Reviewer's report

Title: Parent-Rated Behavior Problems Associated with Overweight After Controlling for Sleep Disordered Breathing: A Prospective Study

Version: 1 Date: 9 June 2006

Reviewer: Kylie Hesketh

Reviewer's report:

General

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. The inclusion of sleep disordered breathing (SDB) constitutes the novel aspect of this paper and is potentially of great interest. Yet the authors have not given sufficient weighting to this aspect in the paper. The review of SDB in the background section should be expanded, particularly research relating to the relationship between SDB and overweight, to provide a rational for looking at these conditions within the same study. A description of the polysomnography methodology and how SDB was defined should be included in the methods section. Further analyses should be conducted to allow the authors to report the relationship between overweight and SDB in this sample and whether SDB was related to each of the behavior problems, before they go on to report whether SDB influences the overweight-behavior problem relationship. It would also strengthen the paper to consider the possible mediating effect of SDB in the overweight-behavior problem relationships that are identified, rather than merely adjusting for SDB. In the conclusions section there should be some discussion of why SDB was important to consider and the implications of your findings showing certain overweight-behavior problem relationships diminished when SDB was accounted for.

2. The description of the analyses performed should be expanded. Include the analyses used to compare descriptives of normal vs overweight children. Clarify for which variables simple odds ratios and adjusted odds ratios were calculated.

3. Paragraph 2 of the conclusions section You need to be more explicit that you’re trying to explain why this scale may have been related to overweight before but not after accounting for SDB. You should also include an explanation of the similar finding for the general internalizing symptoms scale.

4. Paragraph 3 of the conclusions section Are you referring to the CBCL withdrawal scale in the first sentence? This should be more explicit. Table 4 indicates that the highest prevalence behavior problem in the sample was social problems, not withdrawal as you indicate here.

5. Paragraph 5 of the conclusions section The final sentence does not appear to be relevant and could be removed. It would be more valuable to comment on whether you’d expect to see differences in behavior problems between the Hispanic and Caucasian groups. If this could be the case, it would be necessary to stratify your analyses or adjust for race.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. The term a prospective study implies this was a longitudinal study and should be removed from the title.

Abstract:

2. Methods â€¢ â€œ402 normal childrenâ€ the word normal should be removed.

3. Methods â€¢ include description of the measure of SDB.

4. Results â€“ â€œORâ€ missing from 4th set of brackets.

Background:

5. 3rd para â€“ â€œbetween overweight and depression [15, 16] as well as between overweight and social problems and withdrawal [15] or bothâ€ could be reworded to â€œbetween overweight and depression [15, 16], social problems, withdrawal [15] and bothâ€

6. 4th para â€“ â€œWhile cognitive problemsâ€ should begin a new paragraph.

7. 4th para â€“ SDB should be spelt out in words prior to providing this abbreviation for the first time.
The sentence “Understanding what behaviors...” could be reworded to make it clearer.

Methods:

9. Include the number of schools from which the sample was drawn.
10. Provide a reference for the statement that the TUSD school population is representative of children in southern Arizona.
11. Move “within the Department of Pediatrics...” to the end of the sentence.
12. “$25 for completing the behavioral evaluation.”

Methods, measurement:

13. Introducing a second sentence along the lines “All children <95th percentile were classified as normal weight...” would clarify that all children not classified as overweight were classified as normal weight.
14. ADHD should be spelt out prior to providing this abbreviation for the first time.
15. Include total number of scales in CPRS-R.
16. “ADHD such as cognitive problems and hyperactivity or...”
17. Provide examples of behaviors comorbid with inattention and hyperactivity that the scale measures.
18. Move sentence “Behaviors are rated on a 4-point...” after “criteria for ADHD [29].”
20. “children aged 4-18.”

Results:

22. Explain the discrepancy between the 503 who agreed to participate and the 480 who completed a sleep study.
23. For consistency, 56% should be reported to 1 decimal place.
24. You state there are no significant differences between the groups on gender. While not quite reaching p<0.05, there is a notable tendency for overweight subjects to be male, which you mention and discuss in the conclusion section. This trend should be noted here.
25. It is unclear whether you’re assessing if the presence of behavior problems increases the odds of overweight or whether the presence of overweight increases the odds of behaviour problems “please clarify.”
26. “no longer significantly different across the groups.”
27. “(moderate to severe) by the Child Behavior Checklistâ€”
28. “the results reported in the final 2 sentence should be described more clearly and expanded.”

Conclusions:

29. Clarify whether by “Current findings...” you mean this study (be explicit) or previous studies (in which case you should provide references).
30. “Overweight children had increased parentâ€”
31. “You seem to jump between explaining the results observed for the withdrawal and social problems scales. This paragraph could be made clearer. In addition, references are required for a number of the statements made (sentences 3, 4 and last sentence).”
32. “the final sentence does not appear to be particularly relevant and could be deleted.”

Tables:

33. Indicate the unit of measurement for age and parent education in the variable column eg. Age (yrs)
34. Remove the % signs from the variable column
35. Table 1 â€“ variable should read “overweightâ€” not “obeseâ€”
36. Table 1 â€“ “(59/402)â€” should be removed.
37. “move the n for parent education to a footnote and also include an explanation of the discrepancy.”
38. Table 2 heading â€“ “between normal weight versusâ€”
39. Table 2 “itâ€™s common to round significance figures to 2 decimal places.”
40. Table 3 â€“ provide the full name of the measurement tool used.
41. Table 3 â€“ include “(95% CI)â€” in heading for last 2 columns.
42. Table 4 â€“ include “unadjustedâ€” to heading for second last column.

Discretionary Revisions (which the author can choose to ignore)

1. The first 3 paragraphs of the background section could be condensed.
2. Tables 3 and 4 could be combined.
What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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

Declaration of competing interests:
I declare that I have no competing interests