

The influence of post event information on eyewitness' memory

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Introduction

The aim of this research paper is to find relevant elements that prove **how different terms, specifically verbs, can influence the accuracy of eyewitness testimony**. In this case, the distortion could be the result of required informations that can be lead to a different interpretation depending on what verbs we used to formulate questions.

This experiment takes inspiration from the original one by Loftus & Palmer (1974), but with some differences:

- we changed verbs due to the fact that most subjects were not english native speakers.
- we added another factor in the equation and that is the factor of time in order to measure memory decay.

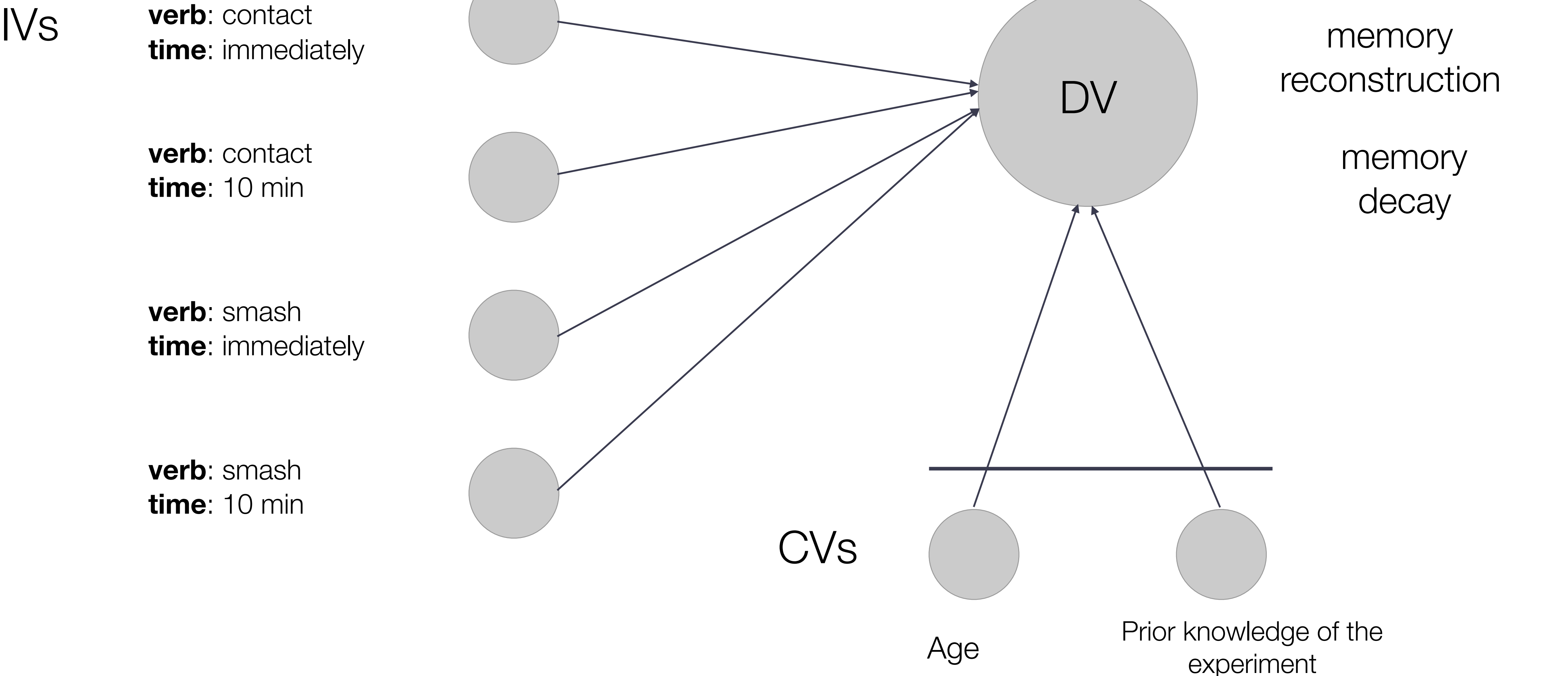
Research questions and hypothesis

Our hypothesis is that, while memory reconstructs eyewitness' events, the reconstruction can be affected by the way we express words.

Moreover, we want to find out if subjects who wait a certain amount of time (10 minutes) before answering questions can remember details less accurately than subjects who take the test immediately after.

Importance: questioning the credibility of eyewitness' testimony in court.

