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Prevalence of Hazardous Drinking Among UK 18–35 Year Olds; the Impact of a Revision to the AUDIT Cut Score

Robert Patton^{1,*} and Sadie Boniface²

¹School of Psychology, University of Surrey, Guildford GU2 7XH, UK, and ²Department of Addictions, King's College London, London SE5 8BB, UK

*Corresponding author: Tel.: +44-01483686861; E-mail: r.patton@surrey.ac.uk

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Abstract

Aim: Most published research utilizes an AUDIT score of >8 as the threshold for hazardous drinking. Recent research suggests that this limit should be amended for younger drinkers (aged 18–35 years). This study aimed to explore the effect of a revision to AUDIT cut scores.

Method: Applying Foxcroft *et al.*'s [(2015) Accuracy of Alcohol Use Disorders Identification Test for detecting problem drinking in 18–35 year-olds in England: method comparison study. *Alcohol Alcohol* **50**, 244–50] suggested cut off scores of nine for males and four for females to the most recent Adult Psychiatric Morbidity Survey (2007) data.

Results: This more than doubles the prevalence of female hazardous drinkers, and significantly increases the overall rate for that age group when compared with the standard threshold of >8.

Conclusion: The prevalence of hazardous drinking among females ages 18–30 may be significantly higher than current estimates.

Scores of eight or more on the Alcohol Use Disorders Identification Test (AUDIT) have long been used as the cut off point for hazardous drinking. The reliability and validity of the AUDIT has been established in research conducted in a variety of settings and countries (Babor *et al.*, 2001). However in recent years the issue of whether thresholds for safe levels of alcohol consumption and also alcohol use disorders should be the same for everyone has been raised.

For example, a 2011 report by the Royal College of Psychiatrists suggested lower recommended 'safe' levels of drinking for older people of 1.5 UK units per day or 11 units per week (currently 4/3 units for men and women per day, and 21/14 per week), with 'binge drinking' (currently 8/6 units for adults) defined as >4.5 units in a single session for men and >3 units for women (The Royal College of Psychiatrists, 2011). A subsequent study by Knott and colleagues suggested that, under these guidelines, the number of individuals in England aged 65+ and drinking in excess of daily recommended limits would increase 2.5-fold to over 3 million (using 2008 data) (Knott *et al.*, 2013).

Foxcroft et al. (2015) explored the optimal cut off point for the AUDIT among 18–35 year olds. Revised thresholds for identification

of hazardous drinking using AUDIT were scores of nine and four for men and women (for optimal Sensitivity and Specificity). This study is not the first to investigate optimal cut points for the AUDIT [see for example (Conigrave *et al.*, 1995)], however it was the first to suggest age-specific cut points. The most recent large scale population survey that allowed participants to complete the full AUDIT was the 2007 Adult Psychiatric Morbidity Survey (APMS; Fuller *et al.*, 2009). We re-coded the raw data for 18–35 year olds from the APMS 2007 available from the UK Data Archive (National Centre for Social Research and University of Leicester, 2011) (N = 1598) using the revised thresholds suggested by Foxcroft *et al.*

Overall, the proportion of hazardous drinkers (originally reported as those who scored 8+ on the AUDIT) increased significantly when the revised formulae were utilized (Table 1) While the number of males identified as hazardous drinkers remained relatively unchanged, the number of female hazardous drinkers more than doubled.

This simple re-scoring exercise demonstrates the implications of changes in the AUDIT cut points; changing the threshold suggests that the proportion of hazardous drinkers in the 18–35 age range

Table 1. Comparison of AUDIT thresholds for male and female aged 18–35 years in the 2007 APMS (*N* = 1598)

	Proportion (%) scoring 8+	Males (9+) and females (4+)	Difference
Male	46.0	39.6	-6.4
Female	21.4	55.8	34.4 ^a
Overall	31.5	49.1	17.6 ^a

^aStatistical significance at 99% CI.

may have been significantly under estimated in previous research, and that many female potential participants in intervention studies may have been missed. The Screening and Intervention Programme for Sensible drinking (SIPS) research programme (Kaner *et al.*, 2013; Drummond *et al.*, 2014; Newbury-Birch *et al.*, 2014) used AUDIT status as its primary outcome measure; and also used AUDIT to assess eligibility for the trial (only participants who scored 8+ were randomized to receive an intervention), when perhaps there may have been benefits of screening and brief intervention among female young adults drinking at lower levels too. Foxcroft *et al.* acknowledge the limitations of using simple thresholds in screening and diagnostic tests such as the AUDIT. As their use continues, it is worthwhile exploring whether such thresholds should apply uniformly or be specific to certain age-sex groups.

It is of particular concern that a large number of female hazardous drinkers may have been missed by screening tests utilizing the standard cut off score. This has important implications within primary care where many patients receive a routine assessment of their drinking based on an AUDIT score of 8+, as well as for the development of intervention materials. Further research on alcohol screening and brief interventions that focus upon female drinkers seems warranted.

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