Background music As A Risk Factor For Distraction Among Young Drivers: An IVDR Study

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Statistical data on road safety indicates that drivers between ages 16-24 account for a high level of accidents and fatalities; in Israel 25% of severe accidents and 5% of fatalities occur during the first two years of driving, and young novice drivers are 10-times more likely to be in an accident during their first 500 miles. Ironically, the most common violations for this group are speeding and lane weaving – both of which correlate with in-cabin music behavior (Brodsky, 2002). Young drivers regularly listen to fast-tempo highly energetic aggressive music played at elevated volumes. This State of Israel National Road Safety Authority study investigates music as a risk factor among young novice drivers. The study employed two Learners Vehicles installed with in-vehicle data recorders (IVDR). Eighty-five young novice drivers drove six trips: twice with preferred music brought from home, twice with In-car alternative music (Brodsky & Kizner, 2012), and twice with no-music. For each trip 27 events were logged; a range of vehicle variables that were mechanical, behavioral, or predetermined HMI interactions. The findings indicate that both frequency and severity of driving violations were higher for trips with driver-preferred music than trips when either no music or In-car alternative music. Clearly in-car listening will forever be part of vehicular performance, and therefore future research should explore the effects of music on driving performance. Developing and testing functional music backgrounds towards increased driver safety is an important contribution of Music Science in the war against traffic accidents and fatalities.