

## **AUDIOPHILE DRIVERS: HOW LISTENING TO MUSIC AFFECTS DRIVING**

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### **Background**

The automobile is the most popular and frequently reported location for listening to music. Yet, not much is known about the effects of music on driving. Does music simply entertain drivers? Or, perhaps music arouses and/or distracts drivers?.

### **Aims**

The study explored the effects of music tempo on PC-controlled simulated driving among everyday drivers – with and without formal musical training.

### **Method**

48 drivers (20 musicians and 28 non-musicians) participated in one of two experiments. Each participant simulated driving activity for 120 minutes, during which they were exposed to 4 conditions: no-music, slow-tempo music (40-70bpm), medium-tempo music (85-110bpm) and fast-tempo music (120-140bpm). Simulated driving occurred on both city-boulevard and interstate-highway environments. Descriptive data, psychophysiological measures, clock speed, speed estimates, and traffic violations were collected per participant in each condition.

### **Results**

The study found that music tempo consistently affected both simulated driving speed and speed estimates. Furthermore, the tempo of background music consistently affected the frequency of virtual traffic violations, including: disregarded red lights, lane crossings, and collisions.

### **Conclusions**

While the investigation was based on a virtual simulated environment which can not guarantee the attention requirements equivalent to real driving, the study points to an under-researched area of human behaviour. The number of music-related automobile fatalities is not a known statistic. Police investigators, traffic researchers, music psychologists, and drivers themselves are not mindful of the risks associated with listening to music while driving.