



The Impact of Type of Book and Time of Day on Concentration Levels and Memory Retention



Research Methods in Cognitive Psychology

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Introduction

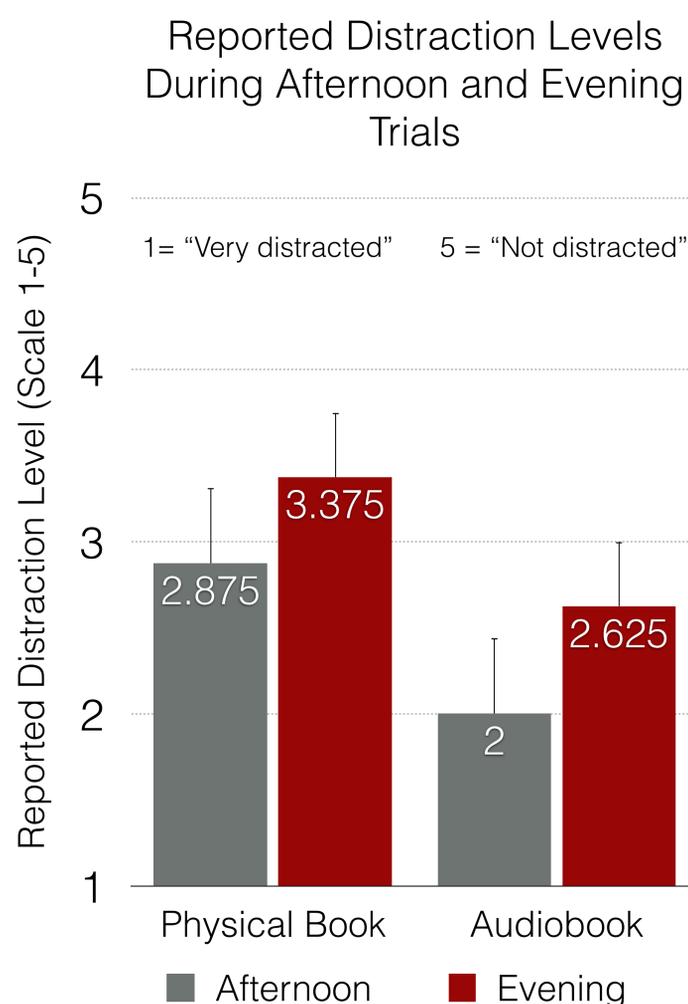
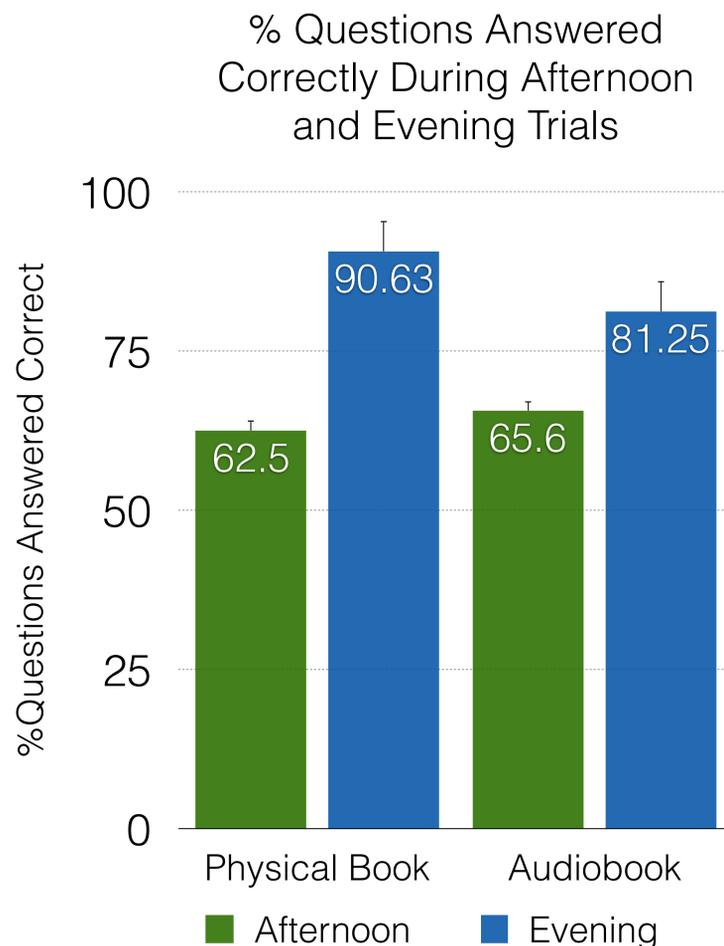
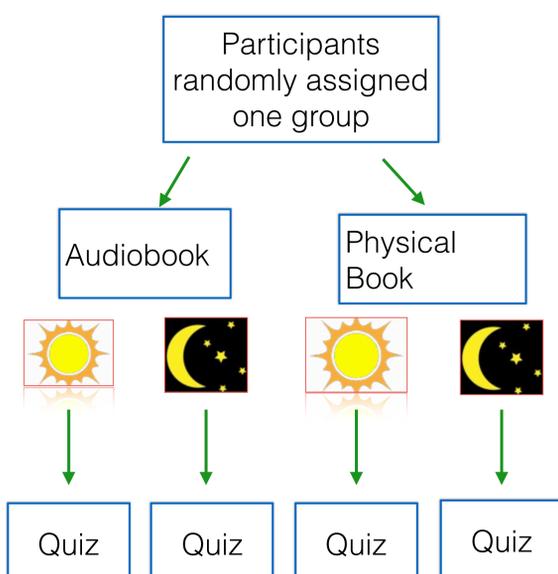
Audiobooks are becoming increasingly popular, but it is unclear what effect they have on the learning process. It is also unclear whether time of day impacts the learning process. This experiment investigates the effect of type of book and time of day on a university student's concentration levels and memory retention.

Objective

The main question of this experiment was to determine whether there was a difference in concentration levels and memory retention when subjects were given a physical book to read versus an audiobook and whether the time of day impacted this as well.

Methods

- 16 undergraduate college students between the ages of 19 to 22 participated in this experiment.
- The short stories :
 - "The Lottery" by Shirley Jackson
 - "The Necklace" by Guy de Maupassant.
- Quiz asked content-related questions and questions about how distracted they felt.
- Subjects asked to report how distracted they felt on a scale of 1-5.
- Administered different short story each trial.



Results

- Main effect of Time of Day on the average %questions answered correctly during afternoon and evening trials, $p = .03$
- Participants remembered more about the story they read during their evening trials compared to their afternoon trials.
- There was no significant difference in the % of questions correctly answered between subjects in the physical book group and the audiobook group.
- There was a main effect of Type of Book on the average reported distraction levels during afternoon and evening trials, $p = .048$.
- There was no significant effect of Time of Day on the average reported distraction level.

Conclusions

- Subjects, regardless of the type of book they were assigned, on average performed better on the quiz during the evening trial than the afternoon trial.
- This result implies that college students seem to perform better academically in the evening compared to the afternoon.
- Subjects, while listening to audiobooks, feel more distracted compared to when reading a physical book,
 - although there is no significant difference in their actual quiz performance.
- Combining both results, we conclude that there seems to be no difference in the learning process between listening to an audiobook and reading a physical book and that university students perform significantly better on tasks in the evening compared to the afternoon.

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