

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Risk factors for suicidal thoughts in adolescence – a prospective cohort study -The Young-HUNT study.
AUTHORS	Strandheim, Arve; Bjerkeset, Ottar; Gunnell, DJ; Bjørnelv, Sigrid; Holmen, Turid; Bentzen, Niels

VERSION 1 - REVIEW

REVIEWER	Roman Kuposov University of Tromsø, Norway
REVIEW RETURNED	24-Jun-2014

GENERAL COMMENTS	<p>Statistics</p> <p>Page 8, lines 54 – 58 and page 9, lines 5 – 16.</p> <p>Interactions. Are they from former studies with the Young-HUNT or they are from the current study? If from the former study, change "where" to "were" (line 54) and remove reference to Table 2 on page 9 line 5. But if from the current study - then you have to be clearer with presenting the significance level of the findings. According to the table 2 both unadjusted and adjusted OR are significant for all the variables but reference in the text made only for the selected variables?</p> <p>Page 9, line 5. Early alcohol debut is mentioned while “early alcohol intoxication” is in the text and in the tables. First alcohol intoxication does not obligatory means early alcohol debut. Adolescent can have first drink without been intoxicated.</p> <p>Results</p> <p>Page 10, line 47. I suggest moving to new line the sentence that starts with “The effect of early alcohol intoxication...”</p>
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	<p>Page 11, the paragraph between lines 7-16. The reference to the table 2 is needed at the end otherwise move this paragraph up.</p> <p>Discussion</p> <p>Page 11, line 36. Put punktum before "Attention"...</p> <p>Page 11, line 43. Delete punktum before "In accordance..."</p> <p>Page 11, line 45. Delete punktum before "Conduct problems..."</p> <p>Page 11, line 56. "...breking behavior" change to "... breaking behavior".</p> <p>Page 12, line 10. I suggest substituting the word "correcting" to "controlling" or "adjusting".</p> <p>Tables</p> <p>Titles of the tables 1, 2 and 3 have different style (bold, non-bold). Use the same for every table, which is according to the journal requirements.</p> <p>Table 1, page 16</p> <p>Under the table there is a reference made to the definitions "underweight" and "overweight". I suggest to insert symbol "*" in the table on lines 26-28.</p>
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REVIEWER	Berit Grøholt University of Oslo, Norway
REVIEW RETURNED	06-Jul-2014

GENERAL COMMENTS	<p>I have some comments about weaknesses in the manuscript regarding:</p> <ul style="list-style-type: none"> 8. I miss a few references, and the reference list needs to be corrected 11. Some weaknesses in the discussion need to be addressed 12. Representativity is nor discussed 15. English is not my native language <p>This study explores prediction of suicidal thoughts in 2.399</p>
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Norwegian adolescents, examined at two time points (13-15 years and 17-19 years). Anxiety and depressive symptoms, behavior problems at school, overweight and muscular pain and tensions, as well as physical activity, use of alcohol and nicotine at baseline are explored as predictors of suicidal thoughts four years later. The paper is clearly written, the material is good, and methods used is sound. However, some points need to be considered:

Introduction:

The authors quote previous literature without making it clear if it is related to adolescents or adults. This distinction is important, as suicidal thoughts in adolescents and adults probably differ. Several epidemiological adolescent studies have been conducted previously in Norway, and I find it surprising that findings from authors like A. M. Sund or L. Wickstrom have not been quoted.

Method:

It is stated that 90% and 80% participated in the study at T1 and T2, and that 2.399 participated at both time point. How large percentage was this of the whole cohort invited? All went to school at T2. How representative is the group for all adolescents in the area? The question of representativity should be discussed, here or in "Strength and limitation".

In the adjusted analyses 1.911 were included. Were they representative for the cohort?

The outcome variable "suicidal thoughts" is the answer to a question quoted in the text. Did you have any information about self-harm, with or without suicidal intent? If so, that would have been interesting information.

Attention and conduct problems

are based on a 14 items scale, which has been described previously, according to the text. One of the references given, only refer to previous studies regarding the scale. In the other reference, it is stated that the construct "conduct problems" has strongest load from the question: "I am reprimanded by my teacher". In that paper (36 in the reference list), a factor called attention problems is not described. Thus, the explanation of the variables conduct problems (and may be attention problems) in the present paper seems misleading, as the word conduct makes most readers associate with conduct disorder (In the discussion conduct problems are compared to findings based on psychiatric diagnoses). The variables need to be described better, and probably need new names.

Pain and tension problems

Why was the 70 percentile used as a cut-of? Is there any reason?

