Reviewer's report

Title: Health behaviors, masculinity and social-demographic predicting illegal motorcycle street racing.

Version: 1 Date: 21 March 2011

Reviewer: Nerida L Leal

Reviewer's report:

MAJOR COMPULSORY REVISIONS

1. The research question posed in the final paragraph of the Introduction is not consistent with the title of the manuscript or the research methods. This paragraph builds on earlier arguments about the novel nature of the research by describing the purpose as providing insight into, and understanding of, factors associated with illegal motorcycle street racing. However, the manuscript title and selection of variables of interest imply a much narrower scope of inquiry. The author should amend the manuscript so that the stated aim is more consistent with the study conducted. As it stands in this draft, a qualitative design would be required to address this research question.

2. The Discussion section mentions a previous study by the author [reference #24], yet description of this research is missing from the Introduction section. A brief description of this research and how it informed the selection of variables of interest in this research is required in the Introduction and perhaps Methods if this research also informed question wording etc. The inclusion of this research in the Introduction will also address the previous comment that the current research question suggests a qualitative approach should have been used. Describing this initial study and how it informed the current quantitative research, including rewording the research question, would be appropriate.

3. The Introduction section should include a brief discussion of the motorcycle risk taking, or even driver risk taking, literature. If this is not possible, some mention should be made of why this literature was beyond the scope of the current research, and was not included in the survey. Similarly, there is very little discussion of the illegal car street racing literature and why this knowledge base was not used to inform the selection of variables in this study.

4. Results, first para: the statement that non-participation was mainly due to other errands rather than the sensitivity of the research topic needs to be justified. Was this the feedback received directly from the participants, or an assumption of the interviewer/s?

5. Results, first para: the statement that illegal street racing was more common among Malays seems contradictory to the data presented in Table 1, where the percentage of Chinese participants reporting street racing is higher than that for Malays.

6. It is not clear which survey item the Model 2 regression is referring to. In the
current version of the survey presented as an Appendix, there is no item that
separates racing behaviour from dangerous stunts. Which two groups are being
compared in this analysis, and where was this data obtained?

7. The final sentence of the first paragraph of the Discussion is not based on the
current study, and so this recommendation should not appear in the manuscript.

8. The final sentence of the third paragraph of the Discussion is not inappropriate
given that the substance use of this sample has not been compared to any
population level data. I would imagine that interventions designed to reduce
these behaviours would continue to be targeted at a general population level,
rather than illegal motorcycle street racers alone.

9. Discussion, fourth para: The discussion of the definition of masculinity raises
the question of why masculinity scores were correlated with health measures in
this study. It seems inevitable that they would be related, as they are measuring
the same construct according to your definition?

MINOR ESSENTIAL REVISIONS

1. The terms “stunt driving” and “stunt racing” are used a number of times
throughout the abstract and body of the manuscript. As the terminology used in
item B1 of the survey is “perform dangerous stunts”, and the research is
interested in illegal motorcycle street racing, all uses of these terms should be
amended to reflect the nature of the survey question e.g. “performing dangerous
stunts while riding” or “stunt riding”.

2. Many of the Results presented in the Abstract can be deleted, as they are
descriptive in nature and do not directly relate to the research question (factors
associated with illegal motorcycle street racing). Suggest deletion of sentences 3
to 6 (i.e. from “The mean health protective…” to “…positively correlated with
health risk behaviour scores”).

3. Results, fourth and fifth paras: Health protective behaviour scores and health
risk behaviour scores for this sample are described as average, but it is not clear
whether these statements are referring to comparisons with normative data, or
the average of possible scores on these variables. A similar statement is made in
the first sentence of the third paragraph of the Discussion.

4. Results, seventh para: It would be useful to state the two groups being
compared in the Model 1 regression analysis – presumably those who race
often/very often versus those who race rarely/sometimes?

5. Results, seventh and eighth paras: ORs and other stats should be removed
from these paragraphs as they are reported in Table 1 – just describe the results
in the remaining text.

6. Normally a Discussion would start by briefly restating the aim of the research
before briefly describing the key results in terms of the hypotheses (if any) and
linking the results to the literature reviewed in the Introduction. For example, the
findings discussed in the third sentence of the first paragraph of the Discussion
are consistent with the illegal car street racing literature, so links could be drawn
between motorcycle racing and the body of knowledge regarding illegal car
racing.
DISCRETIONARY REVISIONS

1. Suggest adding “motorcycles” and “risk behaviour” as keywords.

2. Introduction, second para: “alcohol drinking” could be changed to “excessive alcohol consumption” or “binge drinking” to better describe the research you are discussing. This clarification is also required in the second sentence of the third paragraph of the Introduction.

