

## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form ([see an example](#)) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

### ARTICLE DETAILS

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| <b>TITLE (PROVISIONAL)</b> | Clustering of substance use and sexual risk behaviour in adolescence: analysis of two cohort studies |
| <b>AUTHORS</b>             | Caroline A Jackson, Helen Sweeting and Sally Haw   |

### VERSION 1 - REVIEW

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| <b>REVIEWER</b>        | Dr Adam Fletcher, Lecturer, Faculty of Public Health & Policy, London School of Hygiene & Tropical Medicine.<br><br>Conflict of Interest Statement: I have no financial or personal involvement with the authors or organisations involved that could inappropriately influence my review. |
| <b>REVIEW RETURNED</b> | 12/12/2011   |

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| <b>GENERAL COMMENTS</b> | <p>Minor points which may be worthy of consideration for you to further improve the paper:</p> <p>The gendered nature of your findings could come out more clearly in your abstract (although I realise you are constrained by the word limit)</p> <p>The sexual risk variable is not itself necessarily a 'risky' behaviour (number of sexual partners), especially by late adolescence. It is a good, appropriate proxy so no major problem but perhaps you should touch on how this a limitation in the discussion (i.e. reports of unprotected sex may have been better).</p> <p>In the discussion, you do a good job of summarising the key findings and discussing the strengths and limitations of these data. However, I was a little suprised you did not mention Howard Parker/Fiona Measham's 'normalisation thesis' at all as these data add further weight to supporting their central point: "while the overall prevalence of drug use varies widely across different regions and samples, drug use nevertheless appears to be spreading into all sections of the youth population, and differences between some population sub-groups are becoming less polarized and more subtle" (Measham et al, 1994 p. 309).</p> <p>The statement that your findings on gender are "hard to explain" is true (p.9), especially as had no prior hypothesis, although I wonder if you could develop any hypothesis regarding why?</p> |
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| <b>REVIEWER</b> | Dr Jilly Martin<br>Research Fellow in Child Health and Well Being<br>Oxford Brookes University, UK<br>Department of Social Work and Public Health |
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|                        | No competing interests to declare |
| <b>REVIEW RETURNED</b> | 21/12/2011                        |

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| <b>GENERAL COMMENTS</b> | <p>This manuscript is an excellent addition to the literature in this area, highlighting interesting insights into the prevalence of risk behaviour that are applicable to the work of a wide range of researchers, health professionals and intervention designers exploring multiple health-risk behaviours in young people. The limitations of the data are amply covered, though it might also be worth addressing the question of generalisability, given that the sample are derived from Scotland only. The analysis of data is neat and clearly presented, with some interesting concluding remarks.</p> <p>One minor point that might improve readability might be to define the different cohort as 'early' and 'later' cohorts rather than including the dates every time; where you have used this terminology already, there is better flow in the text.</p> |
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### VERSION 1 – AUTHOR RESPONSE

We would like to thank both reviewers for their very helpful comments and suggestions.

Reviewer: Dr Adam Fletcher, Lecturer, Faculty of Public Health & Policy, London School of Hygiene & Tropical Medicine.

Conflict of Interest Statement: I have no financial or personal involvement with the authors or organisations involved that could inappropriately influence my review.

Minor points which may be worthy of consideration for you to further improve the paper:

The gendered nature of your findings could come out more clearly in your abstract (although I realise you are constrained by the word limit)

#### RESPONSE:

We have included further details of the differences in findings by gender in the last sentence of the results section of the abstract.

The sexual risk variable is not itself necessarily a 'risky' behaviour (number of sexual partners), especially by late adolescence. It is a good, appropriate proxy so no major problem but perhaps you should touch on how this a limitation in the discussion (i.e. reports of unprotected sex may have been better).

#### RESPONSE:

We agree with you and are grateful to you for pointing out this omission from the discussion. Unfortunately the two studies did not collect equivalent data on contraception or condom use. We have included a comment on this in the discussions section at the bottom of page 9.

In the discussion, you do a good job of summarising the key findings and discussing the strengths and limitations of these data. However, I was a little surprised you did not mention Howard Parker/Fiona Measham's 'normalisation thesis' at all as these data add further weight to supporting their central point: 'while the overall prevalence of drug use varies widely across different regions and samples, drug use nevertheless appears to be spreading into all sections of the youth population, and differences between some population sub-groups are becoming less polarized and more subtle?'

(Measham et al, 1994 p. 309).

#### RESPONSE:

Our previous paper that included analyses of these datasets focused on increasing rates of behaviours (Sweeting H, Jackson C, Haw S. Changes in the socio-demographic patterning of late adolescent health risk behaviours during the 1990s: analysis of two West of Scotland cohort studies. BMC Public Health 2012 (in press)). However, our focus in this paper is the associations between substance use and sexual risk behaviour and so we don't feel extensive discussion of normalisation is justified. However, thanks very much for reminding us of this reference. We have added it to the introduction, where we refer to the normalisation of behaviour (page 3, line 5).

The statement that your findings on gender are "hard to explain" is true (p.9), especially as had no prior hypothesis, although I wonder if you could develop any hypothesis regarding why?

#### RESPONSE:

We have given this further thought and still feel that the findings remain hard to explain. Although we didn't have a prior hypothesis, we do discuss how we might have understood the opposite sort of result (decreasing strength of associations with increasing prevalence of behaviours), which is perhaps what one would have expected to find.

Reviewer: Dr Jilly Martin  
Research Fellow in Child Health and Well Being  
Oxford Brookes University, UK  
Department of Social Work and Public Health

No competing interests to declare

This manuscript is an excellent addition to the literature in this area, highlighting interesting insights into the prevalence of risk behaviour that are applicable to the work of a wide range of researchers, health professionals and intervention designers exploring multiple health-risk behaviours in young people. The limitations of the data are amply covered, though it might also be worth addressing the question of generalisability, given that the sample are derived from Scotland only. The analysis of data is neat and clearly presented, with some interesting concluding remarks.

#### RESPONSE:

We have included a comment on the generalisability of our findings prior to the conclusions section on page 10.

One minor point that might improve readability might be to define the different cohort as 'early' and 'later' cohorts rather than including the dates every time; where you have used this terminology already, there is better flow in the text.

#### RESPONSE:

We agree with the reviewer and have now referred to the cohorts as 'earlier' and 'later' throughout the manuscript, and have also adjusted the headings in the tables and figures.