Definition of variables

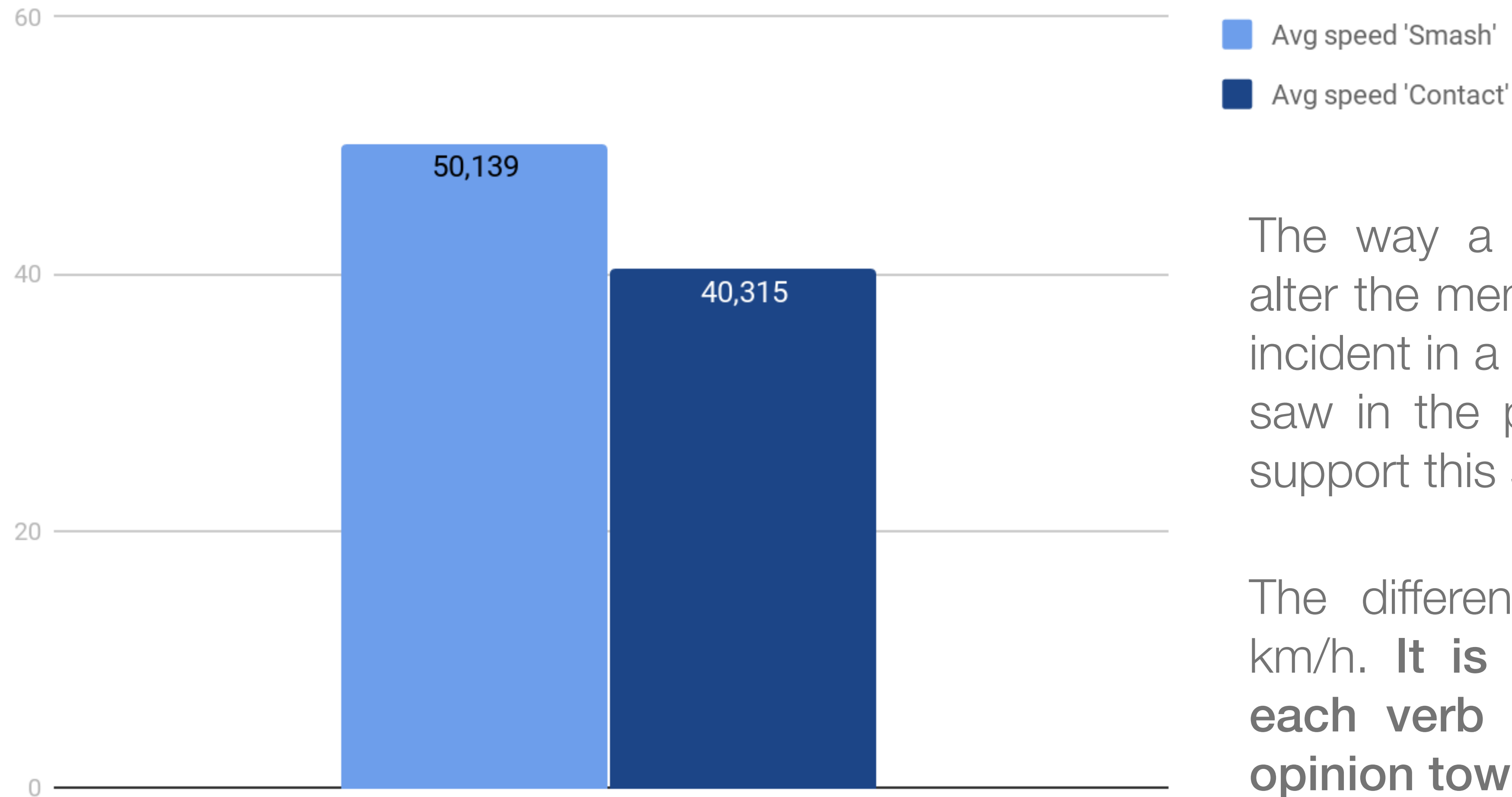


Methodology and instruments

- We had two videos
- Each video was watched just one time
- Tests were taken on the same computer
- Data were collected through Google Forms
- Participants agreed with the terms of the study by signing a document
- We talked to participants who had to wait 10 minutes before answering questions in order to take their mind off the videos

Results

Average speed between 'Smash' and 'Contact' in km/h (A)

