Normative misperceptions about alcohol use in the general population of drinkers

Claire Garnett, David Crane, Robert West, Susan Michie, Jamie Brown & Adam Winstock

Research Department of Clinical, Educational and Health Psychology, UCL; Cancer Research UK Health Behaviour Research Centre, UCL; Institute of Psychiatry, National Addiction Centre, KCL; South London and Maudsley NHS Foundation Trust, KCL

UCL

Introduction

• Normative misperception about alcohol use refers to the *underestimation of one's own alcohol consumption* relative to other people

• Removing this misperception has been found to *reduce subsequent alcohol use* in a number of studies[1-5]

• Research has been limited to college and university students or heavy drinkers[1-3,5] and has not looked at what factors may underlie them

Research questions

1) What is the *prevalence of normative misperceptions* about alcohol use in the general population of alcohol users from the UK, US, Australia and Canada?

2) To what extent are *normative misperceptions* about alcohol use *associated* with a range of *socio-demographic* and *drinking variables*?

Method

• Cross-sectional online survey
  • Conducted globally
  • Drawing on data from UK, US, Australia & Canada
• Participants
  • n= 9,820
  • Aged 18+
  • Consumed alcohol in last year
• Measures
  • 10-item AUDIT questionnaire
    • Assessed alcohol consumption, harmful drinking & alcohol dependence
  • Socio-demographic assessment
  • Question assessing beliefs about how one's drinking compares with others
• Associations were analysed by linear regression models

Results

High prevalence of normative misperceptions in the general population of drinkers
• Mean normative misperception score = 0.2 (SD=1.85)
• Significantly greater than 0 ($t_{(9819)}$=10.443, p<0.001)
• Nearly half (46.9%) of drinkers underestimated the proportion of other people who consume less alcohol than them

A number of socio-demographic and drinking variables associated with a larger normative misperception:
  • Younger (16-24): p<0.003
  • Male: p<0.001
  • From the UK (vs the US): p<0.001
  • Without (vs with) post-16 qualifications: p=0.003
  • White: p=0.035
  • Unemployed (vs employed): p<0.001
  • At higher levels of alcohol-related risk: p<0.001
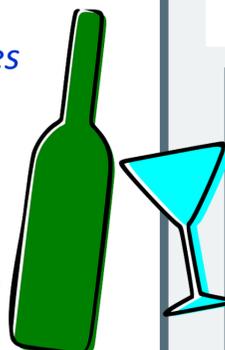
Conclusions

• Substantial minority of harmful drinkers believe their alcohol consumption to be at or below average

• **Underestimation** of one's own alcohol consumption relative to others is **common in the general population of drinkers**

• This normative misperception is **greater** in those who are younger, male, less well educated, unemployed, white, from the UK, and high-risk drinkers

• *Future research:*
  • Examine whether there is more impact for interventions targeted at individuals with the socio-demographic and drinking variables associated with normative misperceptions
  • Targeted interventions could potentially enhance the effectiveness of population wide health strategies to reduce alcohol consumption and misuse

		Mean normative misperception score (SD)	Adjusted multiple regression B (95% CI)	p
Country of origin	UK*	0.4 (1.78)		
	Australia	0.2 (1.95)	0.03 (-0.16, 0.22)	0.779
	Canada	0.1 (1.92)	-0.02 (-0.16, 0.11)	0.753
	US	-0.3 (1.90)	-0.29 (-0.37, -0.21)	<0.001
AUDIT risk zone (score)	1 (0-7)*	-0.8 (1.60)		
	2 (8-15)	0.5 (1.73)	1.29 (1.21, 1.36)	<0.001
	3 (16-19)	1.1 (1.74)	1.90 (1.77, 2.02)	<0.001
	4 (20-40)	1.4 (1.69)	2.00 (1.85, 2.16)	<0.001
Age	16-24*	0.5 (1.88)		
	25-34	0.0 (1.80)	-0.28 (-0.36, -0.20)	<0.001
	35-44	0.0 (1.79)	-0.22 (-0.34, -0.11)	<0.001
	45-54	-0.2 (1.77)	-0.26 (-0.43, -0.09)	0.003
	55+	-0.6 (1.71)	-0.47 (-0.73, -0.21)	<0.001
Gender	Male	0.3 (1.84)	0.34 (0.27, 0.41)	<0.001
	Female	-0.1 (1.84)		
Qualification level	Pre-16	0.6 (1.91)	-0.25 (-0.41, -0.08)	0.003
	Post-16	0.2 (1.85)		
Employment status	Unemployed*	0.4 (1.91)		
	Student	0.3 (1.87)	-0.09 (-0.18, 0.00)	0.056
	Employed	0.1 (1.80)	-0.20 (-0.29, -0.11)	<0.001
Ethnicity	White	0.2 (1.85)	-0.13 (-0.25, -0.01)	0.035
	Non-white	-0.1 (1.82)		

*reference group for the categorical variable

References
1. Neighbors C, Larimer ME, Lewis M a. Targeting misperceptions of descriptive drinking norms: efficacy of a computer-delivered personalized normative feedback intervention. J Consult Clin Psychol. 2004 Jun;72(3):434–47.
2. Kypri K, Langley JD. Perceived social norms and their relation to university student drinking. J Stud Alcohol. 2003 Nov;64(6):829–34.
3. Cunningham J, Neighbors C, Wild TC, Humphreys K. Normative misperceptions about alcohol use in a general population sample of problem drinkers from a large metropolitan city. Alcohol Alcohol. 2012;47(1):63–6.
4. Collins SE, Carey KB, Sliwinski MJ. Mailed personalized normative feedback as a brief intervention for at-risk college drinkers. J Stud Alcohol. 2002 Sep;63(5):559–67.
5. Cunningham J, Wild TC, Bondy SJ, Lin E. Impact of normative feedback on problem drinkers: a small-area population study. J Stud Alcohol. 2001 Mar;62(2):228–33.

UKCTAS — UK Centre for Tobacco & Alcohol Studies

GLOBAL DRUG SURVEY

Society for the Study of Addiction