**Reviewer’s report**

**Title:** What could keep young people away from alcohol and cigarettes? Findings from the UK Household Longitudinal Study

**Version:** 0  **Date:** 04 Nov 2016

**Reviewer:** Kohta Suzuki

**Reviewer's report:**

Major comments

The authors described the association between happiness, awareness of alcohol- or smoking-related harm or the size of friendship network and the pattern of alcohol and cigarette use among young people in the UK. Because the effect of smoking or alcohol consumption among adolescent seemed very important from the view of public health, this article might be valuable to prevent these risky behaviors. However, there were some problems to clarify before publishing as an epidemiological paper.

First, although the behavior among the participants at wave 2 survey (baseline) was different, the authors analyzed the all available data of participants. Because the results of multinomial logistic regression analyses seemed a bit confusing and difficult to interpret, it might be better to use the data of participants who did not use either substances at the baseline. In addition, because the characteristics of participants between non-user and user at baseline and the number of participants of ex-user was limited, it might be better to separately analyze these participants. Thus, it is necessary to describe the reason of the authors' analyses.

Next, although the authors thought their methods were valid, it seemed that it might be necessary to clarify the external validity or reliability of each questionnaire about outcomes and study factors because the answers of children at 10 years of age might be less valid and less reliable compared with these of children at 15 years of age. Please clarify the difference of validity and reliability of each questionnaire at each age and discuss the effect of these differences on the results in discussion section.

Finally, these study factors might be changed during the study period, particularly about the size of friendship although the authors used only the baseline data. It is necessary to describe the effect of this possibility on the results as a limitation of the study.

Therefore, it is necessary to consider and to correct these problems before publishing.
Minor comments

Background

Because the logic of description in the paragraph of "Awareness of alcohol- and cigarette-related harm" seemed a bit ambiguous, it might be better to clarify the association which was not clarified.

Methods

Was the age of participants (10-15 years of age) at wave 2? Please clarify it. In addition, it is necessary to show the dates of wave 2 and wave 3.

Although the authors cited the article 17, it is better to describe the detail of methods of survey weight.

The number of available cases (1749) and the final sample size (1729) were different.

Please describe the correction methods about health status of participants as a covariate.

Results

It might be better to describe not only the weighted data but also the raw data because the difference of these data might show the generalizability of results.

It was not necessary to describe the F values in the results. In addition, it is better to round the results off to one or two decimal places.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

No

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

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