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THE EFFECTS OF ENVIRONMENTAL CONTEXT ON CORRECT AND FALSE RECOGNITION MEMORY

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Purpose/Introduction

This experiment was designed in order to see the interaction effect between environmental context, and false memory. Environmental context is the difference in our physical environment that can effect our memory. False memory is the phenomenon where memory we thought was accurate was actually not. The goal was to replicate the original environmental context experiment, and see if it's effects applied to false memories in a similar way to normal memories.

Procedure

Each person regardless of the group they were in received the same lists to study, in random order using the E-prime program. Every list (ten in total) had a different key word or critical lure that was not in the list. In this example the key word is 'doctor', so the words in the list are all related to the word 'doctor'. Every participant would receive all these lists of ten words and then after a minute and a half break would be tested on all of the lists. The screens participants saw are presented below.



When being tested the participants would be asked about three different types of words. Target words that were in the list and they would want to answer 'yes' that they saw it. Lure words are words that are still related to the critical lure, but were not shown in the list, they would want to answer 'no' to these words. Finally, Critical Lures are the key words that the lists are built around, this is the word the research was interested in, because they should say 'no' however previous research says they will say 'yes'.

Target

Nurse

Please rate confidence on a scale of 1-5
1 2 3 4 5

Do you remember (r) or know (k) it?

Lure

Needle

Please rate confidence on a scale of 1-5
1 2 3 4 5

Do you remember (r) or know (k) it?

Critical Lure

Doctor

Please rate confidence on a scale of 1-5
1 2 3 4 5

Do you remember (r) or know (k) it?

