

A New ERP-based Guilty Knowledge Test for Lineups

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The ERP Lineup presented here was based on the Guilty Knowledge Test (GKT), a lie detection method that utilizes an oddball paradigm to evoke the P300 component when a witness sees the culprit. This GKT-based lineup was intended to postdict identification accuracy regardless of witnesses' overt responses, thus faces are used as stimuli. P300 component amplitudes evoked by the culprit were compared to those evoked by a different learned face to assess the method as a device to gather identifications when witnesses are unwilling or unable to make an overt ID.