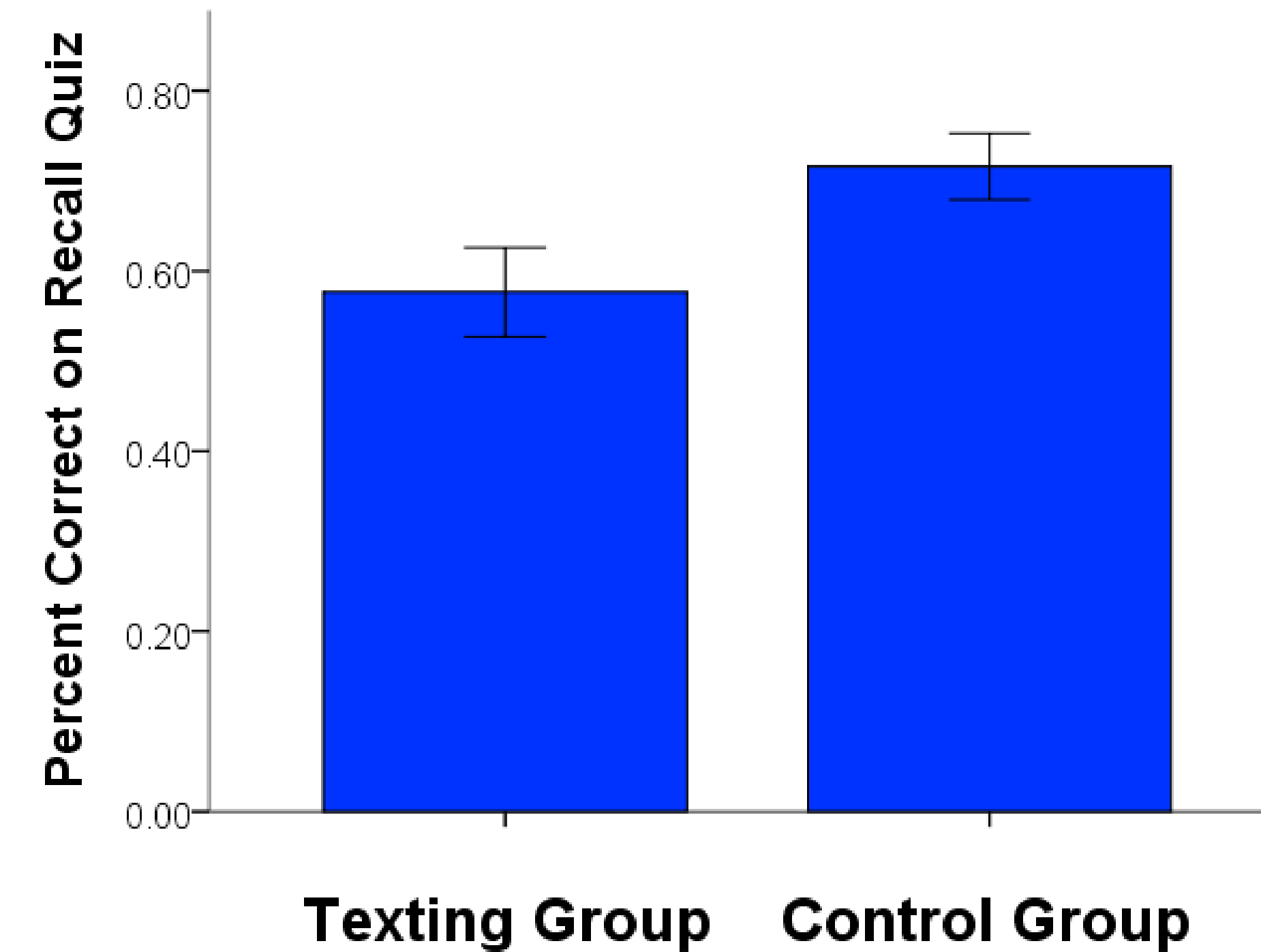
## Hypothesis

Text messaging is distracting to the user during a lecture setting, and will therefore lower the percentage of correct recall on a memory-based test.

## Procedure

This study took place in a campus classroom. The participants (n = 99) were randomly assigned groups, and asked to watch a twenty minute pre-recorded lecture on an advance research topic. During this lecture, the students in the text messaging group were asked to send and receive text messages on a consistent basis. The control group was asked to put their phones away and watch the lecture.