Groups

Condition

Same

Different

Study

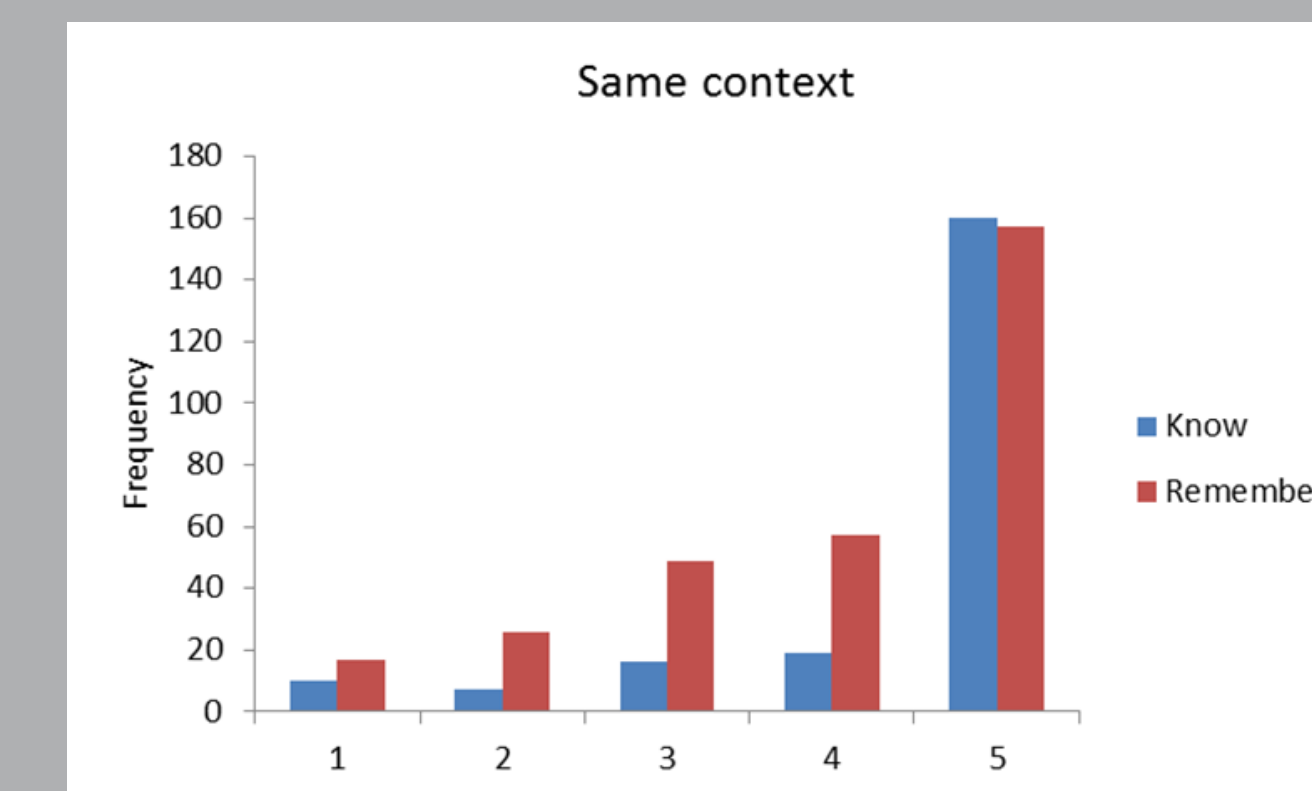
Test



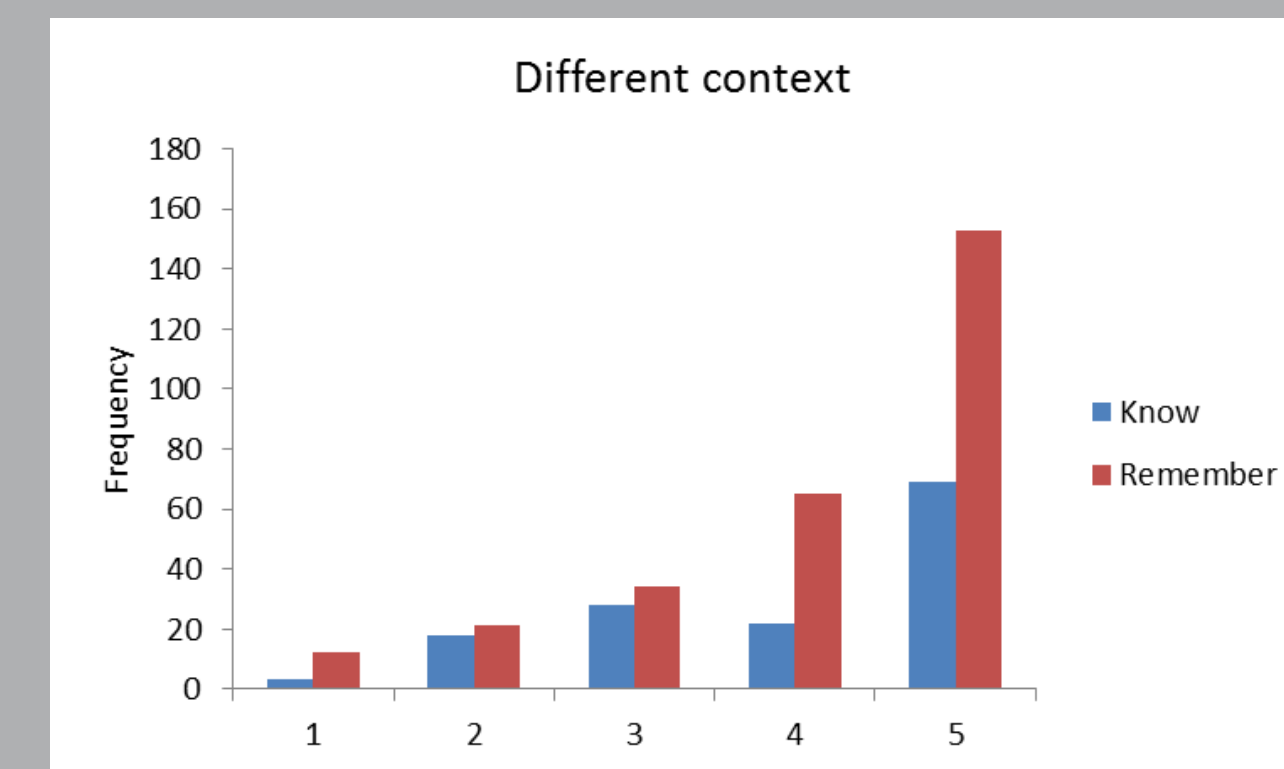
Results

An analysis of variance for a 2x3 mixed factorial design was conducted on the data. It was found that target words were significantly more common in the control group $t(34) = 2.08, p < 0.05$. This shows that the environmental context effect was replicated. False Memory was indicated, however no significant effects were found in different contexts.