Alcohol use

is dichotomized, but you also report number of intoxication in the text (Table 3).

Results

I miss a table giving the results of the adjusted analyses, which is the most important result, and more so as one aim is to describe preventive efforts, as stated in the abstract. I suggest that the authors give results from Table 3 in the text, and make a new Table 3 with adjusted results, or perhaps better, add the adjusted results to Table 2. As the discussion should mainly be based on adjusted results, this will facilitate the reading of the discussion. In some cases, analyses were made separately for girls and boys, as the main analysis was stratified for gender. Is it possible to add these results to a table?

Discussion

	<p>The main weakness of the discussion is that it is unclear if the author refers to bivariate or multivariate analyses. In my opinion, the discussion should be based on the adjusted results, with mention of bivariate results only when needed to make special points. Again, I miss to know if literature used for comparison refer to adolescents, adults or all ages.</p> <p>Another weakness is the use of conduct problems. I think the authors make comparison that could not be made. The text needs modifications. The authors must convince the reader that "reprimands from the teacher" really are caused by behaviour problems, and not by other reasons such as inattention caused by depression or lack of academic interest.</p> <p>The authors stated that alcohol use might have protective elements. This is probably true, but the authors might explain which elements they are referring to. They also stated that alcohol may act as a modifier, for instance on depression. I did not find this analysis in the result section.</p> <p>References Some of the references are given twice (example reference 4 and 10, and 30 and 41) Some Dutch names are incomprehensible (see reference 3)</p>
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VERSION 1 – AUTHOR RESPONSE

Both reviewers comments are appropriate, and points to indistinctness in the text.

Reviewer 1: Text is corrected in line with the comments to make points more clear.

Reviewer 2:

Introduction:

The literature search were restricted to adolescent- or total population- and longitudinal studies, were numbers from the child and adolescent period were possible to extract. See extra clarification in the introduction text. Some Norwegian studies has fallen out in the revision, and are reinstated.

Method:

90 %(9131) of the total cohort participated in Young-HUNT 1, only two last classes in secondary high school (2969) were invited to Young-HUNT 2, of them 80% attended.

Apprentices of the same cohort were invited, but few attended(due to practical problems? -they were not at school). This represents a problem, and will be stated in the discussion.

When we chose to adjust for all the factors addressed, all missing items added up, and the informants with any missing information were excluded. Most is due to missing in the physical examination, most of them by random, a whole school was by mistake not examined. We do not not know that the remaining group is representative, but the similarity of the crude and corrected OR are reassuring. The variable names Conduct problems, and Attention problems are used in 3 former articles from this study. They represents broad problem groups not comparable to the psychiatric diagnoses named Attention and Hyperactivity disorder and Conduct disorder. Even so it is difficult to imagine that adolescents with the diagnoses not to be in these broad groups. The "problem groups" was clearly defined in several factor analysis, and behaves well in statistical analysis. As a risk factor in population studies they might be more valuable than a smaller and more exact diagnostic group. I agree that the names are not ideal, but find it difficult to change them in this article alone. It is appropriate to make a notification of the difference in the discussion.

The 70 percentile was used to define a broad group of adolescents with problems in different areas, and was tried used systematically to avoid "fishing" for results with different cut-offs. Exceptions were oily used where previous research had set another standard, or dichotomization of simple questions made it necessary.

Alcohol intoxication was used as a dichotomous variable, but to prevent discussion about possible differences along the "slope", it was also shown parted in three in table 3.

Results.

i do agree that the adjusted ORs are more important, but this can be discussed. With som many intercorrelated variables I found it important to show both the crude ORs and the adjusted ones. It makes a discussion about each factors independence possible. The crude OR also have 15% more informants in the calculation, and possibly less selection.

Discussion.

My intention was to use only multivariate analysis as foundation for discussion. I see that the numeric reference is not consequent, and have changed the text.

A clarification of the terms conduct problems, and reference to literature on conduct disorder is done. Conduct problems included disagreement with teacher as quarrels and scolding, as well as involvement in fights at school. Attention problems was capturing both inattention and hyper-kinetic symptoms.

Alcohol-discussion slightly changed.

VERSION 2 – REVIEW

REVIEWER	Berit Grøholt University of Oslo, Norway
REVIEW RETURNED	30-Jul-2014

GENERAL COMMENTS	<p>There are a few typing errors. The term univariable logistic regression is seldom used, I like univariate logistic regression, but this is not an important comment.</p> <p>All my comments are well answered, some of my comments I see is not justified. I think the paper should be published</p>
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