

## Effects of the Visual and Auditory Stimuli with Emotional Content on Eyewitness Testimony

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**Abstract :** Eyewitness testimony is one of the most frequently used methods in criminal cases for the determination of crime and perpetrator. In the literature, the number of studies about the reliability of eyewitness testimony is increasing. The study aims to reveal the factors that affect the short-term and long-term visual memory performance of the participants in the event of an accident. In this context, the effect of the emotional content of the accident and the sounds during the accident on visual memory performance was investigated with eye-tracking. According to the results, the presence of visual and auditory stimuli with emotional content during the accident decreases the participants' both short-term and long-term recall performance. Moreover, the data obtained from the eye monitoring device showed that the participants had difficulty in answering even the questions they focused on at the time of the accident.

**Keywords :** eye tracking, eyewitness testimony, long-term recall, short-term recall, visual memory

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