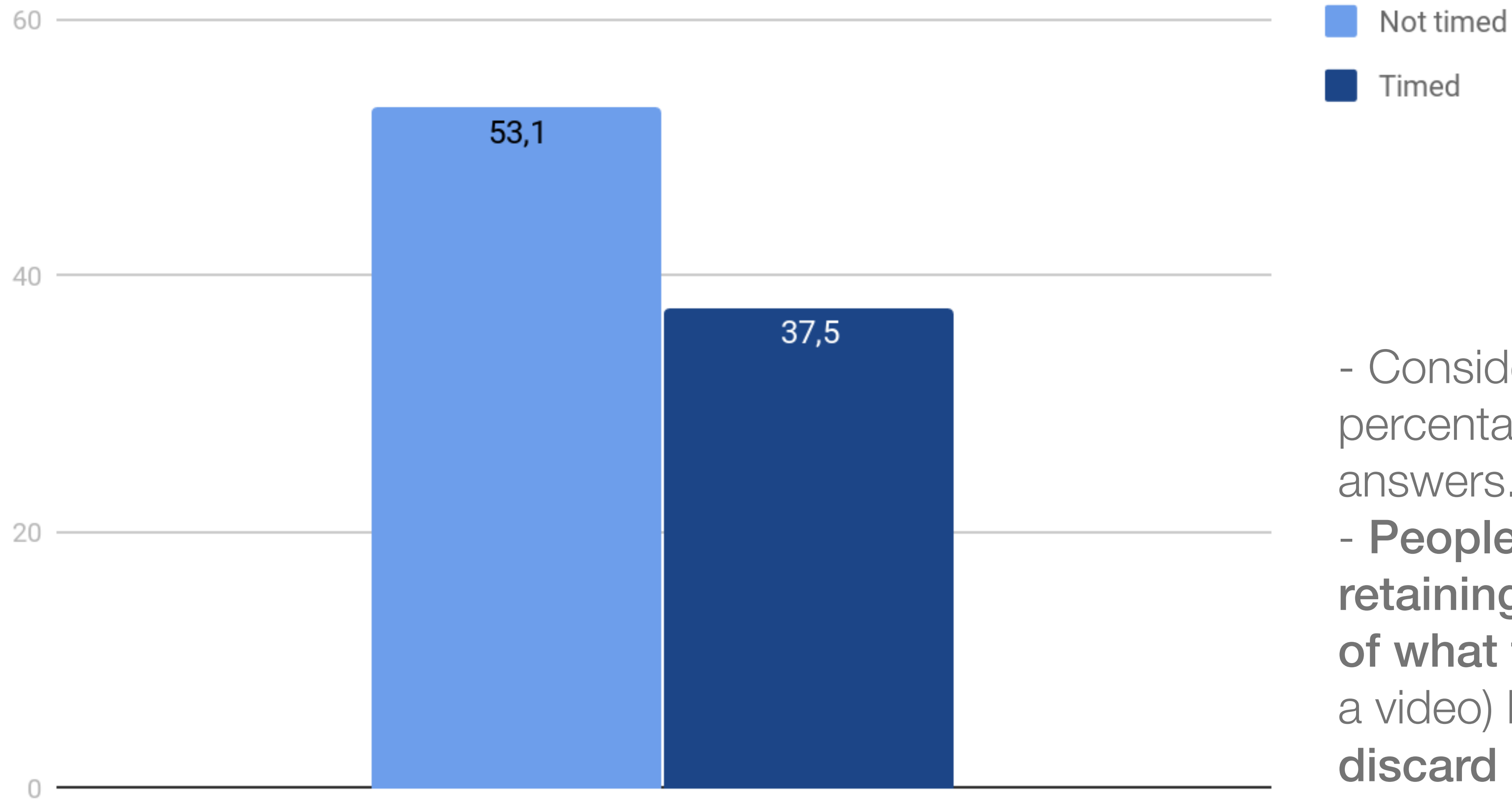


The way a question is formed can alter the memory representation of an incident in a subject's mind and as we saw in the previous slide the results support this statement.

