Glass Shape Influences Consumption Rate for Alcoholic Beverages

Background

High levels of alcohol consumption and increases in heavy episodic drinking (binge drinking) are a growing public concern, due to their association with increased risk of personal and societal harm. Alcohol consumption has been shown to be sensitive to factors such as price and availability. The aim of this study was to explore the influence of glass shape on the rate of consumption of alcoholic and non-alcoholic beverages.

Methods

This was an experimental design with beverage (lager, soft drink), glass (straight, curved) and quantity (6 fl oz, 12 fl oz) as between-subjects factors. Social male and female alcohol consumers (n = 159) attended two experimental sessions, and were randomised to drink either lager or a soft drink from either a curved or straight-sided glass, and complete a computerised task identifying perceived midpoint of the two glasses (order counterbalanced). Ethical approval was granted by the Faculty of Science Research Ethics Committee at the University of Bristol. The primary outcome measures were total drinking time of an alcoholic or non-alcoholic beverage, and perceptual judgement of the half-way point of a straight and curved glass.

Results

Participants were 60% slower to consume an alcoholic beverage from a straight glass compared to a curved glass. This effect was only observed for a full glass and not a half-full glass, and was not observed for a non-alcoholic beverage. Participants also misjudged the half-way point of a curved glass to a greater degree than that of a straight glass, and there was a trend towards a positive association between the degree of error and total drinking time.

Conclusions

Glass shape appears to influence the rate of drinking of alcoholic beverages. This may represent a modifiable target for public health interventions.

Research Team

Angela S. Attwood, Nicholas E. Scott-Samuel, George Stothart, Marcus R. Munafò
School of Experimental Psychology, University of Bristol, Bristol, United Kingdom

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