

OPINION LIFESTYLE HEALTH & WELLNESS

Is silence always golden when it comes to studying? Yes and no

By Linda Blair

April 22, 2019 — 1.27pm

Smartphones distract attention and reduce learning, mainly because of their potential to offer activities more inviting than exam revision. But what about background sound alone? The answer depends both on what sort of sound, and on what a student is trying to accomplish.



Smartphones are a distraction from studying. SHUTTERSTOCK

Randi Martin and colleagues at Rice University in Houston compared students' comprehension of verbal material when reading in the presence of background speech, instrumental music or white noise. Their scores were most depressed in the presence of background speech, whereas the presence of music slightly improved comprehension.

However, when asked to identify melodies rather than understand text, background music interfered more. Finally, when the background speech was in a language unfamiliar to participants, there was little if any interference with reading

comprehension. The degree of interference from background noise, it seems, depends on the overlap between the processing required on the task and the processing required to screen out the background noise.

Pierre Salame and Alan Baddeley at Cambridge compared the effects of background speech, vocal music, instrumental music, general background noise and silence on short-term memory.

Background speech had the biggest negative effect; vocal music was slightly more disruptive than instrumental; and general diffuse background noise and silence were least disruptive. Once again, when the material to be learnt was verbal, word-based distractions interfered most.

These studies suggest that when you read and when you try to remember any verbal material, background speech will inhibit your ability, whereas instrumental music will have at worst no effect. When you write essays, however, it's best to reduce all background noise as much as possible.

Not everyone reacts in the same way to distractions, of course. Recent studies suggest some aspects of personality may make a difference.

Gianna Cassidy and colleagues at Glasgow Caledonian University subjected introverts and extroverts to high arousal or low arousal background music, "everyday noise", or silence while asking them to remember words. Everyone performed best in the silent condition, but introverts were more negatively affected by every one of the distractions.

In summary, parents should call for quiet conditions when children are writing essays.

When reading and trying to incorporate new material, however, they should consider allowing some background music, particularly if it's instrumental and their child is an extrovert.

Most important of all is to minimise background conversations altogether.

Linda Blair is a clinical psychologist and author of *The Key to Calm* (Hodder & Stoughton). Telegraph, London