Perceived intoxication is a strong determinant of one's willingness to drive after drinking alcohol. When contextual cues are conditioned with the administration of alcohol, a compensatory response is elicited that decreases the impairing effects of alcohol and perceived intoxication. The authors hypothesized that a cue-induced compensatory response would decrease perceived intoxication and therefore increase willingness to drive while intoxicated. Young adults (N = 60, 81.7% male) attended a single session during which they were randomly assigned to receive a moderate dose of alcohol via either a familiar or an unfamiliar alcoholic beverage. Following consumption, participants completed cognitive and psychomotor tasks, rated their subjective experience, and reported their willingness to drive. The cues of the familiar alcoholic beverage did not increase the willingness to drive compared to the unfamiliar cues. The groups also had similar subjective experiences and cognitive and psychomotor impairment. These results are inconsistent with previous conditioned compensatory response research. These discrepant results may be a result of the observed group difference in breath alcohol concentration (BrAC), with the familiar alcoholic beverage resulting in a higher BrAC. The group difference in BrAC makes it difficult to interpret these results.