



UNIVERSITY
OF WOLLONGONG
AUSTRALIA

University of Wollongong
Research Online

Faculty of Health and Behavioural Sciences - Papers
(Archive)

Faculty of Science, Medicine and Health

2012

Equal discussion of significant findings? Not confirmation bias, but a focus on the most significant findings

Sandra C. Jones

University of Wollongong, sandraj@uow.edu.au

Christopher A. Magee

University of Wollongong, cmagee@uow.edu.au

Publication Details

Jones, S. C. Magee, C. A. (2012). Equal discussion of significant findings? Not confirmation bias, but a focus on the most significant findings. *Alcohol and Alcoholism*, 47 (1), 80.

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library:
research-pubs@uow.edu.au

Equal discussion of significant findings? Not confirmation bias, but a focus on the most significant findings

Abstract

Letter to the editor published in *Alcohol and Alcoholism* Vol. 47, No. 1, p. 80, 2012

Keywords

findings, equal, confirmation, bias, significant, but, discussion, focus, most, not

Disciplines

Arts and Humanities | Life Sciences | Medicine and Health Sciences | Social and Behavioral Sciences

Publication Details

Jones, S. C. Magee, C. A. (2012). Equal discussion of significant findings? Not confirmation bias, but a focus on the most significant findings. *Alcohol and Alcoholism*, 47 (1), 80.

LETTER TO THE EDITOR

Equal Discussion of Significant Findings? Not Confirmation Bias, but a Focus on the Most Significant Findings

Sandra C. Jones^{1,*} and Christopher A. Magee^{1,2}

¹Centre for Health Initiatives, University of Wollongong, Wollongong, NSW 2522, Australia and ²School of Psychology, University of Wollongong, Wollongong, NSW, Australia

*Corresponding author: E-mail: sandraj@uow.edu.au

We thank Ms Jackson for her correspondence on this issue and agree that it is certainly important that any research report all results regardless of whether they are considered favourable or unfavourable. We note that in our paper we clearly reported all results in the Results section regardless of the direction of the associations. Thus, there is no 'confirmation bias' and we have not ignored the 'unfavourable' data.

Given the limitations on the length of the article, in the Discussion we expanded on the most consistent and reliable findings obtained. While we did consider possible reasons for the findings in relation to exposure to television advertising, we did not address them in the Discussion section, as we believed that these would be of less interest to readers. Thus, we appreciate Ms Jackson's letter as it provides us with an opportunity to comment on these findings, and we acknowledge that we possibly should have done so in the original article.

As shown in Tables 4 and 5, and as pointed out by Ms Jackson, ~94% of the sample (n = 1048) reported that they had seen alcohol advertising on television, with only 65 indicating they had not. Broken down by age and sex, the number of people who had not seen alcohol advertising on television was considerably small in the respective analyses.

The smaller cell sizes (which are unique to the television advertising variable) raise a number of issues regarding the reliability of the obtained odds ratios. In this instance, the associations are non-significant findings in the unadjusted analyses, but become significant with the inclusion of covariates. Furthermore, the confidence intervals of the adjusted effects are wide, raising doubts as to whether these significant results are meaningful or merely due to the effects of the small cell sizes. It was therefore important that we interpreted these results with caution.

It is important to point out that possible interpretations could focus on the more likely explanation (that there is something about the ~6% of adolescents who have not seen alcohol advertising on television that increases their risk of alcohol consumption) rather than the less likely explanation (that the ~94% who had seen alcohol advertising on television were somehow protected by this exposure).

In summary, we acknowledge the importance of a balanced approach to the reporting and interpretation of the results regardless of direction, and have adhered to this principle in our paper. However, we also emphasize the need to carefully consider the statistical issues discussed above to ensure that the results are interpreted appropriately.