The difference is approximately 10 km/h. **It is visible that the use of each verb can produce a biased opinion towards a certain direction.**

Results

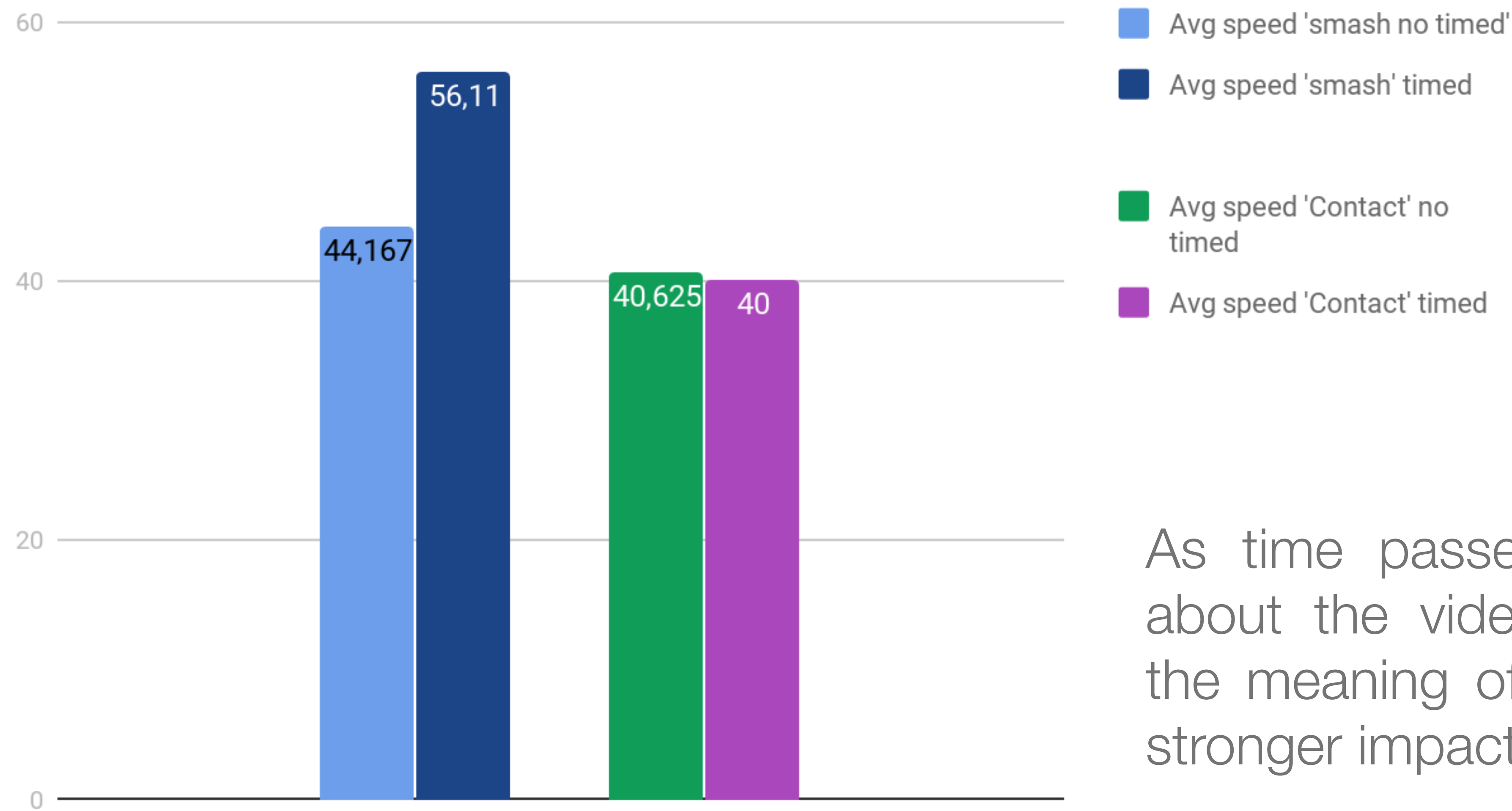
Avg correct answers between timed/not timed questions (C)



- Considerate decrease in the percentage of correct answers.
- **People are capable of retaining the general context of what they saw** (in this case a video) **but they tend to discard most of the details.**

Results

Avg speed difference between timed and not timed tests (B)



As time passed and memories about the videos started fading the meaning of the verbs had a stronger impact.

Conclusion

- Post-event information, such as the use of different verbs, can influence an eyewitness' memory.
- Time tends to emphasize the meaning of words.
- When time is passing, people just retain the main information discarding the irrelevant details.
- The result of this research should be taken into consideration in any activity or situation that relies on the credibility of the testimony of an eyewitness ie. court cases, investigations etc.

Further Research

A possible research, following the results of our study, would be to add the factor of stress in order to test if that would affect an eyewitness' memory, considering that most important cases that an eyewitness might be needed to report their experience, are usually extremely stressful situations.