

PEER REVIEW HISTORY

BMJ Paediatrics Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Reactions of non-abused children aged 3 to 9 years to the Sexual Knowledge Picture Instrument, an interview based study
AUTHORS	van Ham, Kirsten van Delft, Sanne Brilleslijper-Kater, Sonja van Rijn, Rick van Goudoever, Hans van der Lee, Hanneke Teeuw, Rian

VERSION 1 – REVIEW

REVIEWER	Reviewer name: Dr. Rachel Mary Hilliam Institution and Country: The Open University, Mathematics and Statistics Competing interests: None
REVIEW RETURNED	24-Apr-2021

GENERAL COMMENTS	<p>This is an interesting paper and a topic that will be of interest to the readers of the journal.</p> <p>There are two main points that need to be addressed in a revision of the paper.</p> <p>Firstly a point of readership. Currently the paper is too long due to the way that the tables are presented. Much of this information can be compressed into tables that categorise the results which would also help the reader in identifying the main points of the paper. It would also help the reader to spot patterns in the data if the tables were presented in a better way. Currently there are far too many individual tables to scan through to make sense of the study.</p> <p>The second point is about how the study fits into the overall validation of the instrument. Normally to validate any sort of tool one should make sure that the tool measures the constructs of:</p> <ul style="list-style-type: none">- Face validity- Content validity- Criterion validity <p>and also that inter and intra rater reliability are checked.</p> <p>If it not enough to use the tool on one set of children who you believe to not be abused, more thought needs to be given as to exactly how each of these constructs are going to be measured and how this particular study fits into the overall validation. This needs setting out at the start of the article. It would be useful to get a statistician to help with this work.</p> <p>The content of the study is interesting and has some useful findings, but you need to set out how this fits into the overall validation of the tool and exactly what this study is testing.</p>
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REVIEWER	Reviewer name: Dr. Tania May Institution and Country: South Western Sydney Local Health District, Sexual Assault Service Competing interests: None
REVIEW RETURNED	08-Jun-2021

GENERAL COMMENTS	I thought the limitations of the study were acknowledged well. I thought an additional response to "what is already known" should relate more directly to the study question. That is, what is already known in relation to the sexual knowledge of non-abused children?
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VERSION 1 – AUTHOR RESPONSE

Dr. Guddi Singh
Associate Editor, BMJ Paediatrics Open

Prof. Imti Choonara
Editor in Chief, BMJ Paediatrics Open

Amsterdam, June 25, 2021

Subject: Submission revisions manuscript: "Reactions of non-abused children aged 3 to 9 years to the Sexual Knowledge Picture Instrument, an interview based study" - bmjpo-2021-001128 -

Dear Dr. Singh and Prof. Choonara,

Thank you for reviewing our paper, and considering it for publication. The points and suggestions of you and the reviewers are very valuable. We hope that the changes we made in response to your comments lead to substantial improvements in the manuscript, which is attached to this letter. Below we respond to your and the reviewers' comments on a point-by-point basis:

Responses to the editor-in-chief:

Upon your request the required amendments were made to the "What this study adds" section of the summary box. The former points were deleted, and replaced by the following items:

- Non-abused children up to nine years of age showed only limited knowledge of the sexual function of the genitals.
- Non-abused children up to nine years of age showed hardly any insight into adult sexuality.

Table 1 was removed, and the patient demographics were described in the text. Table 4 was indeed missing; this was an omission on our side. We renumbered the tables. The information in Table 3 (formerly Table 5) was condensed, and now it only reports the most scored non-verbal reactions. An additional supplemental e-only table was added containing the complete data of all 24 non-verbal reactions that could be scored.

Responses to reviewer 1.

Dear Dr. Hilliam,

We first want to thank you for reviewing our manuscript. We were very pleased to read the general comment that you consider it an interesting paper and a topic that will be of interest to the readers of the journal.

Point 1. Firstly a point of readership. Currently the paper is too long due to the way that the tables are presented. Much of this information can be compressed into tables that categorise the results which would also help the reader in identifying the main points of the paper. It would also help the reader to spot patterns in the data if the tables were presented in a better way. Currently there are far too many individual tables to scan through to make sense of the study.

