The Effect of Music and Lights on Memory Retention

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Little research has been done to determine the effects of lights and music on our memory retention. With the constant need to memorize more information faster, it is imperative that researchers find out how the environment around us affects our memory. Other research that has been done in recent years has looked at more complicated experiments where background effects are only a small part of the research. In this proposal, the focus was primarily on a simple memory task with more choice in the background effects. This study used a random two group between-subjects design using 180 participants from around the Chicagoland area to determine if metal or classical music and bright or dim lights affected memory scores on the Wechsler Memory Scale. The participants chosen for the study represented a broad range of educational and racial backgrounds. The results showed that when classical music and dim lights were paired together, it greatly improved memory scores compared to the control condition. Alternatively, when metal music and bright lights were paired, it had an adverse effect on participants’ memory scores compared to the control. The results from this experiment can help schools create environments more conducive to learning and create long-term memory skills that are needed for life in the 21st century.

Research advisor Phuong Do writes, “In an age of information overload, finding ways to create positive learning environments is an important area of research. Katheryn’s study suggests some simple ways to promote memory retention.”


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