Reviewer’s report

Title: Type A personality, hostility, time urgency and unintentional injuries among Chinese undergraduates: A matched case-control study

Version: 3 Date: 31 July 2013

Reviewer: Julie Mytton

Reviewer’s report:

This is an interesting paper that builds upon the research previously published in this journal in 2011.

Major compulsory revisions

Methods

1. The authors refer back to their previous publication which they describe as a “cross-sectional study”. The absence of information on the methodology of the previous study requires the reader to seek the previous publication to know whether the sample reported in this manuscript is appropriate. I recommend that the authors include a short description of the previous study to include information that the methodology was a questionnaire survey, year conducted, sampling framework, eligible sample, & response rate.

2. The injury outcome in this manuscript is not clearly stated – it is assumed to be a dichotomous variable of ‘no injury’ vs ‘any injury’ that meets one of the three criteria.

3. The terms ‘competitive hostility’ and ‘total hostility’ and ‘hostility’ appear to be used interchangeably – are they the same thing? If so, please use a single term. If not, clarification is required. The opening paragraph of the results section refers to ‘the hostility and competitive component’ which suggests that they are different.

4. It is acknowledged that you can only explore the variables included in your original questionnaire, but other potential confounders, e.g. drug use, caffeine use, diagnosis of ADHD or conduct disorder etc, would influence the likelihood of injury and may be associated with personality. If you did not collect information on such confounders the potential impact of unmeasured confounders should be considered in the discussion section of the manuscript

Results

5. The methods section states that groups A and mA were combined into one group “Type A” and groups M, mB and B were combined into one group “not Type A”. However the results section appears to report the data by all 5 groups of TABP. Please revise the manuscript to ensure consistency between methods and the results presented.

6. It is unclear why the analysis of the relationship between TABP and injury is
split into an analysis that includes some confounders, and a second analysis that includes all confounders. What was the rationale for partially and then fully adjusting the model? If both steps are required, this should be explained in the methods. If only the fully adjusted model is relevant this should be the only model reported in the text and the tables.

7. Penultimate paragraph in results section states “there seems to be a dose response relationship between the time urgency component and injuries”. This appears to be inappropriate since the data in table 5 shows quintiles with confidence intervals with considerable overlap, suggesting that any apparent increase in ORs may be due to chance.

8. The final paragraph of the results section describes analysing the association between hostility and injuries. Do you mean that you compared CH with injury adjusted for time urgency? No data or figures appear to be presented to support your statement that the hostility remains independently associated, with a dose response relationship.

Discussion & conclusions

9. The fifth paragraph of the discussion section contains the statement that “psychologists, especially in China, should find a better, more accurate scale for assessing type A personality or hostility” – If the measure does not accurately reflect the variable does this not invalidate your study?

10. The last paragraph of the discussion and the conclusions appear to have over-interpreted the findings of your study. The results do not specifically support a recommendation that services should be provided for those learning to drive to prevent RTAs since the outcome of interest in your study was any injury not just road traffic injuries. It is inappropriate to recommend Tai Chi unless there is evidence that use of Tai Chi in persons with TABP reduces injuries. It is not appropriate to generalise findings from a college population to school children or their teachers or supervisors, or recommend combative sports. Recommendations for research, for practice and for policy should be directly supported by the findings of your study.

Minor essential revisions

11. It would be helpful if the opening paragraph of the results section could include the fact that the 506 students included in this analysis were drawn from the sample of 2287 students that completed valid questionnaire responses in your previously published study. The methods section states that groups A and mA were combined into one group “Type A” and groups M, mB and B were combined into one group “not Type A”, therefore this paragraph should present the proportions of cases and controls that were, and were not, Type A behaviour pattern, with their respective scores.

Discretionary revisions

12. It is unclear why the abbreviation ‘TH’ has been used for Time Urgency component of Type A Behaviour Pattern – ‘TU’ would appear to be more appropriate.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests