Review of the manuscript 'Injuries among adolescents in Greenland: behavioural and socioeconomical correlates among a national representative sample'.

The present manuscript is written in clear, unambiguous technically correct English, and the language used conforms to the professional and scientific standards. However, unfortunately I have some major problems with the content of the manuscript and the dataset, which I will explain below.

1. My main problem is the purpose of the study, which was not clear to me after reading the introduction. The title suggests that the topic is determinants of injuries. The introduction however is on the seriousness of violent behaviour and injury as a result of violence, differences in prevalence of violence and bullying in different societies, other forms of injury and determinants of violence. After reading the results, I conclude that the topic indeed is determinants of injury. So the introduction does not cover the topic. Moreover, the goal, research questions and hypotheses are lacking in the introduction and also the relevance is not clear enough.

In lines 128 – 133 the investigated determinants are mentioned. I suggest that the authors focus the introduction on these determinants of injury. They can describe the literature on these determinants, and discuss their mutual relations and their relations with injury. I also suggest ending the introduction with pointing to the relevance of these determinants and their relations for the Greenland youth, with a goal of the study and with research questions and/or hypotheses.

- 2. Another main point is the data. In line 115 it is mentioned that the data are from 2005/2006. I unfortunately must conclude that they are not up to date and probably not in line with current society, so they cannot be treated as representative for the current society. In my opinion they can only be used to report on the difference between the prevalence of injuries, the determinants of injuries and their relations 15-20 years ago and the present society. This however needs an analysis of the same but more recent data, which should be possible (line 117-118).
- 3. Besides the points mentioned above, I think the structure and information of the paragraph on materials and methods can be improved.
  - a. The description of the sample contains a remark on the questionnaire (line 108-109) and procedure (line 110-112). Further information on the procedure is missing, as is the mean age or frequencies of classes of age, but is important regarding the attention on age in the discussion.
  - b. In the measurement part there is only a reference to table 1 containing the questions. However, there is a need for more information. For example, the question in table 1 regarding injuries is on being injured in the last 12 months. In statistical analysis part it is mentioned that the measure for injury is based on the definition of HBSC 'injuries that require medical attention'. My question is than, how is this medical attention measured? Moreover, the answering categories for the question on injuries are described under the statistical analysis (line 122-124) instead of under the measurements.

- c. In the description of the statistical analysis the determinants are mentioned as independent variables (line 129) in a chi-squared test and ANOVA (line 139), suggesting that the three categories on injury occurrence is the dependent variable. The independent variable is however the three groups on injury occurrence and the dependent variables are the determinants.
- 4. Also the results section can be improved.
  - a. Frequencies for several variables are provided, but some are lacking (SES, VPA).
  - b. Percentages of children who lived with their mother or father are presented, but it concerns children who lived ONLY with their mother or ONLY with their father.
  - c. Table 2 contains the distribution of the dependent variables for the three categories of the independent variable, and not the other way round (line 160). Moreover, some numbers presented in table 2 are unclear. The number presented for age is a mean, but where does the number for 'VPA' until 'job mother' stand for? And the percentages presented for 'talk to same gender' until 'self-assed wealth' seem to be based on the determinant (they count up until 100), while others seem to be based o category (e.g. of the children with no injuries 80.1 lived only with their mother, 19.9 lived with both parents (?)).
  - d. In the statistical analyses it is mentioned that the first MLR include all variables that were shown to be significant in the bivariate analyses and the second MLR was adjusted for age and sex (gender). In the results section however it is mentioned that the first MLR is adjusted for all covariates and the second for age and gender. What than is the difference?
- 5. The same holds for the discussion. The reasoning there is not specified enough.
  - a. Some explanations of findings in the discussion are based on injury and medical attention (line 198-208). See my remark above (3b).
  - b. The authors provide some explanations for a 'drop' in injury incidence (line 205), although they did not measure more than once (see my suggestion on my second important remark: an analysis of more recent data). These may be explanations for difference between societies.
  - c. One of the explanations for not finding evidence for injuries associated with alcohol misuse is the unclear impact of inebriation (line 215). This explanation needs more attention. Why is the impact unclear? (See my suggestion on my first important remark: descriptions of determinants and relation with injury).
  - d. One of the explanations the authors provide for not finding evidence for smoking is the high prevalence of smoking in all three injury groups (line 228-229). That's not an explanation but a finding.
  - e. The results show an association between not living with the mother and being injured. The authors refer to a study on low parental monitoring (line 237-238) and therefore suggest that children who only lived with their father experience low parental monitoring. They did not measure parental monitoring that, so is there other evidence for this suggestion? Moreover, no evidence was found for only living with the father. This seems to contradict the former explanation: when fathers do not monitor, then the authors should have found an impact of living with only the father. The contrast study the authors mention (line 241) is not really relevant, since

- this study concerns adolescent man, their partners and children. It is not clear how the explanation for the finding of this contrast study (line 242-244), that is, the problems of male Inuit, is an explanation for driving the positive effect of father on children to the null.
- f. The final conclusion that alcohol misuse needs to be questioned as a risk factor is contradictory to the statement that the effect for alcohol is missing because children are too young to use alcohol (line 220-222).

## Conclusion

## **Basic reporting:**

The submission is written in clear unambiguous and technically correct English. However, the intro and background can be improved, as well as the structure of the text.

## **Experimental design:**

The research is conducted in conformity of the ethical standers, but the experimental design can be improved: Research questions and/or hypothesis and relevance of the study are missing, and methods should be described with sufficient information, since reproduction is not possible with the information provided.

## Validity of the findings:

The data are robust and statistically sound, but they are not up to date. That is not a necessity for all studies, for example to investigate theoretically based research questions, but for a study investigating the prevalence of phenomena and their determinants it is necessary. Speculations and conclusions can be improved by linking them to research questions and results of the study.