BREAST CANCER SURVIVOR SELF-EFFICACY SCALE

POLISH ADAPTATION AND PRELIMINARY VALIDATION

Nadia Majewicz, Institute of Psychology, SWPS University, Warsaw, Poland

Aleksandra Kroemeke, Institute of Psychology, SWPS University, Warsaw, Poland

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INTRODUCTION

- ➔ Breast cancer (BC) is a most common cancer among women worldwide (2.3M new cases annually)
- ➔ Self-efficacy (SE) is a proven resource that supports coping with BC
- ➔ There is no BC-specific SE tool avaialble in Poland
- ➔ **The Breast Cancer Survivor Self-Efficacy Scale** (BCSES) (Champion et al., 2013) is an 11-item questionnaire with a 5-point Likert response scale, presenting very good psychometric properties
- ➔ Aim: adapt and preliminary validate the BCSES into Polish context

METHODS

STUDY DESIGN

Forward & backward translation → Expert panel review → Cognitive interviews → Final Polish version

Maria Sklodowska-Curie National Institute of Oncology

N = 101

- **BCSES (specific SE)**
- **GAD-7 (generalized anxiety symptoms)**
- **CES-D (depressive symptoms)**
- **MHC-SF (emotional, psychological, and social well-being)**
- **EORTC QLQ C30 and BR23 (health-related quality of life)**

- ➔ **Sample**: women after BC surgical treatment
- ➔ **Age**: 27–77 (M = 51.5, SD = 12.3)
- ➔ **Analysis**: exploratory factor analysis (EFA), confirmatory factor analysis (CFA), reliability (Cronbach α), criterion validity (Pearson correlations)

RESULTS

Table 1. Psychometric Properties of the Polish BCSES. Comparison of 11-item vs 4-item version.

	Factor strutcure	Model fit	Factor loadings	Reliability
11-item BCSES	**5 factors**	**CFI = .87, RMSEA = .073**	**Several low (< .40)**	**α = .74**
4-item Short-BCSES	**1 factor**	**CFI = 1.00, RMSEA = 0.00**	**Strong (.64 - .81)**	**α = .79**

Table 2. 4-item Short-BCSES.

English version	Polish version
1. I am able to deal with the fact that I had breast cancer.	**1. Radzę sobie z faktem zachorowania na raka piersi.**
2. I am able to deal with physical symtpoms from having breast cancer.	**2. Radzę sobie z fizycznymi objawami raka piersi (jeśli ich doświadczam).**
3. I am able to handle any fears I have about breast cancer returning.	**3. Radzę sobie z lękiem dotyczącym nawrotu raka piersi.**
4. I am able to successfully deal with emotions since I have breast cancer.	**4. Radzę sobie z emocjami od momentu rozpoznania choroby.**

Table 3. Correlations of the Polish Short-BCSES with Psychological and QoL Measures.

Variable		r	p
Anxiety symptoms		**-.47**	**< .001**
Depression symptoms		**-.27**	**.007**
Well-being		**.50**	**< .001**
Global health	**EORTC QLQ C30 - Global scale**	**-.34**	**< .001**
Emotional functioning	**EORTC QLQ C30 – Functional scales**	**.48**	**< .001**
Cognitive functioning		**.40**	**< .001**
Social functioning		**.30**	**.002**
Physical functioning		**.21**	**.041**
Pain	**EORTC QLQ C30 – Symptom scale**	**-.27**	**.006**
Body image	**EORTC QLQ BR23 – Functional scales**	**.34**	**< .001**
Future perspective		**.41**	**< .001**
Systemic therapy side effects	**EORTC QLQ BR23 – Symptom scales**	**-.27**	**.007**
Arm symptoms		**-.24**	**.019**
Breast symptoms		**-.30**	**.003**

DISCUSSION

- ➔ **The 11-item BCSES** did not replicate the original one-factor structure, CFA fit was poor (CFI = .87, RMSEA = .073) and reliability was modest (α = .74)
- ➔ **The 4-item Short-BCSES** showed clear one-factor structure, strong loadings (.64–.81) and **good reliability** (α = .79)
- ➔ Excluded items reflect specific clinical and cultural context (country-specific healthcare system, perioperative context, retierement vs active career)
- ➔ **Criterion validity** was supported by meaningful associations: higher specific SE was related to better well-being (r = .50) and higher quality of life, as well as lower levels of distress (anxiety r = –.47, depressive r = –.27) and symptoms

LIMITATIONS:	CONSLUSIONS:
✓ Lack of test-retest procedure, which prevents conclusions about scale's temporal stability	✓ The Polish Short version of BCSES is a **reliable and valid tool**
✓ Modest sample (N = 101) reduced to perioperative patients	✓ Further validation is required, ideally in larger and more diverse samples

Contact: nmajewicz@st.swps.edu.pl