Reviewer’s report

**Title:** The Chinese version of Attitudes towards guidelines scale: Validity and reliability assessment

**Version:** 0 **Date:** 12 Aug 2018

**Reviewer:** Jeroen Dikken

**Reviewer’s report:**

Dear authors,

I was privileged to review your paper, which I appreciated. There are however some aspects/thoughts regarding your study I wanted to share. Some of them, I believe you should address.

Overall, a nice study with appropriate statistical procedures and number of respondents. Most parts are clearly described. However, I missed the step of content validity which raises some questions regarding the construct being measured. Furthermore, in the discussion I miss a reflection on the results for clinical practice and I have some methodological questions that can be addressed in the discussion.

Abstract:

L15: "tested" → "used/validated"

L19: "in nurses" → "in nursing/for nurses"

L23: "standard procedure"? looking at your reference probably better to use "forward-backward translation method".

L44: indeed acceptable levels, and it can be used, however I mis one sentence how to proceed with this instrument in China.

Background:

L49: "similar psychometric properties"... however you have not described the previous demonstrated psychometric properties from the AGS therefore this does not say anything for me as a reader. Perhaps you can mention these previous results in the method section where you describe the instrument. Furthermore, do you want the same results as western society or you want to see whether the instrument can be used in China regardless the western psychometric scores → "the purpose was to test whether the AGS can be used in China by looking at the psychometric properties."
L51: "the practical implication would be large"? Simply the reason that in China are a lot of nurses is not very convincing nor an argument for validating an instrument. Can you address in the background why this instrument can be so important for Chinese health (nursing) care at this moment? Will it affect the quality of nursing care for example?

Method:

L49: You used indeed a standard procedure for translating the instrument, however the word 'standard' does not say how you did it. I believe you should mention 'forward-backward translation method as described by ..... '

L14: You did a pilot study with 35 nurses, was this proper face-validity? Why not mentioning this? What were the results? Did you have to make major revisions after the results came in? and if yes: what were these major revisions in the AGS?

Major: I miss the content validity phase (logical validity) where experts access whether the instrument represent the whole construct. And if items are relevant for measuring the construct. This would be nice for the discussion as the psychometric scores are acceptable but not excellent...


L55: 32 nurses did the AGS 14 days later, were these at random or selected? How? How did you calculate the sample size (reference?)

Results

L31: Cross-validation purpose: you should mention this in the method section as well and the "why" you choose to do this (sample size is half now although still sufficient for 14 items). And why when you figured out that group A did not work but B did, you continued only with group B.

L39: You dismiss group A here because you cannot figure out the 3 factors, but I miss a reflection on this result and the choice you made in the discussion, what can it mean? What do you believe is the reason?

Major: Table 1: It looks like the two factors are based on formulation of question (reverse coding), you did not reverse the coding a priori the analysis? Is this why it is a 2 factor structure and not a unidimensional scale? Could you say something about this?

L53: I get model 1, now you choose to use the whole data set (n= 768), why? Can you repeat here that the conceptual structure of the original version has 7 factors). It make sense that this model does not fit you data looking at the EFA.
L55: Why did you use data from group A for the CFA and not group B if you test a two factor solution? And why not the whole data n=768? If EFA shows three factors for group A, than the result that model two shows mixed results is not weird if you test two factors CFA? Could you elaborate on this?

The numbers (groups) are a bit confusing to me in this part of the result section, maybe it is just a matter of structure in the text….

L17: now you reverse the score to perform a Cronbach's alpha on the total score, why not doing this before doing the factor analysis? See comment table 1.

Discussion:

L22: The psychometrics are acceptable, but whether it works well in a Chinese context is a bit difficult to say without a content validity study regarding the construct being measured…

L25: could you elaborate a bit more on the context (history and the process nursing care is going through in China) and what this instrument can do for China healthcare. See Background comment.

L29: Maybe mentioning this in the background/introduction that there are other instruments but the AGS is the most promising to continue and validate for China looking at the research goal. Here this part of the discussion is a bit 'lost/ without context'.

L39: I like that you had extensive contact with the original authors. Was there a chance of looking at measurement invariance between the original data (from USA) and the Chinese data? That would make your validation study methodological stronger and cross-cultural comparisons could have been made if proven valid. (you don't have to address this, I'm just curious).

General: I think some of my thoughts earlier mentioned can be addressed in the discussion.

General: looking at the items, I can imagen some bias in measuring the construct due to socially desirable answers. For example, which nurse would give a score 1 at the question whether guidelines are useful as educational tools? Looking at the means of the questions of the PAG factor support my thought and this is a concern for the construct being measured. For example: it makes it difficult to distinguish between nurses (at least using the PAG). So what is the use for the PAG in clinical practice? Maybe this is already addressed in the original study, however how is this in the Chinese culture? I believe a content validity study could have addressed this concern. Can you elaborate on this concern in the discussion?

Hope this review is of help to you and your colleagues, good luck.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

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