

Review of: "American Institutional Stereotypes: A Pilot Investigation of Factor Structure"

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Potential competing interests: No potential competing interests to declare.

Thank you very much for inviting me to comment on this preprint. I enjoyed reading it and believe the research goal is quite relevant and would contribute meaningfully to the field of research. Nonetheless, I have some major and minor comments that might help you improve the manuscript (see below). Enjoy your further work on the text and I am looking forward to seeing this manuscript published soon.

Kind regards

Maria-Therese Friehs

- Theory:
 - There is a lack of relevant literature in the theory part:
 - Regarding the SCM/social perception in general (especially <https://doi.org/10.1037/rev0000262>) and the relevance of the warmth dimension (<https://doi.org/10.1016/j.jesp.2020.103995>) in particular
 - Regarding the stereotype content of businesses in the US, e.g., <https://doi.org/10.1521/soco.2014.32.3.256>
 - Regarding the previous assessment the measurement structure of stereotype content, see <http://doi.org/10.5334/irsp.613> (excuse me for citing my own research here, I am not fishing for citations, but feel this literature is very relevant to contextualise your research goals and findings)
 - Were the common stereotypes measures self-constructed? There is no reference for that in the theory.
 - If I understood your goals correctly, you actually search for sub-factors of the stereotyping of institutions within the global domains of intentions and abilities, which you equate to warmth and competence. This procedure is somewhat different from the previous stereotype research in the SCM and familiar models, which assume warmth and competence to actually be the evaluative dimensions rather than the domains. I think it would make sense to emphasize this difference in your theory part.
- Methods:
 - Generally:
 - I recommend using robust FIML-estimation (MLR) in Mplus as this estimator yields more trustworthy results because it considers potential non-normality of the data
 - Please consider that there is a difference between configural (i.e., equal form – the relations between the indicators and factors is equivalent across groups without having the restriction of equal factor loadings) and

metric (i.e., restrictions of equal factor loadings) measurement invariance in the data. Please state it more clearly which type of invariance you find.

- Whenever you wish to compare the stereotypes of different targets (e.g., government versus business) on warmth and competence dimensions, you would need scalar/strong measurement invariance (i.e., equal factor loadings and indicator intercepts, but freely estimated error variances) (for the line of argument, see Friebs et al., 2022, above). In my opinion it would make sense to test it (see also [10.31234/osf.io/n3f5u](https://doi.org/10.31234/osf.io/n3f5u) for a description of the general problem in psychology)
- For your modelling approach, I recommend the term “Multiple-group confirmatory factor analysis (MGCFA)”, I find this term very often in the literature
- Study 1:
 - I have a hard time following how you generated the measurement model for which you wish to assess measurement invariance. Am I right in understanding that you conducted EFA for the government indicators in the general condition and applied the resulting measurement model to the other stimuli and group? What was the reason for limiting the EFA to max. 6 factors? Why use an oblique rotation if warmth and competence are supposed to be independent from one another (Fiske et al., 2002)? I think it would make sense for you to add more details to your procedure and give a reasoning why you chose this approach and the stimulus “government”.
 - What are the sample sizes for the different conditions in study 1? I fear roughly 100 participants is a very small sample size for an EFA or CFA with up to 65 items. It would be helpful to provide some reasoning for your sample size.
- Study 2:
 - What was your reasoning for shortening the scales? How did you decide which items to keep and to remove? I believe it would make sense to elaborate more on this to increase transparency.
- Results:
 - Generally:
 - For the sake of transparency and completeness, I recommend you report general model fit (RMSEA, CFI, SRMR, Chi2-value, df, p) for all EFA and CFA models as well as the chi2-difference test results between the different models of the EFA (1-factor vs. 2-factor, 2-factor vs. 3-factor etc.) and between the configural and metric measurement invariance.
 - Study 1:
 - I have a hard time interpreting Table 3 – is this the content of the “government” stimulus or is this something else? Why report 3 factors if you decide for a two-factor model. How would you define the two factors content-wise and how would you name them?
 - Table 4: The CFI is below conventional cut-off criteria, which range between .909-.95 depending on the literature. How do you interpret this?
 - Study 2:
 - Table 6: I cannot see the difference between shaded and unshaded items.

- Discussion:
 - You identify the two factors as benevolent versus harmful intentions and discuss the possibility that these are one factor with positive and negative factor loadings. If you were to examine this, I recommend adding a so-called methods factor (see e.g. Brown, 2015, ISBN 146251779X, 9781462517794) to control for the methodological variance introduced by the negatively formulated items.
- General comments:
 - I find it irritating that the text varies in the description of its key constructs between warmth and competence/motives and abilities as well as the names of the measures used in study 1 and 2 between the theory and the methods part (Table 1), streamlining the terms or explaining the precise differences in the context of your study might be helpful to increase readers' understanding
 - Figure 1: I would use the specific labels "governmental agencies", "large corporations" and "advocacy groups" to clarify your research design