## **Literature Review 2**

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## **Literature review:**

Stacey Dobbs conducted research and wrote a paper on the impact of background noise and music on the cognitive test performance of introverts and extraverts in March 2011. A group of 118 female students aged 11–18 were randomly selected and tested on their extraversion, IQ, and performance in various noise environments. The findings demonstrated a negative correlation between average performance and environments with higher noise levels. However, when extraversion was taken into account, it became clear that an extroverted student is significantly less affected by background noise than an introverted student is. There were even a few instances where an outgoing student responded favorably to a louder background noise. This demonstrates that while a louder environment has a negative impact on performance, each person reacts differently to background noise.

The main finding of this study is that louder background noise has a negative impact on most people's cognitive performance; however, how each person reacts to the background noise varies greatly from person to person. Finding correlations between a person's tolerance for background noise and other variables is also very challenging.

## **Correlation to project:**

This evidence supports the development of our application and project because it demonstrates the need for various environments depending on the background noise tolerance of various people. Our application can be used to locate a particular environment that the user prefers, allowing them to find a place that is ideal for them, whether it is a louder or quieter environment.

Dobbs, S., Furnham, A. and McClelland, A. (2011), The effect of background music and noise on the cognitive test performance of introverts and extraverts. Appl. Cognit. Psychol., 25: 307-313.