



Drivers listening to music tend to have more simulated collisions, poorer speed control and less stable following distances than those driving in silence. PHOTO/VECTEEZY.COM

How music changes the way you drive

Listening to music while driving is almost second nature for most drivers. But science shows it can both help and hinder performance, and the effects are surprisingly different for novice and experienced drivers.

BY MILAD HAGHANI

For many of us, listening to music is simply part of the driving routine, as ordinary as wearing a seatbelt. We build playlists for road trips, pick songs to stay awake, and even turn the volume up when traffic gets stressful.

More than 80 percent of drivers listen to music on most trips. And many young drivers find it difficult to concentrate without it.

We tend to think music relaxes us, energises us, or helps us focus when we are behind the wheel. But the science paints a more complicated picture. Decades of studies show music can sharpen some aspects of driving and dull others. And it affects young drivers differently from more experienced ones.

How do researchers study driving and music?

Most studies use driving simulators, where participants drive through realistic road scenarios while researchers change only one thing: the music. This allows precise measurement

DRIVING SAFELY WITH MUSIC

Choose your music wisely. Familiar songs help reduce stress, maintain focus, and regulate mood, while music you enjoy is generally less distracting than imposed or random tracks. Aggressive or high-arousal songs, such as heavy metal or fast pop, can increase risky behaviour, particularly for novice drivers.

Mind the volume. Low to moderate volumes help maintain concentration and safe speeds, whereas high volumes may nudge drivers to speed up and can mask important traffic sounds.

Tempo also matters, especially for inexperienced drivers. Slow-tempo music can improve hazard response and reduce mental load, while fast-tempo tracks can increase distraction, cognitive strain, and errors. Experienced drivers are less affected by tempo, though extremely aggressive tracks can still

influence behaviour.

Use music strategically. On long, monotonous drives, music can temporarily boost alertness for 15 to 25 minutes. During short trips or busy city driving, calmer tracks can reduce stress without overloading attention. Choose songs to support calmness and focus rather than purely for entertainment.

For novice drivers, turning the volume down or switching off music in demanding conditions can make a big difference. Avoid unfamiliar or imposed playlists, as they can increase collisions, violations, and mistakes.

Slower, familiar tracks help maintain hazard detection and response. Finally, always remember that music should aid your driving, not compete with it. Never let it replace attention to road signs, signals, or other vehicles, and only adjust it when it's safe to do so, ideally using steering wheel controls.

of indicators such as speed, reaction time, lane-keeping, braking, following distance, simulated collisions and even the driver's physiological state under different music conditions.

Because everything else is held constant, any difference in driving performance can be attributed to the music.

Researchers have tested different music and driving scenarios in dozens of small studies, often with conflicting conclusions. To make sense of these results, researchers combine them in "meta-analyses" to see broad patterns.

So, how does music affect our driving?

Meta-analyses show music changes how we drive in several ways.

Drivers listening to music tended to have more simulated collisions, poorer speed control and less stable following distances than those driving in silence. Other outcomes, such as lane position, signalling errors and pure reaction time, show more mixed or inconsistent effects.

Music often changes the driver's heart rate and makes it more variable. It also increases their arousal and mental workload, meaning how mentally "busy" or stretched they are while trying to drive.

Music can also help tired drivers stay alert on long, monotonous stretches but only for a short window. The boost fades by about 15 to 25 minutes. So, music can make you feel better and more alert, for shorter distances, even while it is adding extra cognitive load and competing with the main task of driving.

Does the volume, type of music matter?

Volume does influence driving, but the effects are more subtle than many assume.

High- and medium-volume music tends to nudge drivers' speeds slightly upward, while low-volume music consistently leads to slower driving. These effects are small, but relative

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