A COMPARISON OF THE FREQUENCY AND QUANTITY OF ALCOHOL CONSUMED WHEN MIXED WITH ENERGY DRINKS AND MIXED WITH COLA



Sean Johnson¹, Chris Alford, ¹ Joris Verster^{2,3}, Karina Stewart⁴

1. Centre for Research in Biosciences, University of the West of England, Bristol, U.K.

2. Utrecht University, Utrecht, The Netherlands. 3. Swinburne University of Technology, Melbourne, Australia.

4. Department of Biological, Biomedical and Analytical Sciences, University of the West of England, Bristol, U.K.



Introduction

Previous research has suggested that consuming alcohol mixed with energy drinks (AMED) increases overall alcohol consumption. However, to date no research has investigated whether energy drinks are unique in their effects when mixed with alcohol by comparing them with other similar caffeinated mixers. Therefore the aim of this survey was to investigate alcohol consumption on AMED occasions, with other occasions on which the same individuals mixed alcohol with cola (AMC).

Methods

A UK wide online student survey collected data on the frequency and quantity of alcohol consumed on alcohol only, AMED and AMC occasions (N=167).

Results

Within subjects analysis revealed that there were no significant differences (P=0.54) in the number of alcoholic drinks usually consumed on AMED (6.2) versus AMC (6.5) occasions. However, the number of standard mixers (ED=250ml,80mg caffeine, Cola=330ml,32mg caffeine) usually consumed were lower on AMED occasions (2.2) compared to AMC occasions (4.0). In addition, when consuming AMED, students reported significantly (P<0.05) fewer drinks mixed on a heavy drinking session (7.1 versus 9.4), fewer days consuming 5 or more alcohol drinks (1.8 versus 2.7), fewer days mixing (2.2 versus 3.6) and fewer days drunk (2.0 versus 2.7) compared to when consuming AMC. Of importance, alcohol consumption was significantly less on both AMED and AMC occasions compared to alcohol only occasions (P<0.001).

Conclusion

The findings that heavy alcohol consumption is significantly lower and consumed less often on AMED occasions compared to AMC occasions indicates that the current public health concern on energy drinks being a unique mixer in increasing overall alcohol consumption is unwarranted.

Implications for policy and practice

The increased alcohol consumption on alcohol only occasions compared to AMED and AMC occasions suggests that in order to inform public health policy future research should focus on excessive alcohol consumption per se.

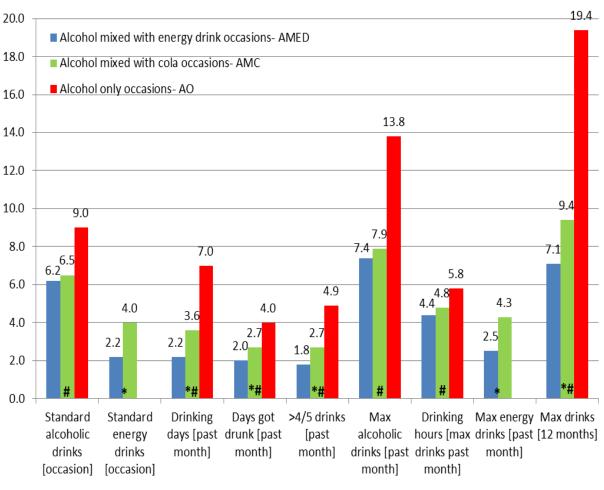


Figure 1: Means for within subjects comparisons (N = 167) for frequency and quantity of alcohol consumed on AMED occasions, AMC occasions and AO occasions. **Notes:** * = significant difference between AMED and AMC occasion. # = significant difference between AO & AMED occasions and AO & AMC occasions.

This study was supported by Red Bull GmbH.