Reviewer's report

Title: Lowering of self-esteem mediates the association between social phobia and depression in middle adolescence. A two-year follow-up of a prospective population cohort study.

Version: 2
Date: 10 December 2013

Reviewer: Katharina Manassis

Reviewer's report:

This is an interesting report stemming from a large community-based sample of Finnish adolescents followed prospectively over two years. The authors find different longitudinal associations between depression and social phobia depending on gender, each mediated by low self-esteem (social phobia preceding depression in boys; depression preceding social phobia in girls). They conclude that self-esteem should be a focus of intervention for adolescents suffering from either disorder.

Overall, the authors review most relevant literature, describe their methods in sufficient detail, and undertake the analyses with care. The topic is an important one in adolescent mental health, in that both conditions (depression and social phobia) are prevalent and associated with high morbidity. The paper is clear and easy to follow, and the research questions are original.

I believe some revision is indicated, however, to ensure accurate interpretation of the findings.

Minor Essential Revisions:

1) The authors define depression and social phobia based on certain cut-points on self-report scales. There is no indication of their level of functional impairment and thus no way of ascertaining which teens actually met diagnostic criteria. Therefore, rather than referring to ‘depression’, ‘social phobia’, ‘adolescents with depression’, and ‘adolescents with social phobia’, the authors need to refer to ‘symptoms of depression’, ‘symptoms of social phobia’, ‘adolescents with symptoms of depression’, and ‘adolescents with symptoms of social phobia’ throughout the paper, as this would be more accurate.

2) In the abstract, the results should indicate that the first association was found among boys but not girls and the second association was found between girls but not boys. Otherwise, the reader cannot tell that both associations were examined for both genders.

3) In the conclusion of the abstract and also in the discussion, there should be a call for replication in other jurisdictions or in more ethnically diverse samples. It is possible, for example, that in jurisdictions where the baseline rates of depression or social phobia are different than in this area of Finland, the analyses might yield different findings.

4) In the conclusion of the abstract and also in the conclusion of the paper, one
should advocate not only interventions for self-esteem (and I’m not sure what the best evidence-based ones are—perhaps worth adding these to the discussion), but also aggressive treatment of the initially appearing disorder. For example, providing exposure and other cognitive-behavioral techniques to socially anxious boys might prevent the lowering of self-esteem that led to subsequent depression; similarly implementing behavioral activation to reduce depression-related social withdrawal might preserve self-esteem and prevent social phobia in girls.

5) On page 3, there is a reference (#25) to findings that are very similar to this study, and that were published in 2011 with the same lead author. Please clarify: is this paper from a different data set, or are these two different papers/analyses based on the same data set?

6) Looking at Table 1, it appears that some of the ‘clinical’ cells have a rather small number of subjects, as most of this community-based sample had neither depression symptoms nor social phobia symptoms. Given these small cell sizes and the fact that 4 or 5 variables are controlled for in each analysis, I wonder if some of the non-significant findings may relate to insufficient power. Please clarify or cite as a limitation.

7) Figure 2 seems to have disappeared…unless it was mis-labeled ‘Figure 3’?

Discretionary Revisions:

8) On page 3, the 4th hypothesis is not linked to any literature that has been reviewed up to that point, and I don’t think it is discussed extensively in the manuscript. I suggest either deleting this hypothesis, or linking it to literature & discussing it more.

9) On page 7, paragraph 3, it may be worth noting that acceptance and rejection by others as a source of self-esteem is particularly salient in the adolescent developmental stage (versus younger children or adults).

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

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I receive royalties from Barron’s Educational publishing for a parenting book I have published on childhood anxiety disorders, but not directly related to this paper.