**APPENDIX**

**Table A1.** Driving simulator studies on longitudinal acceleration and brake pedal force of alcohol-impaired drivers

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| --- | --- | --- | --- | --- | --- | --- |
| Study | Country | Sample Size | Alcohol dose/BAC level (%) | Analysis technique | Driving performance measure | Findings |
| Wan et al. (2017) | USA | 28 | 0%, 0.08% | ANOVA | Mean, standard deviation and maximum acceleration | Intoxicated drivers showed greater acceleration measures than sober drivers |
| Hartman et al. (2016) | USA | 18 | 0%, 0.065% | General Linear Model (GLM) | Maximum and minimum longitudinal acceleration | Breath alcohol concentration was not associated with longitudinal acceleration |
| Helland et al. (2016) | Norway | 20 | 0%, 0.05%, 0.09% | Linear mixed model | Number of brake pedal pressures and number of accelerator pedal pressures | Brake and acceleration pedal pressures are directly proportional to BAC |
| Fillmore et al. (2008) | USA | 14 | 0, 0.65 g/kg | ANOVA | Mean longitudinal acceleration | Drivers showed greater acceleration under the influence of alcohol |
| Liu and Fu (2007) | Taiwan | 8 | 0%, 0.05%, 0.08%, 0.10% | ANOVA | Variance in brake pedal force | Increasing alcohol intoxication did not significantly affect the variance in brake pedal force |
| Strayer et al. (2006) | USA | 40 | 0%, 0.08% | MANOVA | Maximum braking force | Intoxicated drivers applied more force while braking |