Reviewer's report

Title: Type D personality is a risk factor for psychosomatic symptoms and musculoskeletal pain among adolescents. A cross-sectional study of a large population-based cohort of Swedish adolescents.

Version: 3 Date: 2 November 2012

Reviewer: Paula M.C. Mommersteeg

Reviewer's report:

The authors have adapted their tables in accordance to the reviewer's suggestions. However, it is unfortunate that changes in text are not clearly marked, e.g. by yellow, nor described in the answers to the reviewers comments. This makes a comparison between the previous and the present version less obvious.

Please clearly mark any changes in the document, or refer to the phrases, or paraphrase the adapted text in the rebuttal.

Major compulsory revisions.

1. In addition to the changes made in response to Point 4: the authors have now added a summed 'Type D' score, based on the sum of both NA and SI. This is an unusual, and incorrect way to describe Type D personality as a continuous construct. Eg. Smith (2011) made an editorial comment on Type D personality, suggesting "Hence, the model makes the specific prediction of a "synergistic" or "moderated" effect of NA and SI on clinical outcomes; only the combination of high NA and high SI confers increased risk. In the language of quantitative analysis, the model predicts an interaction rather than additive first-order (i.e., main) effects of NA and SI."

This suggestion has now been used in several papers, examining the interaction term of NA and SI in addition to both subscales.

The authors have adapted their Table 4 in accordance, but need to expand Table 2 and 3 in accordance. So remove the "Type D personality index' and replace with an interaction of NA and SI, in addition to both subscales.

Interpret the findings of this interaction in addition to the use of the dichotomized construct. Is there added value of the NA x SI subscale over the two subscales? What could be the implications of these findings?

[Smith TW Toward a more systematic, cumulative, and applicable science of personality and health: lessons from type D personality. Psychosom Med 2011;73:528-32]

Minor essential revisions

2. Please further adapt Table 3, by placing the findings for girls on one side of the
diagonal, and the findings for boys on the other side of the diagonal. This further reduces the length of the Table in half.

3. Please clearly mention in Table as well as tekst whether the interaction term was based on the Z-transformed NA x Z-transformed SI scores, or not. It now says (page 8 statistical analysis): "We moreover included Z-score transformations of the NA and SI scales and tested for interaction effects." which does not specify whether the interaction term was based on the z-transformed scores.

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

**Quality of written English:** Acceptable

**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