

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Positive associations between consumerism and tobacco and alcohol use in early adolescence: cross-sectional study
AUTHORS	Sweeting, Helen; Hunt, Kate; Bhaskar, Abita

VERSION 1 - REVIEW

REVIEWER	Gerry McCartney NHS Health Scotland
REVIEW RETURNED	12-Jun-2012

THE STUDY	<p>Overall this is an excellent study but I have a small number of queries in relation to the methods employed:</p> <ul style="list-style-type: none"> - Table 2 details analyses that have been 'mutually adjusted'. I am not clear what ORs have been adjusted for what other factors. It would be very helpful if this was made much clearer. - The Family Affluence Score has been collapsed into 3 categories rather than used as a continuous variable. This could explain the loss of some of the explanatory power of this as the only marker of SES. - The Family Affluence Score contains aspects which could also be considered markers of consumerism - number of computers at home, number of family holidays. The extent to which this is measuring affluence rather than consumerism is not clear.
RESULTS & CONCLUSIONS	<p>The markers of consumerism have been interpreted as a means to identify the culture in which the children inhabit. I don't think this is accurate. By definition, the children are all part of the same school groups and inhabit the same culture - the same social norms and shared understandings - therefore, to interpret the results as suggesting a cultural explanation rather than a structural explanation I think is not supported. To examine a cultural explanation would require school children inhabiting different cultures to be compared and SES to be adjusted for.</p>
GENERAL COMMENTS	<p>Overall this is an excellent study.</p> <p>My main concerns are:</p> <ul style="list-style-type: none"> - the lack of clarity about the 'mutual' adjustments - the interpretation of the markers of consumerism as different cultures - the potential loss of power from categorising FAS - the potential for FAS to be detecting consumerism rather than affluence <p>I think these can all be easily addressed or the limitations arising from them discussed.</p> <p>I also wonder if the differences between smoking and alcohol reflect that alcohol can be used sensibly and without harm whereas tobacco cannot. Could it be that alcohol use is therefore</p>

	less of an important outcome unless the harms due to its use can be detected?
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REVIEWER	Dr Jane Hartley Senior Research Fellow CAHRU, School of Medicine University of St Andrews Scotland I have no competing financial or other interests with this research. Note: Author KH was my PhD supervisor.
REVIEW RETURNED	26-Jun-2012

GENERAL COMMENTS	<p>General comment:</p> <p>This is a very interesting and timely paper. The authors unearth specific negative health-related repercussions of consumer society and explore the way in which different health-related behaviours – smoking and drinking alcohol – are connected when considered through the lens of consumer identities. The paper's findings have exciting implications for exploring further the connection between consumer culture, state of mind and specific health-related outcomes; these implications are not restricted to these two health-related behaviours, nor to this age group.</p> <p>Specific comments:</p> <p>a) Page 2 Line 40 – 44 ‘Conclusion’: ‘These results suggest associations between consumerism and both smoking and drinking might arise because adolescent identities incorporate both consumerism and substance use, or be the result of promotion (indirectly in the case of tobacco) linking consumerist or aspirational lifestyles with these behaviours’.</p> <p>This is a provocative conclusion. It would be interesting, in the future, to undertake a theoretical investigation of how adolescent identities in fact comprise all those things. For example, the four elements noted: Consumerism; Aspirational lifestyles; Promotion of different companies; Substance use could be considered as fundamentally related and interdependent.</p> <p>b) Page 2 Line 37/38 ‘Brand awareness’ had an equal or stronger relationship with both smoking and drinking than family affluence.’</p> <p>In the future, could a scale that incorporates family affluence and dimensions consumerism be developed? Also, qualitative work could be utilised to explore and to further understand the nuances of this finding.</p> <p>d) Page 9 Line 4/5</p>
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	'The consumer involvement scales'. It would be interesting to develop this scale to incorporate non-material products too – ie holidays, meals, and other 'experiences'
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REVIEWER	Professor Amanda Ampos Professor of Health Promotion Centre for Population Health Sciences Medical School University of Edinburgh Teviot Place Edinburgh EH8 9AG
REVIEW RETURNED	05-Jul-2012