After the lecture, students were given a survey created by the authors, which looked at text messaging attitudes, actions, and ability. Once all the students had been given the survey, they were given a seventeen-question quiz, covering the information presented in the lecture.

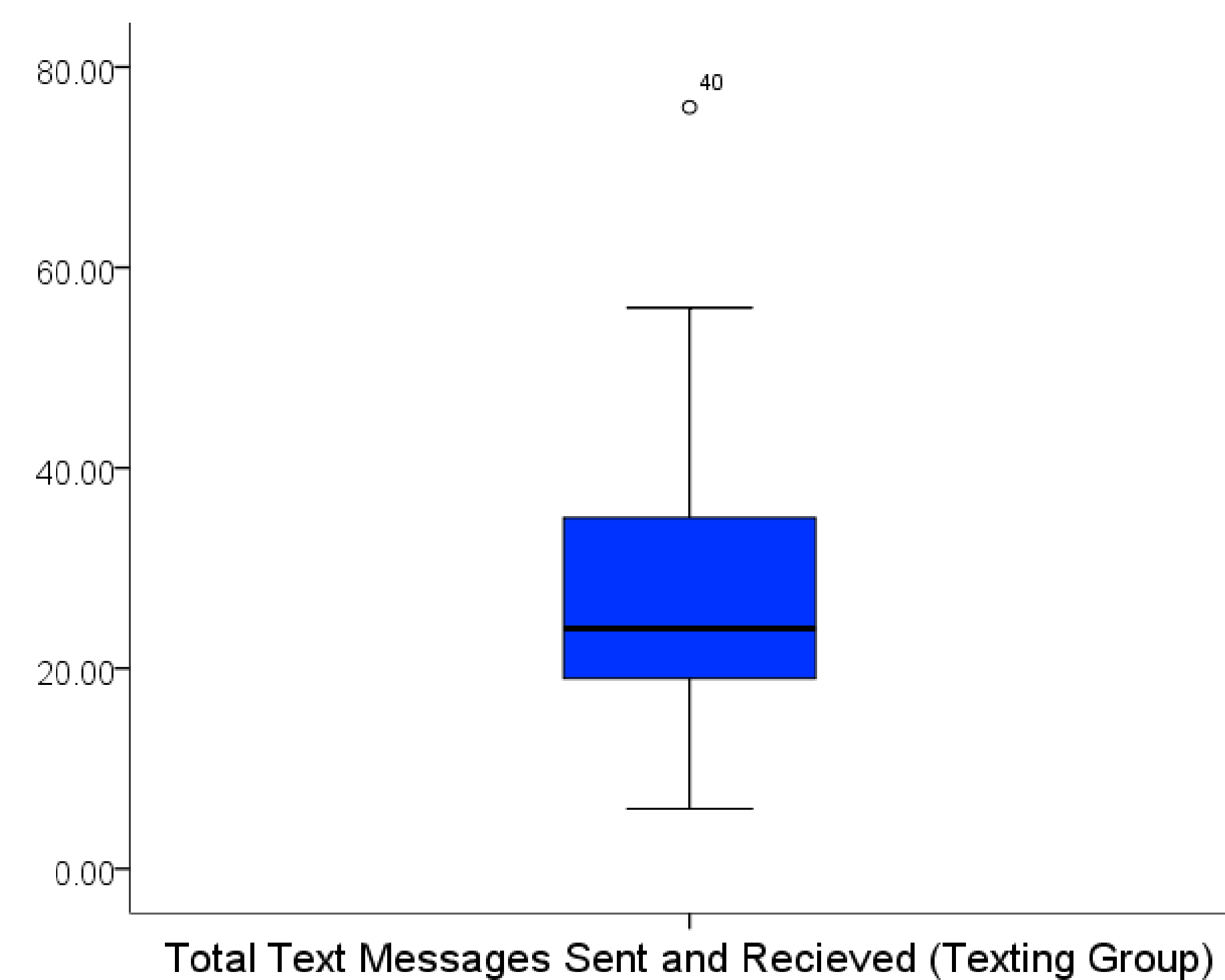


## Experimental Outcome Results

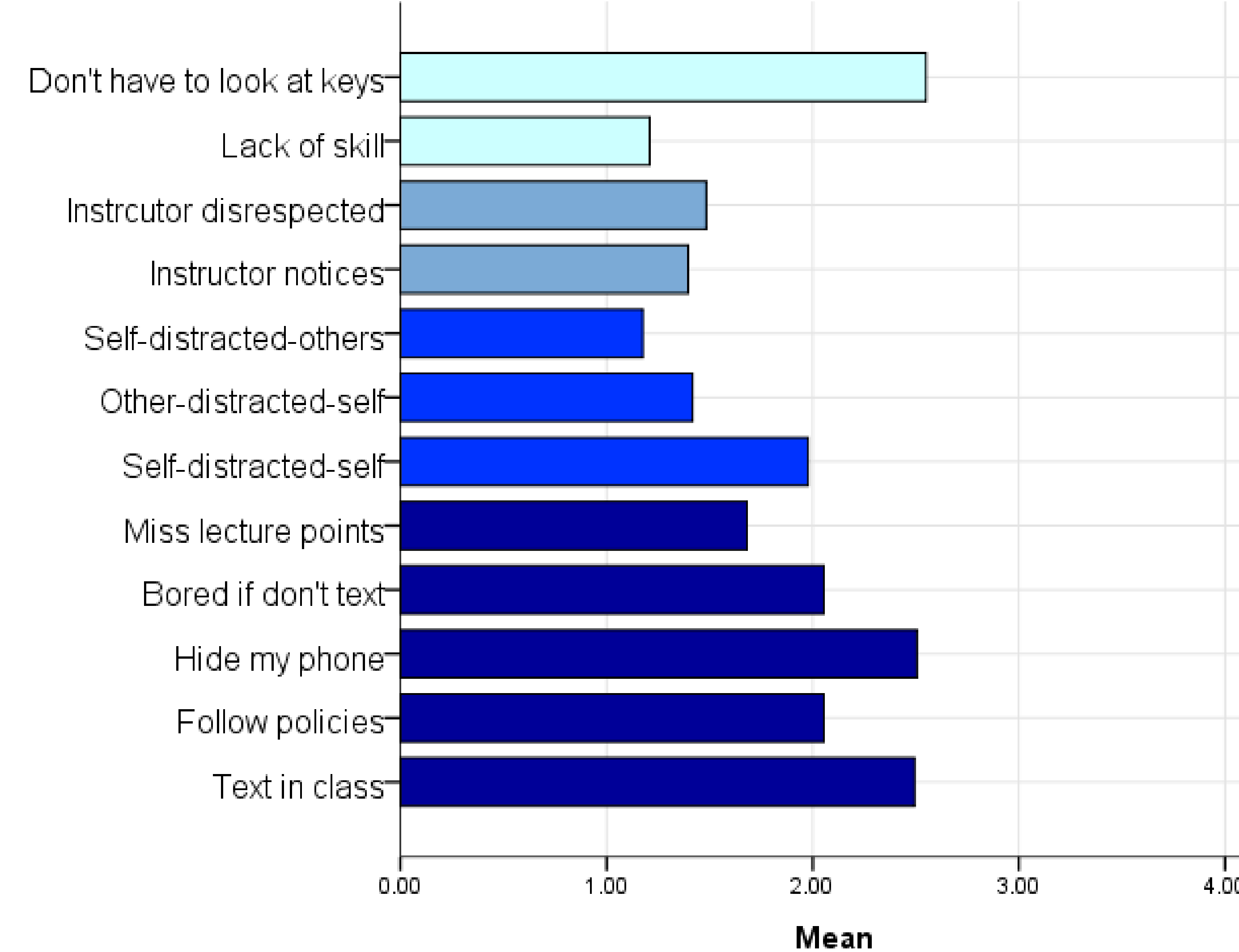
On average, students who text messaged throughout the lecture scored significantly lower than those who did not.