3. Methods, second para: please report Cronbach’s alpha for street racing and related activities.

4. Generally statistical notations (e.g. U, SD, df, n) are presented in italics.

5. In the Results section, there are a number of occasions when it is not completely clear which participants are being referred to. For example, in the first paragraph it says that “a large number were students…” Is this referring to a large number of the participants? Or a large number of the Malays described in the previous sentence? Or a large number of frequent racers? In the final edit of the manuscript, care should be taken to ensure the reference data for each sentence is clear and unambiguous.

6. In the Results section, it is not always clear whether the author is referring to general alcohol use (measured by item C3b) or alcohol use while racing (B2). This should be clarified.

7. While there are limitations associated with self-report data, the author could note in the final paragraph of the Discussion that as the research was designed to gain insight into the factors associated with illegal motorcycle street racing, there were no alternative sources of the required information.

8. If the author plans to use the survey again in future, consider adding “motorcycle” to questions in section B to avoid confusion with illegal car street racing; consider adding “no injury” as a response option for B5; and consider using interval / continuous response scales (e.g. frequency) for sections B and C.

MINOR ISSUES NOT FOR PUBLICATION

1. Manuscript title: “social-demographic” should be socio-demographic”; predicting should be “predictors of”.

2. Abstract, Methods sub-section: “survey was conducted in” should be “surveys were conducted”.

3. Abstract, Results sub-section, third line: “them reported” should be “reporting”.

4. Abstract, Results sub-section, final sentence: “show” should be “showed”; and “score” should be “scores”.

5. There is inconsistent use or non-use of hyphens for terms such as “socio-demographic” and “socio-economic” throughout the abstract and body of the manuscript.

6. Introduction, first para: “Street racing threaten the lives” should be “Street racing threatens the lives”; “despite its renown” should be “despite its renowned”; “have been associated to a variety of” should be “have been associated with a
variety of”; extra space between “family structure” and “may influence” should be deleted; “problematic behaviours were associated” should be “problematic behaviours are associated”; “motorbike” should be “motorcycle”.

7. Introduction, second para: “behaviour tend to co-occur” should be “behaviour tends to co-occur”; “Given this findings” should be “Given these findings”; “never been done” should be “never been conducted”.

8. Introduction, third para: Start second sentence with “For example,”; “beliefs reported less” should be “beliefs are less”; insert comma after [14]; “and showing greater” should be “and show greater”; “In particular to motor racing, its association with masculinity” should be “The association between motor racing and masculinity”; insert period after Malaysia.

9. Introduction, fourth para: end of first sentence should be “illegal motorcycle street racers in Malaysia”; “activities and its associated” should be “activities and associated”; “that will help in the development” should be “that will inform the development”; “associated to illegal motor racing” should be “associated with illegal motorcycle street racing”.

10. Methods, first para: I don’t understand what is meant by the sentence commencing “Considering the difficulty” – please reword; the comma after “Mat Rempit” should be a semi-colon, followed by “and”; “exact number of illegal motorcycle racer” should be “exact number of illegal motorcycle racers”; “not known officially” should be “unknown”.

11. Methods, second para: “demographic, illegal racing characteristics, health” should be “demographic characteristics, illegal racing behaviour, health”; “The second section consists of 5-item question that gauges illegal” should be “The second section consisted of 5 items designed to gauge involvement in illegal”; “health behaviour. There were 8 items contribute to the health” should be “health behaviour through an 8-item health”; “This scale had a moderate internal consistency. Cronbach’s alpha = 0.668.” should be “This scale had moderate internal consistency (Cronbach’s alpha = 0.668).”; “Similarly, the 5 items contribute to health risk behaviour scale consists of questions” should be “The 6-item scale measuring health risk behaviour consisted of questions”; “Item responses are scored 1 or 0 (yes = 1, no = 0)” should be “Item responses are scored either yes (1) or no (0)”; do not use italics for “or” when describing the masculinity response scale; “The internal reliability of the masculinity scale” should be “The internal consistency of the masculinity scale”; “(Cronbach’s alpha: masculinity scale 0.869)” should be “(Cronbach’s alpha = 0.869)”.

12. Methods, Analyses sub-section: delete second sentence as this is repeated later in this section; Delete “The internal consistency of the scale was assessed using Cronbach’s alpha” as these have already been reported earlier in the Methods; “comparison of mean” should be “comparisons of medians”; “on the priori hypotheses” should be “on the a priori hypotheses”, with “a priori” in italics.

