

Effective Chord Progressions for Memory

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Aim of Our Research

There are a lot of people who study using various music. However, which is the most effective of all? We decided to investigate the relationship between the rhythm and emotionality of music, especially chord progressions and memory ability.

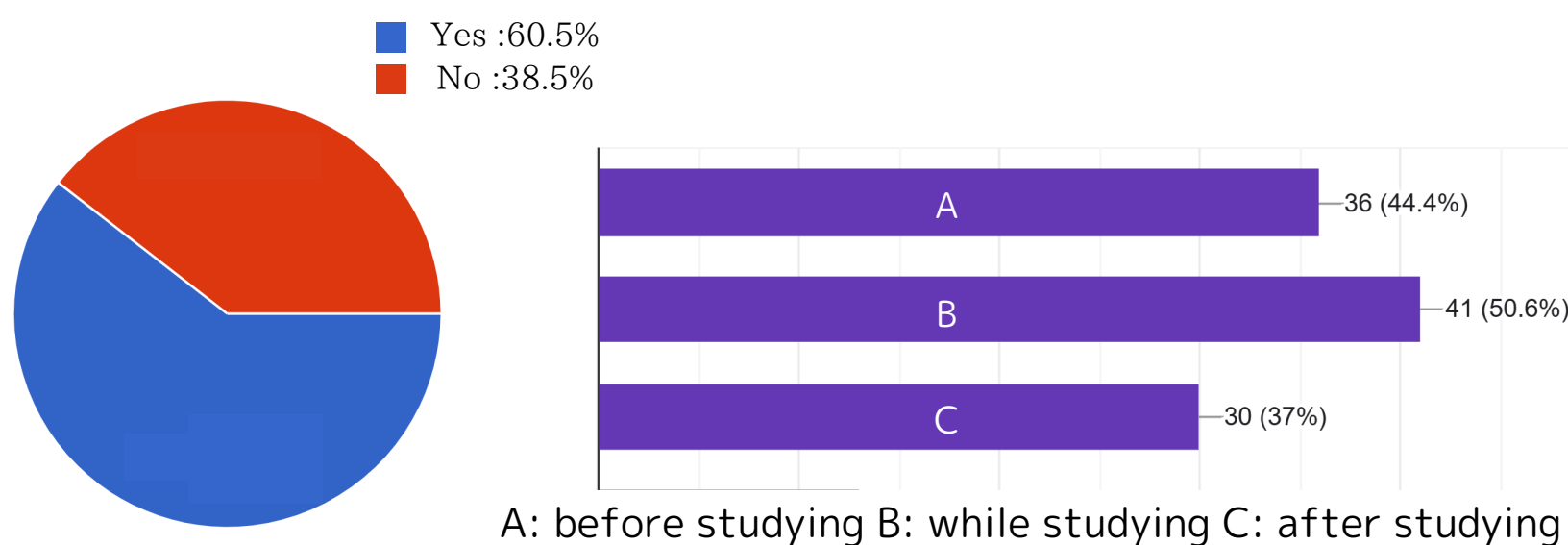
Previous Research

Listening to music while working improves memory ability and performance.*1

Mozart's music did enhance word memory regardless of type of words (positive, negative, or neutral).*2

Questionnaire

① Listening to music while studying ② When do you listen to music?



① People who listen to music are more than people who don't listen to it.

② Most of participants listening to music before or while studying.

Hypothesis

Music with simple progressions has the greatest memory-enhancing effect.

Reference source

*1 Karashima and Nishiguchi Effectiveness of Listening to Music before Simple Repetitive Tasks Japan Industrial Management Association In2012

*2 The Mozart effect on short-term memory London Metropolitan University In2020

Experiment

- ① Making three kinds of music
 - (a) monotonous 43 participants
 - (b) bright atmosphere 32 participants
 - (c) dark atmosphere 32 participants
- ② Having participants memorize 26 pairs of words in 3 minutes (with no music and with using music)
- ③ Participants do a memory test

Result

Group	Average	T-test
a	① 15.616 ② 17.639	t = -2.036 p = 0.045
b	① 15.781 ② 16.562	t = -1.112 p = 0.269
c	① 15.375 ② 16.218	t = -1.179 p = 0.243

(① no music ② with using music)

Consideration

Among these tests, monotonous music, which is allocated the least brain resources is the most effective.

Conclusion

Music using simple chord progressions is the best to improve memory.