We agree that this is a point for improvement of the manuscript. Also upon request by the editor-in-chief, the first table on the demographics was replaced with text, and the table on the non-verbal signs was condensed, now only highlighting the main points of attention to the readership. An additional supplement with the full, extended table was added. Hopefully this will lead to a more organized and compact representation of the results for the readers.

Point 2. The second point is about how the study fits into the overall validation of the instrument. Normally to validate any sort of tool one should make sure that the tool measures the constructs of: Face validity, content validity, criterion validity, and also that inter and intra rater reliability are checked. If it not enough to use the tool on one set of children who you believe to not be abused, more thought needs to be given as to exactly how each of these constructs are going to be measured and how this particular study fits into the overall validation. This needs setting out at the start of the article. It would be useful to get a statistician to help with this work. Establishing the validity and reliability of the instrument is of great importance before recommending the use of the SKPI as a diagnostic tool.

The complete validation study, named PICAS study, was initiated in 2015 by our research team (which includes an epidemiologist who has published several clinimetric studies). We intend to publish a paper on the intra- and inter-rater reliability, and one on the diagnostic accuracy, comparable to criterion validity, of the instrument. In parallel to, and after the PICAS study the face and content validity of the SKPI is evaluated using a modified Delphi procedure in a panel of CSA experts from different professional backgrounds. In the current manuscript we refer to the PICAS study protocol article, previously published in BMJPO. (van Ham K, Brilleslijper-Kater S, van der Lee H, et al. Validation of the Sexual Knowledge Picture Instrument as a diagnostic instrument for child sexual abuse: study protocol. *BMJ Paediatrics Open*. 2020;4(1):e000799).

Two sentences were added to the introduction section in the revised version of the manuscript: (page 5, lines 11-14) "The main hypothesis in this study is that abused children can be distinguished from non-abused children by their verbal and non-verbal reactions to the instrument, and that looking at the pictures may lower the burden for abused children to disclose."

(Page 6, lines 1-4) "In the validation study, the reactions of the non-abused children will be compared with the verbal and non-verbal reactions of a group of (alleged) victims of CSA and the and inter- and intra-rater reliability of the SKPI are investigated."

Point 3. The content of the study is interesting and has some useful findings, but you need to set out how this fits into the overall validation of the tool and exactly what this study is testing.

We agree that this is a valid point. As described above, more information on the content of the future studies and expected publications on the diagnostic accuracy and reliability was added to the introduction section of the manuscript. We hope that this is sufficient to set out how the current study fits into the overall validation of the instrument.

Responses to Reviewer 2.

Dear Dr. May,

Thank you for reviewing our manuscript, and for sharing your valuable comments.

Point 1. I thought the limitations of the study were acknowledged well.

We were very pleased to read this. Thank you.

Point 2. I thought an additional response to "what is already known" should relate more directly to the study question. That is, what is already known in relation to the sexual knowledge of non-abused children?

We agree that it would be appropriate to add a bullet point here on the sexual knowledge in young non-abused children. However, an extensive search in medical and psychological yielded us no relevant information. Besides the study that we referred to in the discussion of the manuscript, and that was performed 20 years ago in 2 to 6 year old children by a member of our own team (Brilleslijper-Kater SN, Baartman HEM. What do young children know about sex? Research on the sexual knowledge of children between the ages of 2 and 6 years. Child Abuse Rev. 2000;9(3):166-82), we found no other research on the topic of sexual knowledge in young (non-abused) children. Because of this, we added the following sentence:

- "Hardly any information is available on the sexual knowledge of non-abused children up to 9 years old."

Since this was another limitation in the study, that was not yet well explained in the manuscript, we added another line to the limitations section to substantiate this:

(Page 19, line 7) "Except for the previous study by Brilleslijper-Kater et al. using a similar instrument, we have not been able to find any information in the literature regarding other research, or other methods to explore sexual knowledge in young, non-abused children."

We once more wish to express our appreciation for all the efforts made by you and by the reviewers. We hope that the manuscript in its current form is acceptable for publication. If any new questions arise, or if there are other points that need to be addressed, please let us know. We look forward to hearing from you.

Yours Sincerely, on behalf of all co-authors,

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