Evaluating the Effect of Induced Synesthesia in Learning a Musical Skill

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ABSTRACT

This study involves the simulation of a synesthesia-like experience for non-synesthetes, to enhance the learning of a musical skill. The goal of this project is to validate whether a synesthesia-like experience could positively influence the acquisition of musical talent. The idea is to increase the number of associations made to a chord (a harmonic group of notes). In this work, chord-color mappings are manifested using colored visuals displayed while listening to music. The expected outcome is that students who learn using consistent chord-color associations will perform better when tested on the identification of chords.

INTRODUCTION

Synesthesia is a condition of the human mind where seemingly unrelated senses are experienced simultaneously [1]. An example of this is seeing color when you hear sound or seeing written words and numbers in color. The current data shows that 2% of the population has some degree of this condition, with a larger concentration in artistic communities. This suggests that there is a correlation between creative skill and sensory experience. Synesthetes have a biological advantage which makes them more receptive to early exploration and adoption thus translating into more expertise in adulthood.

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