

# Validation of the Spanish Nijmegen Gender Awareness in Medicine Scale (SN-GAMS) in Clinical Psychology Students

Thursday 24 July 2025 17:10 (20 minutes)

## Poster

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## Abstract

Background: Gender awareness in healthcare is essential for ethical and effective professional training. The Spanish Nijmegen Gender Awareness in Medicine Scale (SN-GAMS), previously validated in nursing, assesses gender sensitivity and gender role ideology. This study examines its psychometric properties in a sample of Spanish clinical psychology students. Method: The SN-GAMS was administered to 333 psychology students (80% women;  $M = 27.52$ ;  $DT = 7.470$ ) in Spain using a 5-point Likert scale. It comprises three factors: Gender Sensitivity (GS; 12 items), Gender Role Ideology towards Patients (GRI-P; 11 items), and Gender Role Ideology towards Professionals (GRI-Pro; 6 items). Three items were removed following expert focus group evaluations. Due to non-normality, polychoric correlations were used. Dimensionality was assessed using parallel analysis with resampling, principal component extraction, the mean eigenvalue criterion, and the minimum average partial (MAP) index. Additionally, parametric bootstrap exploratory graph analysis (EGA) with 500 replications, graphical LASSO regularization, and the Louvain algorithm were applied. Confirmatory factor analysis (CFA) was conducted using robust weighted least squares estimation (WLSMV) following the original structure. Compared to previous studies, the statistical techniques applied in this research not only provide a more comprehensive analysis but are also better suited to the characteristics of the data. Results: The Kaiser-Meyer-Olkin index ( $KMO = 0.84$ ) confirmed the suitability of the correlation matrix. Parallel analysis with polychoric correlations, more appropriate for asymmetric data, and EGA, suitable for moderately correlated factors, supported the three-factor structure. CFA showed good fit indices ( $RMSEA = 0.060$ ;  $CFI = 0.981$ ;  $TLI = 0.979$ ), improving on previous validations. All items loaded above 0.40, explaining 47.3% of variance. Measurement invariance across gender was demonstrated at configural, metric, and scalar levels. Convergent validity was supported by significant correlations with the Ambivalent Sexism Inventory (ASI), where GS correlated negatively and GRI factors positively. Criterion validity analysis showed that students reporting gender-related training exhibited higher GS and lower GRI scores, aligning with theoretical expectations. Conclusion: This validation confirms the SN-GAMS as a reliable instrument for assessing gender awareness in psychology students. Findings highlight its relevance for ethical and inclusive training, particularly in clinical settings.

## Keywords

Validation, Gender Awareness, Measurement, CFA

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**Session Classification:** Poster Session 4

**Track Classification:** Measurement: Measurement