- Overall recall score:** Control (M = 72% correct), Text Messengers (M = 58% correct),  $p < 0.001$ ,  $t = 4.609$ ,  $d = .92$

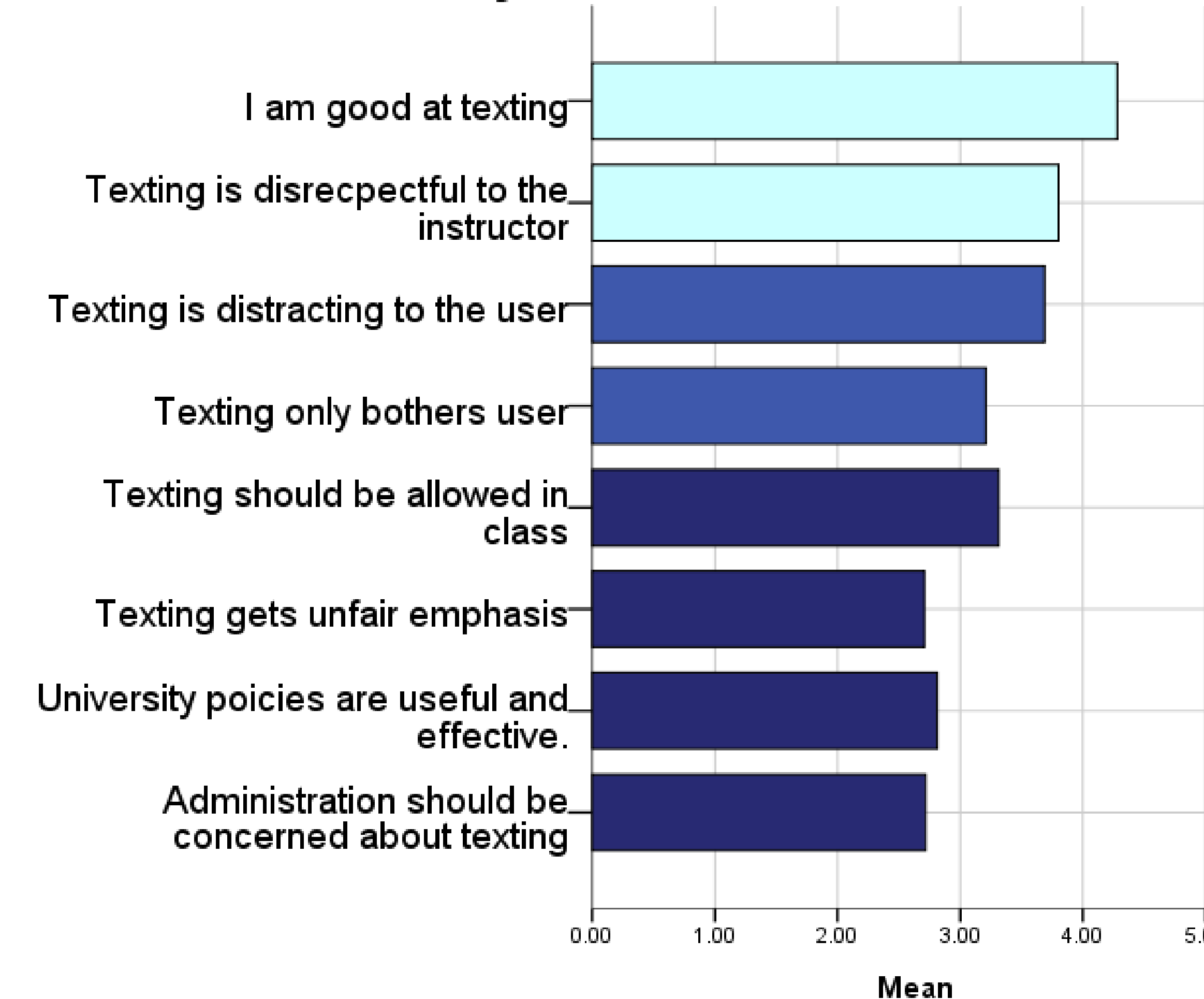
**No interactions** or correlations were found that moderated the effect, including: self-reported text messaging ability, number of text messages sent and received, age, or gender.



## Survey Results: Actions



## Survey results: Beliefs



## Discussion

Text messaging has a large effect on distraction and grade outcome on all students, regardless of perceived distraction, ability, and many other demographic factors.

Most students do not feel that they are distracted by text messaging in the classroom, even though they acknowledge that text messaging is distracting in general. This seems to fall under the general idea of self-serving bias, in that students feel that a negative outcome will not apply to them.

Regardless of what students may think, the **overall recall scores were actually significantly lower in the text messenger group than the control group.** Academic administration should take this finding into account when creating new text messaging policies for the classroom.

## Correlation Matrix of Grade Outcome and Covariates

Covariate	$r^2$
Age	-0.094
Gender	-0.086
Ethnicity	0.193
Year	0.009
Exposure to topic	0.063
Perceived Distraction	-0.013