13. Throughout manuscript: “P” should be in lower case and italics.

14. Results, first para: “due to participant preoccupied with other errands and not because of the sensitivity” should be “due to participants being preoccupied with other errands rather than the sensitivity”.
15. Results, second para: The final sentence is very unclear. Should be reworded to something like “participants who reported that neither parent was strict or only one parent was strict were more likely than participants who reported that both parents were strict to race while under the influence of alcohol”.

16. Results, third para: “majority (68.0%) have been involved in illegal road racing between 2 to 4 years” should be “majority (68.0%) reporting involvement in illegal motorcycle street racing of between 2 to 4 years”.

17. Results, fourth para: “The scores were significantly different in the health protective behaviour score between groups” should be “The scores varied significantly between groups”.

18. Results, fifth para: delete space between 27.8 and % in first sentence.

19. Results, seventh para: “was statistically significant” should be “were significant predictors”; “Road racing” should be “Illegal motorcycle street racing”.

20. Results, eighth para: “and at least one parent” should be “or at least one parent”.

21. Discussion, first para: “Despite the sample was diverse” should be “Despite the sample being diverse”; “household income were notable lower” should be “household income were notably lower”; delete comma from RM3686 national average; “most of the illegal motorcycle races” should be “most of the illegal motorcycle racers”; “concomitantly with illegal street racing” should be “concomitantly with illegal motorcycle street racing”; “alcohol and stunt driving” should be “alcohol and stunt riding”; “over one-third with duration of racing less than” should be “over one-third of those reporting duration of racing of less than”; “illegal motorcycle racer performed stunt driving to gain respect and honour from peers” should be “illegal motorcycle racers performed dangerous stunts while riding to gain respect and honour from their peers”; “that leisure boredom, lack of recreational activity for leisure” should be “that boredom and lack of recreational activities for leisure”; “an effective mean to reduce stress” should be “an effective means to reduce stress”.

22. Discussion, second para: “illegal street racer and additionally there were a number racer of age below 15 years old, early” should be “illegal street racers, and there were a number of racers aged under 15 years, early”; “mentoring at school level may be beneficial.” should be “mentoring at school level, may be beneficial for this group.”; “groups such as the Chinese and Indians” should be “groups, such as the Chinese and Indians, also participate in this high risk activity.”; “Studies suggested that street outreach by trained peer leaders is effective in reducing risk behaviours [25-26]” should be “For example, previous research has suggested that street outreach programs coordinated by trained peer leaders are effective in reducing risky behaviours [25-26]”.

23. Discussion, third para: “Often, adolescents who frequently use cigarettes also were more likely” should be “For example, adolescents who frequently use cigarettes were also more likely”; “illegal racer appear to warrant” should be “illegal racers appear to warrant”.

24. Discussion, fourth para: “In logistic regression, variables” should be “In the logistic regression analyses, variables”; “hold permissive were more likely to have higher street racing frequency” should be “hold permissive attitudes were associated with higher street racing frequency”; “permissive were more likely to perform stunt racing” should be “permissive attitudes were more likely to perform dangerous stunts while riding”; “may be more beneficial” should be “may be beneficial”; “motor racing-related risk behaviours” should be “motor racing-related risk behaviours, and presumably many other risky behaviours”; “high masculinity and risk behaviour score were predictive of” should be “high masculinity and risk behaviour scores were predictive of”; “embracing in risk behaviours and against positive health behaviours” should be “embracing risk behaviours and opposing positive health behaviours”, likewise also shown in this study an inverse correlation”; “masculinity as an important construct for health risk behaviours” should be “masculinity as an important predictor of health risk behaviours”.

25. Discussion, fifth para: “thus may be subjected to selection bias in the sample selection and the sample may not be representative” should be “which may have resulted in selection bias, and a sample that may not be representative”; insert “However, it was not possible to assess the extent of any bias given that the population of individuals who engage in illegal motorcycle street racing is unknown” after the sentence ending with “under study”; “being one of a few” should be “being one of few”; “done with very large and a broad samples” should be “conducted with such a large sample”; “margin error although it does not eliminate” should be “margin for error, although it may not completely eliminate”; “internal reliability of the health protective and health risk behaviour scales, Cronbach’s alpha was not up to 0.7.” should be “internal consistency (Cronbach’s alpha) of some scales (e.g. the health protective and health risk behaviour scales) was less than 0.7.”

26. Conclusion: change “street racing” to “illegal motorcycle street racing”; “is a result of interactions of a variety of factors; include participant” should be “is associated with a variety of factors, including participant”; “interventions for the low” should be “interventions for low”; “adolescents and young youths” should be “adolescents and youths”; “interrelated risk behaviour” should be “inter-related risk behaviours”; “may particularly useful” should be “may be particularly useful”.

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

Quality of written English: Needs some language corrections before being published

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