

PSYCHOMETRIC ANALYSIS OF THE ROSENBERG SELF-ESTEEM SCALE IN PATIENTS DIAGNOSED WITH BREAST CANCER

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BACKGROUND

- The changes associated with breast cancer can affect patients' self-esteem, altering their psychological adjustment. Understanding and evaluating their self-esteem, defined as the attitude towards oneself and the subjective judgments of personal value and self-acceptance, can be key for these patients.
- *Rosenberg Self-Esteem Scale* (SES; Rosenberg, 1965) is a widely used tool to assess self-esteem in the general population; it consists of 10 items (five of which are reverse-coded). Higher scores indicate higher levels of self-esteem.
- **Aims:** To validate the scale with women diagnosed with breast cancer, in order to be able to use it and help guide psychological intervention on this aspect during the disease process.

METHOD

- **Participants:** 170 breast cancer patients, residing in Spain.
- **Procedure:** Participants were recruited following a convenience sampling strategy. They were all volunteers and did not receive any incentives.
- **Data analysis:** Validity evidence based on **internal structure** was analyzed through CFA (ULS estimation method), testing the single-factor structure found in previous studies. The **reliability** of the scores was assessed using Cronbach's alpha and McDonald's omega coefficients. Validity evidence based on **the relationship with other variables** was examined through associations with emotional distress, well-being, and optimism variables.
- **Instruments:** Spanish version of:
 - *Self-Esteem Scale* (Rosenberg, 1965).
 - *21-item version of the Depression, Anxiety, and Stress Scales* (DASS-21; Lovibond & Lovibond (1995)
 - *Satisfaction with Life Scale* (SWLS; Diener et al., 1985)
 - *Flourishing Scale* (FS; Diener et al., 2010)
 - *Positive and Negative Affect Schedule* (PANAS; Watson et al., 1994)
 - *Life Orientation Test-Revised* (LOT-R; Scheier et al., 1994)

RESULTS

- The CFA results showed that the internal structure of the scale is unidimensional, $\chi^2 (35) = 71.98$, $p < .001$, with acceptable fit indices, such as: CFI = .95; NNFI = .94; RMSEA = 0.079 [0.053, 0.105]. All factor loadings were statistically significant.
- The reliability coefficients of the SES scores were satisfactory: Cronbach's $\alpha = .81$; McDonald's $\omega = .83$.
- Figure 1 shows the standardized factor loading of the tested model.
- Correlations between all variables show in Table 1.

Figure 1. Standardized factor loading of the unidimensional model of SES.

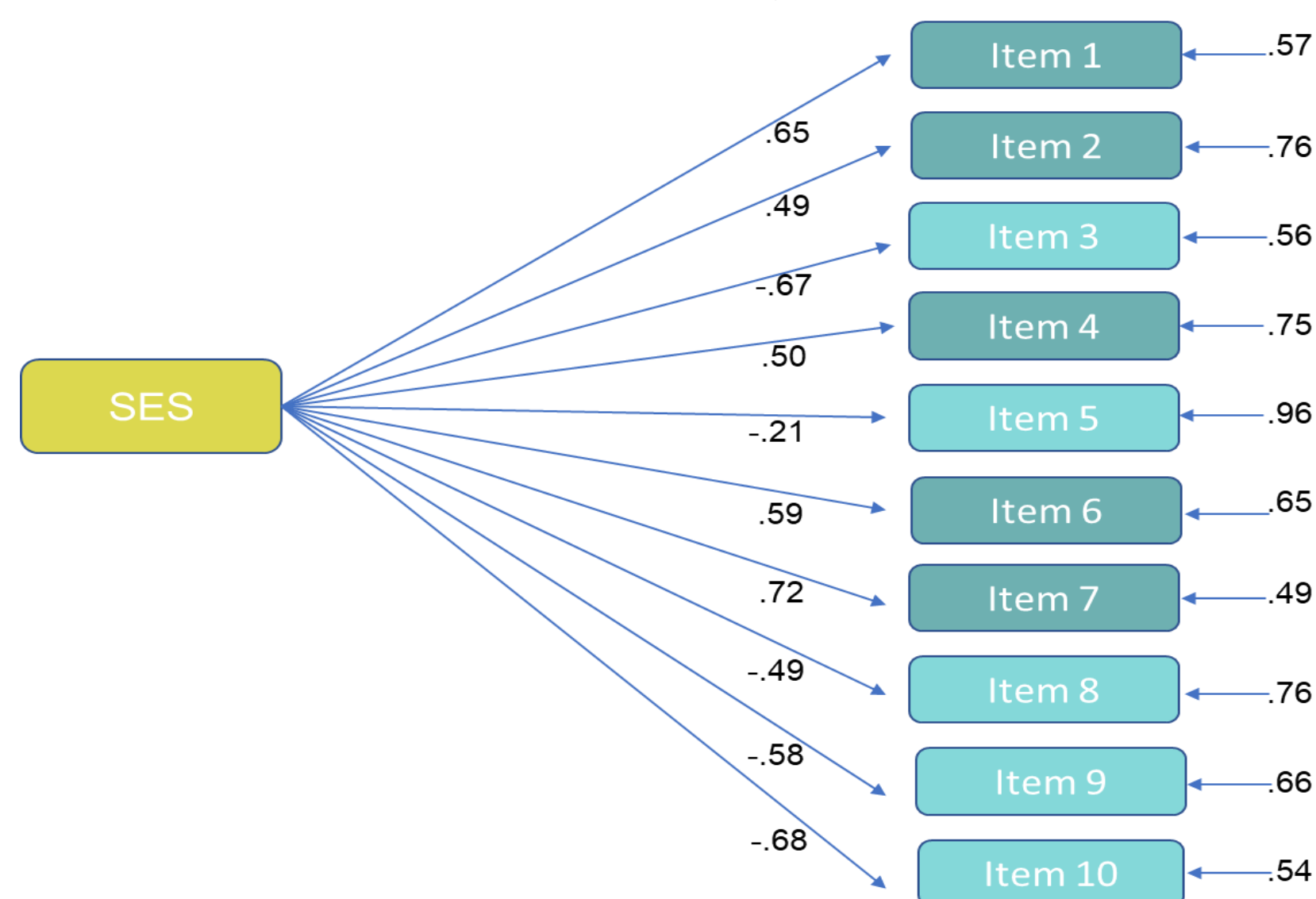


Table 1. Pearson correlations (r_{xy}) between all variables ($N = 170$)

Instruments	r_{xy}
Depression DASS-21	-.50**
Anxiety DASS-21	-.39**
Stress DASS-21	-.35**
Distress DASS-21 Total	-.45**
Life satisfaction SWLS	.50**
Flourishing FS	.65**
Positive affect PANAS	.44**
Negative affect PANAS	-.34**
Optimism LOT-R	.46**
Pessimism LOT-R	-.37**

CONCLUSIONS

- The CFA yielded acceptable fit indices for the unidimensional factorial model, however, model fit could potentially improve with a larger sample size.
- The score on the SES could be a useful measure of the impact on self-esteem in breast cancer patients, allowing for decisions regarding specific interventions in this psychological area.

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