**Reviewer's report**

**Title:** A Feasibility Study of Short Message Service Text Messaging as a Surveillance Tool for Alcohol Consumption and Vehicle for Interventions in University Students

**Version:** 2  **Date:** 16 May 2013

**Reviewer:** James Murphy

**Reviewer's report:**

“A Feasibility Study of Study Message Service Text Messaging as a Surveillance Tool for Alcohol Consumption and Vehicle for Interventions in University Students" is a well written paper whose topic is likely to be of interest to the readership of BMC Public Health. The current study examined the feasibility of a short messaging service (SMS) for the purposes of collecting data on daily alcohol consumption and acting as an alcohol intervention. This study contributes to the literature on both college drinking behavior and technological advances in behavioral interventions by examining the utility of this modality as a realistic intervention service for college students who may want to change their drinking behavior. The authors have made several significant revisions in accordance with the reviewers’ comments. Although these revisions have improved the quality of the paper, I have some existing concerns about the structure of the manuscript. What follows are my concerns and points of clarification.

**Major Concerns:**

1. **Lack of a focus:** It is still not clear why the authors included four separate primary aims in this manuscript. Although the authors have collapsed four studies into two, the manuscript still seems disjointed. Based on the findings of the study, it seems that the most interesting information comes from the quantitative and qualitative assessments of the validity and feasibility of using SMS messages for data collection. The secondary analysis of the temporal patterns of drinking is also interesting, but detracts from the process findings. Lastly, the findings addressing the feasibility of the feedback intervention could be presented in a subsequent manuscript.

2. **Methodology:** The description of the methods is a bit unclear. I suggest moving the statement

   “Semi-structured interviews were conducted in parallel with participants, both those who completed the SMS study and those who dropped out, to investigate their views on the use of this medium. The quantitative study was conducted first and preliminary analyses went forward to inform the themes explored in the qualitative study. The data obtained from this was then used to design a randomised control trial to examine the feasibility of..."
delivering an intervention via SMS text messaging" to the Procedure subsection of the Methods section. The authors may also consider stating the number participants that were recruited in the Participants subsection of the Methods section. It may also be helpful to separate the qualitative methods from the quantitative methods (especially if the authors omit Study II).

As it related to the Measures Subsection of the Methods section, I think it would be clearer if the authors simply presented information about the FAST and acknowledged that it was adapted from the AUDIT. I also do not see a description of the online survey that was used in the study. It is also unclear when the entire AUDIT was used and when adapted FAST was used.

In sum, I think the authors need to revisit the structure of the methods section and make to include a description of all measures (on-line survey), a more detailed and coherent description of the procedure (tying in information from the introduction), and present a more informative, yet concise description of the participants.

3. Analytic Strategy: The rationale for the analyses is much clearer. The authors may save some space by simply stating that the design was a longitudinal within-subjects design, therefore a Poisson Regression was used. After this statement the description of the models could follow.

4. Results: It is unclear what comparisons were made (page 19 line 4). The information about when to online surveys were completed should be moved to the Methods section. It is not clear why there 82 participants that completed the online survey, but 84 participants that responded to at least one text message. The findings of the t-test, Spearman rank analyses, and Figure 1 do not support the following statement “These results suggest that attrition is pronounced for online surveys prompted by SMS, whereas SMS responses remain stable over time”. The figure does not illustrate the comparison between the number of responses to the online survey and the number of text responses. The authors may also consider framing the validation analyses as an examination of convergent validity instead of “external” validity (Shadish et al., 2002).

5. Qualitative Results: The presentation of the specific quotes is well done. However, the authors may want to choose one quote per point to decrease the length of the manuscript.

6. Intervention Results: Again, while these results of very interesting. Given, that this study was done with an unrelated sample and includes non-students, I think that Study II would be better served in a subsequent manuscript.

Minor Concerns:

7. Typo: Page 20 last line, andf should be and

8. In the description of the validation analyses it was gender entered as a
covariate?

9. It is unclear why the staff member was included in the final analysis given that the focus was on college students. The authors should clarify why they included this participants’ data.

Decision: Revise and Resubmit

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests