Reviewer’s report

Title: An accurate and efficient identification of children with problems by means of Computerized Adaptive Testing

Version: 1 Date: 10 February 2011

Reviewer: Luciana Anselmi

Reviewer’s report:

Title: An accurate and efficient identification of children with problems by means of Computerized Adaptive Testing

Date: February, 10th 2011

Reviewer: Luciana Anselmi

Reviewer’s report

The study is very interesting as it employs a statistical method (IRT), in an attempt to simplify and shorten the instruments used to identify psychosocial disorders in children without the common problems in screening tools. This is a relevant question for prevention policies. This kind of paper can stimulate and increase efficiency of primary-care evaluations.

A large and representative community sample of children was studied among preventive child healthcare users in the Netherlands. The response rate was high and the design was adequate. A careful statistical analysis was carried out and used (TRI) procedures commonly used in psychological tests, but rarely used in mental health evaluation instruments, showing the innovation of the study.

The discussion and conclusion are based on sound data.

The following are formatting and typing minor essential revisions:

Title
The authors should include in the title that the mentioned problems relate to children’s mental health.

Abstract
First sentence – write CAT after the first time Computerized Adaptive Testing is mentioned.
Second sentence: can can overcome

Methods
To include “Item Response Theory” after IRT

Discussion
Fourth paragraph – Would it be PSYBOBA instead SDQ? The SDQ was cited twice (The inclusion of items of the SDQ, PSC, SDQ.....)

References
The first five references do not relate to the manuscript. Actually, references should start by reference number 6.
Reference number 9 was not cited in the Background before reference 10.

Level of interest: An article of importance in its field

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'