Author’s response to reviews

Title: French validation of the Brace Questionnaire (BrQ)

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Author’s response to reviews:

Reviewer #1: TITLE

French validation of the Brace Questionnaire (BrQ)

Main idea is clear and concise

ABSTRACT

- Coherent and readable

- Structured format

INTRODUCTION

- Purpose/research clearly stated

Comments

Line 43: instated French questionnaires I suggest write: "There are various questionnaires in France used to evaluate…OK

Line 52-74: I suggest put to the Method section OK

METHOD
Study design appropriate to achieve study objective
Statistical analyses appropriate and used appropriately

Comments
Line 92: "Age 9 to 18" I suggest to add: years OK
Line 103: "curve style" I suggest write: curve pattern OK

RESULTS
Test statistics adequate

Comments
Line: 119: Did the sample include girls and boys? We add the data
Could you add information about an average duration of wearing brace (months) and an average time spent in brace per day (h)? We add the data
Could you present in percentage patients curve pattern (thoracic %, thoracolumbar %, double major curve%)? OK

DISCUSSION
Support of hypotheses noted
Similarities and differences to other studies noted

Comments
Line 164: I suggest to add some supporting references

CONCLUSIONS
Clearly stated

REFERENCES
Relevant and comprehensive
Reviewer #2: The paper is well written and the methods are developed properly.

The authors confirm the good reliable of BrQ also in French.

My only suggestion is to shorten the discussion.

Reviewer #3: It's my honour to be given an opportunity to review this article. Please see my comment for the author below:

The Brace Questionnaire:

Line 52-74: No reference seen for the description of BrQ. OK

Adaptation process:

Line 87: Why only 40 subjects were included in the study? Are these samples enough to address the representativeness of the study in terms of validity and reliability? In the recommendations 30 are enough

Line 87: How did the subjects fill out the F-BrQ in the first and second trial? It has only mentioned "Forty patients were included in the study……, then again one week later". More elaboration is required in this area.

Line 90: Some more explanation on "Carbon Brace" is required in order to understand its effect on the subjects.

Inclusion criteria:

Line 91: Why "gender" not be considered in the inclusion criteria? We add the data

Line 93: What are the recommended hours of wearing Carbon Brace for the subjects? It is not the purpose

Data gathered:

Line 96: How about the data of menarche, Risser Sign and bone maturity? They are the important data that may reflect the trend/prediction related to the eight domains of BrQ. It’s only the French validation, not the validation of Brace questionnaire

Line 99-100: Why the data on weight and height are gathered? Only for the description of the population
Results:

Line 120: What is the range of the demographic data as well as the parameters shown in Table 1?

Line 124: The sample size in the second trial is only 32. How would you address the reliability of F-BrQ?

Line 138: Table 4 showed 25% as ceiling effect against the domain of School Activity. How would you determine if there is any ceiling effect?

Discussion:

Line 158: More explanation is required for "The F-BrQ is therefore considered to be stable over time".

Line 163-171: Is the discussion related to this study? The deliberation should be on conservative treatment for scoliosis using Brace.

Lin 173: Data on average number of months and hours per day the subjects wore the brace was not shown. It can be important data to show its trend/prediction towards the eight domains. We add the data

Line 175: Further elaboration on the "protocol" is required in order to understand the support given to patients in terms of quality of life.

Line 180-185: As Carbon Brace is used for the subjects, to be specific, it is suggested to elaborate how this brace brings about the impact of "agonizing restriction".

Line 186: How to define "cured"? Is it equal to the halt of deterioration of Cobb's angle? The communication between physicians and patients must be concise.

Line 189-191: "Adolescent are usually preoccupied by the cosmetic aspect of scoliosis.....their future". What is the source of reference for this claim? In your present study, is there any trend/prediction shown to support your claim in the related domains?

Line 191-192: What is the risk (%) of relapse in adulthood for AIS patients?

Line 193: Is the discussion relevant to the study? It’s difficult to modified the organisation of the discussion

Line 199: What may be the specific problems related to scoliosis using SRS for ev