GENERAL COMMENTS	This is an interesting and innovative paper in that it explores a potentially important but under-researched issue, the relationship between consumerism and alcohol and tobacco use in young adolescents. It is perhaps surprising that given the rise of consumerism and young people's exposure to tobacco and alcohol marketing, that this relationship has received so little attention in previous research. This study, while using cross-sectional data, makes a useful contribution in analysing several dimensions of consumerism in relation to smoking and drinking behaviour. Another strength of the analysis is the that it also explores these relationships in relation to gender and socio-economic status. It is clearly written and the findings are considered in relation to relevant literature. My only comment is that the measures used for smoking (ever smoking) and drinking (current) behaviour are somewhat different and may be capturing different aspects of these behaviours and their likely trajectories. I assume that ever smoking was used rather than current smoking because smoking prevalence in this age group was low. However, this is not explained and it would have been interesting to see if there were any difference in the findings if current smoking had been used.
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VERSION 1 – AUTHOR RESPONSE

Reviewer: Gerry McCartney

- Table 2 details analyses that have been 'mutually adjusted'. I am not clear what ORs have been adjusted for what other factors. It would be very helpful if this was made much clearer.

We hope this is now easier to understand. Our 'analysis' section now notes that "...the mutually adjusted models entered school year group, family affluence, 'premium' possessions, 'standard' possessions, 'dissatisfaction', 'consumer orientation' and 'brand awareness' all together in respect of both smoking and drinking". We have also added a footnote to the table reporting these which states that the mutually adjusted odds ratios were "Adjusted for all other variables in each model".

- The Family Affluence Score has been collapsed into 3 categories rather than used as a continuous variable. This could explain the loss of some of the explanatory power of this as the only marker of SES.

Thank you for this suggestion. In our description of the measure we now note "In line with the majority of studies which have used this measure (Currie et al, 2008), the resulting scale was collapsed ...".

However, since we were interested to test whether the effects of family affluence would be stronger using the continuous (0-7) scale rather than the collapsed three category measure, we re-ran the mutually adjusted analyses, including the continuous measure of family affluence. In fact, the results were virtually identical, strengthening our confidence in the finding that our consumerism measures had similar or stronger relationships with smoking and drinking than family affluence. We have included these results as Supplementary Table 2 and describe them (p.8) as follows: "Sensitivity analyses, conducted in order to test the effects of family affluence when entered as a continuous variable, rather than the collapsed low, medium and high affluence categories, showed almost identical results (Supplementary Table 2). Family affluence had a markedly less significant relationship with drinking than did 'premium' possessions or 'brand awareness'. Among females it also had a less significant relationship with smoking than 'brand awareness'."

- The Family Affluence Score contains aspects which could also be considered markers of consumerism - number of computers at home, number of family holidays. The extent to which this is measuring affluence rather than consumerism is not clear.

This is an interesting point, which we now acknowledge in our 'Discussion' (p.10) "The authors of our measure of family affluence note that it shows validity both in respect of agreement between pupils and parents on the component items, and in its relationship with other measures of socio-economic status such as parental occupation and country-level macro-economic indicators such as GDP (Currie et al, 2008). However, since it is based on family vehicles, bedrooms, computers and holidays, it is possible that the scale is, at least in part, a measure of (family) consumerism in addition to affluence."

- The markers of consumerism have been interpreted as a means to identify the culture in which the children inhabit. I don't think this is accurate. By definition, the children are all part of the same school groups and inhabit the same culture - the same social norms and shared understandings - therefore, to interpret the results as suggesting a cultural explanation rather than a structural explanation I think is not supported. To examine a cultural explanation would require school children inhabiting different cultures to be compared and SES to be adjusted for.

