

## Attention and Music

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### ABSTRACT

#### Background

A plethora of studies have found that cognitive test performance can be influenced by background music.

#### Aims

The aim of the present study is to investigate whether background music can influence attention.

#### Method

Twenty-four neurologically and acoustically healthy volunteers (12 non-musicians and 12 musicians, 15 men and 14 women, Mean age=26,20, SD=5,64) participated in the study. All of the participants had university education (minimum 16 years). The examination materials were Ruff 2 & 7 Selective Attention Test (2 & 7 Test), Symbol Digit Modalities Test (SDMT), Digit Span Forward and Trail Making Test Part A (TMT). Metacognitive feelings (feeling of difficulty-FOD and feeling of confidence-FOC) were also measured after the completion of each test with the use of Likert scales. Volunteers participated in all three conditions of the experiment and were grouped each time according to the acoustic background that they experienced during the neuropsychological examination (Mozart's Allegro con spirito from the Sonata for two pianos K.448, favorite instrumental music excerpt and no exposure to any acoustic stimuli during their examination).

#### Results

Results indicated a statistically significant difference in favor of the favorite instrumental music condition and statistically more positive metacognitive judgments (less difficulty, more confidence) for this condition. Listening to Mozart's music did not enhance performance on attention tasks. No music education influence was found and also no gender differences were found.

#### Conclusions

The finding of a better attention performance could be interpreted as the result of a general positive influence-effect that preferred music listening has on general cognitive abilities.

#### Keywords

Attention, background music, Mozart effect.

### REFERENCES

- Angel, L. A., Polzella, D. J., & Elvels, D. G. (2010). Background music and cognitive performance. *Perceptual and Motor Skills, 110*(3), 1059-1064.
- Cockerton, T., Moore, S., & Norman, D. (1997). Cognitive test performance and background music. *Perceptual and Motor Skills, 85*(3), 1435-1438.
- Miller, L.K., & Schyb, M. (1989). Facilitation and interference by background music. *Journal of Music Therapy, 26*(1), 42-54.