

# *Drowned in sound: how listening to music hinders learning*

Many students do their homework and revision while listening to music. Many of them will swear that listening to their favorite songs makes them study better. But does music help or hinder learning? And does it matter what type of music you listen to while revising?

Researchers from the applied psychology department of Cardiff Metropolitan University led a study to answer this question. The authors, Nick Perham and Harriet Currie, assigned students into one of four groups: the first revised in silence, the second revised while listening to music with lyrics they liked (which included songs from One Direction and Katy Perry), the third group revised to music with lyrics they did not like (which comprised of very heavy metal bands), and the fourth group revised listening to music without lyrics.

The participants then took a test on the passages they had been revising, rating how distracting their environment had been, as well as writing down their predictions for how well they thought they had done.

## **What are the main findings?**

1. Students who revised in quiet environments performed more than 60% better in an exam than their peers who revised while listening to music that had lyrics.
2. Students who revised while listening to music without lyrics did better than those who had revised to music with lyrics.
3. It made no difference if students revised listening to songs they liked or disliked. Both led to a reduction in their test performance.
4. Students who revised in silence rated their environment as less distracting and accurately predicted that this would lead to better performances in subsequent tests.

## **Related research**

There are some benefits to listening to music while performing certain tasks. It can be quite motivating and it can improve mood (listening to your favorite song tends to make people smile, for example). But it does not help people learn new or complex material.

The misconception that music does help us learn stems from a series of studies linked to the “Mozart effect”, which found that people performed better on a series of cognitive tasks after listening to 10 minutes of Mozart. Participants in these studies appeared to be getting smarter and performing better in tests.

However, further research has since revealed this is not the case. While listening to music before a task can make someone feel better, listening to it while trying to learn something new tends not to help. This is because music – especially tunes with lyrics – can take up processing space. This conflicts with the material you are trying to learn, effectively creating a bottleneck in your memory, as there is less space to process what you are revising.

## **What does this mean for the classroom?**

It is important that students are made aware of the pitfalls of listening to music when revising. Perham and Currie’s study found that students rated the quiet environment as less distracting and better for them, yet many students continue to listen to music during their homework. Why? Perhaps they’re doing so out of habit, or they confuse what improves their mood with what leads to good revision, or it alleviates boredom. Perhaps it’s simply because everyone else is doing it.

Students need to know how to revise well. There may well be a time and place to listen to music during the course of their revision, but not when they are learning new and complex material. After all, silence is golden.