

# Examining the Structural Validity of Stereotype Content Scales – A Preregistered Re-Analysis of Published Data and Discussion of Possible Future Directions



MARIA-THERESE FRIEHS 

PATRICK F. KOTZUR 

JOHANNA BÖTTCHER 

ANN-KRISTIN C. ZÖLLER

TABEA LÜTTMER

ULRICH WAGNER 

FRANK ASBROCK 

MAARTEN H. W. VAN ZALK 

*\*Author affiliations can be found in the back matter of this article*



## ABSTRACT

The Stereotype Content Model (SCM) plays a prominent role in social perception research when comparing the evaluation of different targets on warmth and competence dimensions. However, there is scarce information on the SCM's measurement properties. Thus, in this article, we provide a comprehensive test of the SCM's structural validity (i.e., reliability, dimensionality, cross-group comparability of measurement properties). We re-analysed published SCM data from English speaking participants (study 1: 78 datasets from 43 original publications,  $N = 20,819$ ) and German participants (study 2: 29 datasets from 23 original publications,  $N = 10,854$ ). We used confirmatory factor analyses to assess the scales' reliability and dimensionality as well as measurement invariance assessment to examine cross-group comparability as a precondition for meaningful and valid mean-value comparison. We found on average good reliabilities of the SCM scales. In contrast, about 35% of all 1093 examined SCM measurement models presented adequate scale dimensionality, and regarding the scales' cross-group comparability, we found (partial) scalar measurement invariance in about 11% of all cases. These findings indicate considerable validity concerns in published SCM research, as a meaningful and valid measurement of warmth and competence was not given in approximately two thirds of all cases, and mean-value comparisons were potentially biased due to lacking cross-group comparability for about eight out of nine cases. We propose future directions to improve the measurement quality and validity in SCM research and invite fellow researchers to constructively discuss these ideas.

CORRESPONDING AUTHOR:

**Maria-Therese Friehs**

Faculty of Psychology,  
FernUniversität in Hagen,  
Germany

[maria-therese.friehs@fernuni-hagen.de](mailto:maria-therese.friehs@fernuni-hagen.de)

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