

ABSTRACT

Title: Mozart effect on shooting accuracy of professional basketball players

Aims: The aim of this thesis is to demonstrate whether the Mozart effect impacts the success rate of free throws in young premier league basketball players compared to shooting without music.

Methods: As this is a pilot study, the data acquisition on this topic first started by examining the previously written text on the Mozart. The project is an experimental pilot study involving 21 probands who were randomized into three groups. The experiment is divided into 2 parts. In the first part participants are asked to shoot one hundred free throws in five blocks of twenty. In the second part, the participants are exposed to different types of acoustic stimulus during which they throw another hundred free throws. All measurements were taken after conditioning or shooting practice for the most authentic replication of the game situation. The process of the practical part was carried out in accordance with the CRISP-DM methodology, which is one of the most widely used methodologies for knowledge capture from databases (KCD).

Results: The results show a borderline low correlation between shooting with and without music, according to Pearson's correlation coefficient, with a value of 0.33. The aim of using this statistical function was to find a possible correlation between free-throw shooting and listening to music. No other results confirm a significant effect of music on free-throw shooting success.

In summary: the Mozart effect does not have a significant effect on the accuracy of basketball shooting in professional basketball players. Thus, its presence was not found. Listening to a white noise recording consistently reduces shooting accuracy by 5 % on average.

Keywords

Mozart effect, basketball, repetitive motor task, nerorehabilitation, dopamine, epilepsy