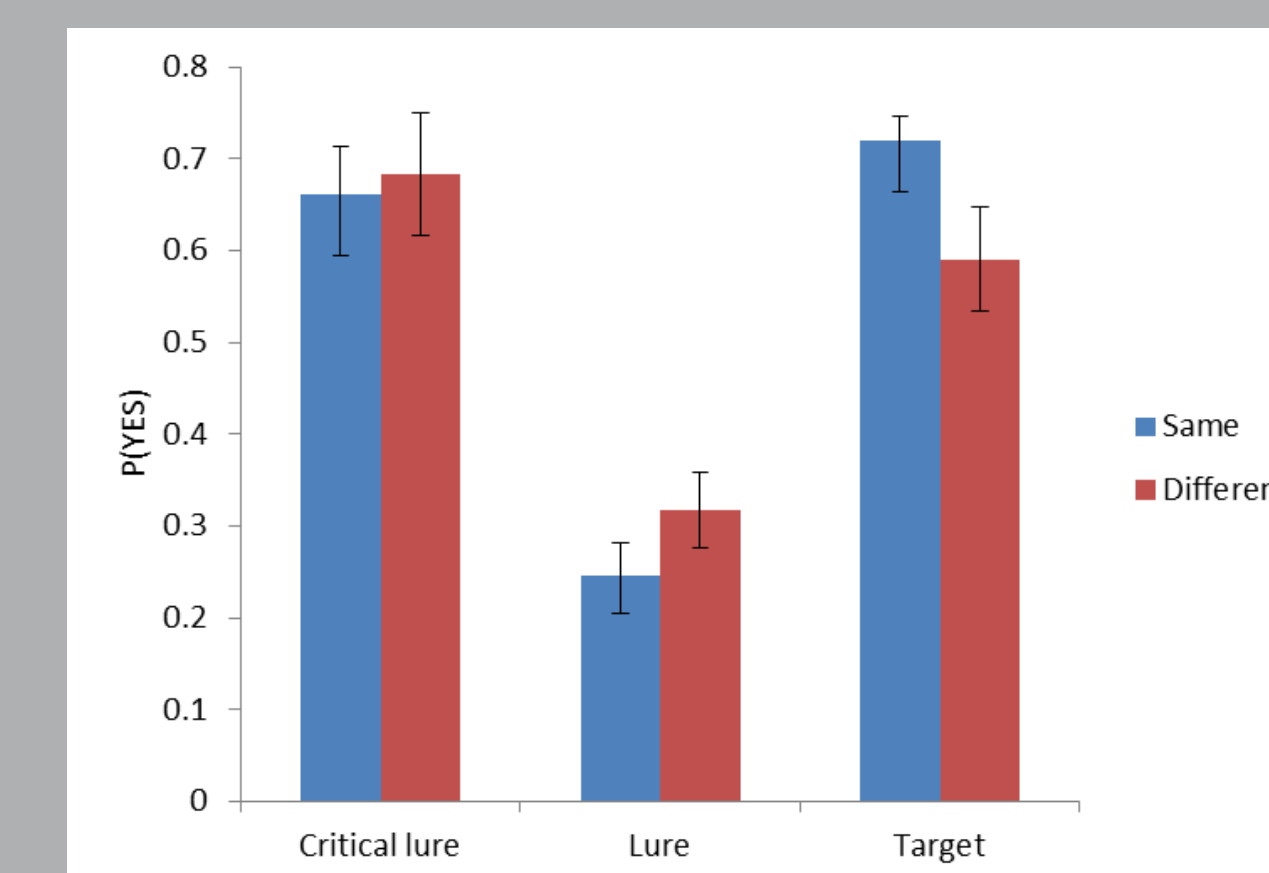
Responses in Same condition



Responses in Different Condition



Responses for different conditions



Discussion

When combining environmental context effect and false memory there were some interesting things that happened like people being very confident with a remember judgment, and context effect was replicated showing the experiment was done appropriately. There was no significant data about the critical lures, meaning that there is no relationship between context effect and false memory. The responses in the same condition were higher for the know which was interesting showing that people were more accurate but less confident in the same condition. This research was limited in the sample received was fairly small. Ideally there should have been at least forty participants per condition, so if there was that additional data there may have been a different result. Another problem was the small words, perhaps if there were a larger number of lists and words in the list the effect would have been larger.

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