

# KNOWLEDGE AND SELF-EFFICACY LEVELS AMONG EARLY AND LONG-TERM BREAST CANCER SURVIVORS: A CROSS-SECTIONAL ANALYSIS

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## BACKGROUND

- Knowledge and self-efficacy are key survivorship concepts reflecting what cancer survivors know and how confident they feel in navigating post-treatment care
- **Knowledge gap:** unclear how these constructs differ across survivorship phases
- Understanding differences can guide tailored support and empower survivors to participate actively in choosing appropriate follow-up care

## OBJECTIVE

Examine knowledge and self-efficacy levels among breast cancer survivors at different survivorship phases to identify differences and care gaps

## METHODS

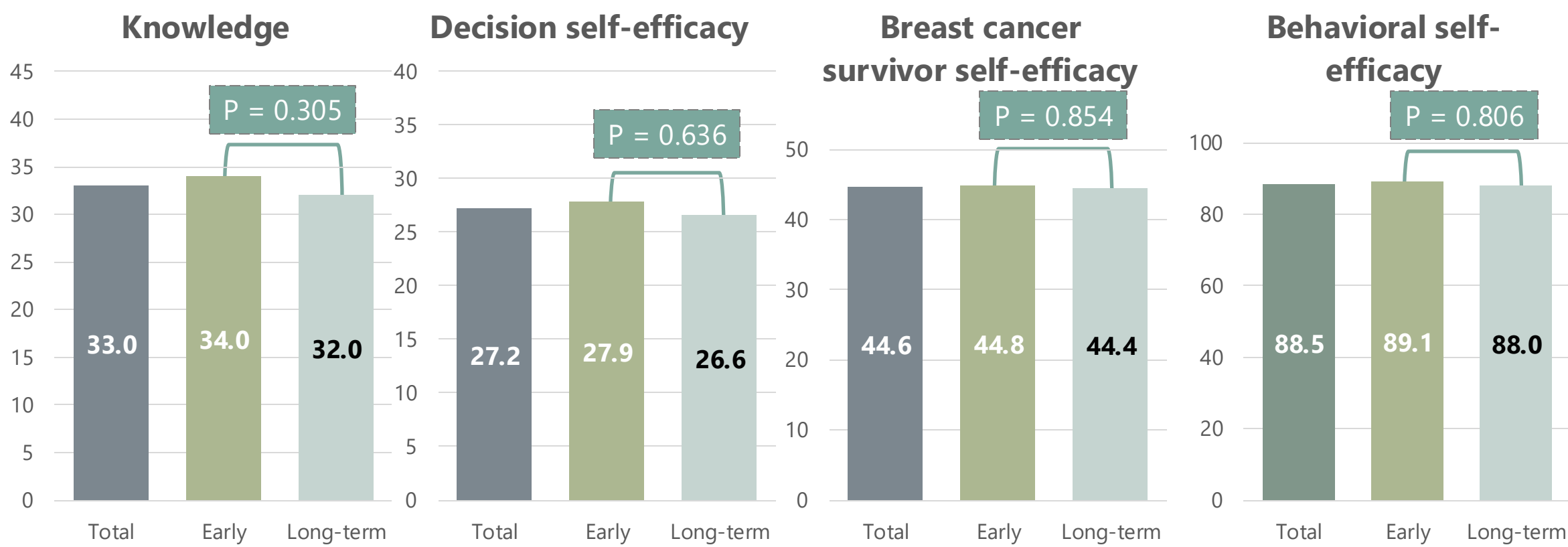
- Study design:** cross-sectional study
- Population:** breast cancer survivors from National Cancer Centre Singapore between 2023-2024
- Groups:** early (1–5 years post-diagnosis) and long-term (>5 years) survivors
- **Outcome measures:** survivorship knowledge questionnaire, Decision Self-Efficacy Scale, Breast Cancer Survivor Self-Efficacy Scale (BCSES), and Cancer Behavior Inventory (CBI-B)

## KEY FINDINGS

Table 1. Participant characteristics

Characteristic	Total (N = 57)	Early (n = 27)	Long-term (n = 30)	P
Age, years, mean (SD)	61.2 (10.0)	57.0 (10.5)	65.0 (8.0)	0.002
Race, n (%)				0.947
Chinese	45 (79.0%)	21 (77.8%)	24 (80.0%)	
Malay	4 (7.0%)	2 (7.4%)	2 (6.7%)	
Indian	3 (5.3%)	2 (7.4%)	1 (3.3%)	
Others	5 (8.8%)	2 (7.4%)	3 (10.0%)	
Education level, n (%)				0.141
Primary	2 (3.5%)	2 (7.4%)	0 (0%)	
Secondary	21 (36.8%)	9 (33.3%)	12 (40.0%)	
Post-secondary	10 (17.5%)	2 (7.4%)	8 (26.7%)	
Polytechnic	8 (14.0%)	4 (14.8%)	4 (13.3%)	
University	16 (28.1%)	10 (37.0%)	6 (20.0%)	
Marital status, n (%)				0.192
Divorced	8 (14.0%)	3 (11.1%)	5 (16.7%)	
Married	34 (59.7%)	14 (51.9%)	20 (66.7%)	
Single	12 (21.1%)	9 (33.3%)	3 (10.0%)	
Widowed	3 (5.3%)	1 (3.7%)	2 (6.7%)	
Staying alone, n (%)	5 (8.8%)	4 (14.8%)	1 (3.3%)	0.179
Cancer stage, n (%)				0.204
Stage 0	15 (26.3%)	6 (22.2%)	9 (30.0%)	
Stage I	20 (35.1%)	7 (25.9%)	13 (43.3%)	
Stage II	21 (36.8%)	13 (48.2%)	8 (26.7%)	
Stage III	1 (1.8%)	1 (3.7%)	0 (0%)	
Treatment received, n (%)				
Radiotherapy	27 (47.4%)	12 (44.4%)	15 (50%)	0.675
Chemotherapy	18 (31.6%)	11 (40.7%)	7 (23.3%)	0.158
Hormonal therapy	38 (66.7%)	18 (66.7%)	20 (66.7%)	>0.999

Figure. Comparison of knowledge and self-efficacy between early and long-term cancer survivors



- Early and long-term breast cancer survivors reported similar levels of knowledge and self-efficacy across all domains
- No statistically significant differences were found between groups, suggesting stable self-efficacy and knowledge across the 5-year period post-diagnosis

Table 2. Correlations between knowledge and self-efficacy constructs

	Knowledge	Decision self-efficacy	Breast cancer survivor self-efficacy	Behavioral self-efficacy
Knowledge	1			
Decision self-efficacy	0.34*	1		
Breast cancer survivor self-efficacy	0.28*	0.59*	1	
Behavioral self-efficacy	0.2	0.38*	<b>0.74*</b>	1

\*P<0.05

Knowledge scores had weak associations with other constructs

Strongest correlation was between BCSES and CBI-B scores

## CONCLUSION

- 📌 This cohort of predominantly early-stage breast cancer survivors demonstrated moderate self-efficacy and knowledge
- 📌 Knowledge alone may not directly translate to confidence in decision-making or self-management
- 📌 Interventions should combine decision-support tools and structured skill-building strategies to enhance self-efficacy and coping behaviors throughout survivorship