We weren't entirely clear about this point. Our sample was drawn from seven schools, and the analyses accounted for the clustering within school classes. All measures included in our analyses were individual rather than aggregate at either the school, year group or class level, and although we recognise that schools differ in their socio-economic mix and ethos, there nevertheless tends to be considerable within-school variation and evidence of various cliques and groups with very different values and behaviours (e.g. Milner [2004] 'Freaks, geeks and cool kids: American teenagers, schools and the culture of consumption', Routledge, New York). However, since our analysis was restricted to 12-14 year olds, we now acknowledge that this means our 'cultural explanations' conclusion should be restricted to adolescents ('at least in adolescence') (p.9).

- I also wonder if the differences between smoking and alcohol reflect that alcohol can be used sensibly and without harm whereas tobacco cannot. Could it be that alcohol use is therefore less of an important outcome unless the harms due to its use can be detected?

We agree that this might be the case among adult, long-term smokers and drinkers, but think it is less likely among the 12-14 year olds who form the sample for our analysis. Indeed, the reverse might even be more likely: among the analysed sample, only 4% reported daily smoking, while 23% said that they would normally drink three or more alcoholic drinks in one go and 9% that they had drunk more than five drinks in one go on six or more occasions.

Reviewer: Dr Jane Hartley

a) Page 2 Line 40 – 44 'Conclusion': 'These results suggest associations between consumerism and

both smoking and drinking might arise because adolescent identities incorporate both consumerism and substance use, or be the result of promotion (indirectly in the case of tobacco) linking consumerist or aspirational lifestyles with these behaviours'. This is a provocative conclusion. It would be interesting, in the future, to undertake a theoretical investigation of how adolescent identities in fact comprise all those things. For example, the four elements noted: Consumerism; Aspirational lifestyles; Promotion of different companies; Substance use could be considered as fundamentally related and interdependent.

b) Page 2 Line 37/38 'Brand awareness' had an equal or stronger relationship with both smoking and drinking than family affluence.' In the future, could a scale that incorporates family affluence and dimensions consumerism be developed? Also, qualitative work could be utilised to explore and to further understand the nuances of this finding.

d) Page 9 Line 4/5 'The consumer involvement scales'. It would be interesting to develop this scale to incorporate non-material products too – ie holidays, meals, and other 'experiences'

Thank you for all these suggestions for future work. As Professor Amos notes in her review, it is surprising that these issues have received so little research attention, and we agree that it is an area which might benefit from qualitative studies. The Consumer Involvement Scale is one of several which have been devised by other authors over the past 30 years or so. The focus of these scales has generally been on beliefs that possession of goods and/or financial success is a means to happiness and life satisfaction. The non-material products suggested above might be interesting as they reflect a different aspect of consumerism.

Reviewer: Professor Amanda Amos

My only comment is that the measures used for smoking (ever smoking) and drinking (current) behaviour are somewhat different and may be capturing different aspects of these behaviours and their likely trajectories. I assume that ever smoking was used rather than current smoking because smoking prevalence in this age group was low. However, this is not explained and it would have been interesting to see if there were any difference in the findings if current smoking had been used.

The reviewer is correct in assuming that we chose our measures of smoking and drinking based on prevalence: only a small minority of our sample were current smokers and almost all had drunk alcohol. However, we were also interested in this idea, and repeated our analyses in respect of current smoking (around 8% of the sample) and ever drinking (86%). Although the associations were generally weaker, we still found – perhaps surprisingly - that 'brand awareness' had a stronger relationship with smoking (females) and drinking (both genders) than did family affluence. We have included these results as Supplementary Table 3 and describe them (p.8-9) as follows: "Further analyses, conducted in respect of different measures of smoking and drinking also found that among females, current smoking (reported by only 6.7% males and 8.9% females) had a stronger relationship with 'brand awareness' than with family affluence, and that among both genders, ever drinking, which was very frequently reported (86% males, 86.8% females), had a stronger relationship with 'brand awareness' than with family affluence (Supplementary Table 3)." In the Discussion, we remind readers of these results (p.11): "Patterns of association between consumerism and both smoking and drinking (whether defined as 'ever' or 'current') were very similar ...".

We hope that following these changes, our paper will now be acceptable for publication in BMJ Open.