cambridge.org/pax

# **Original Article**

**Cite this article:** Thyme KE, Tavelin B, Öster I, Lindh J, Wiberg B (2022). Art therapy and self-image: A 5-year follow-up art therapy RCT study of women diagnosed with breast cancer. *Palliative and Supportive Care* **20**, 482–490. https://doi.org/10.1017/ S1478951521001437

Received: 15 December 2020 Accepted: 14 August 2021

#### Key words:

Art therapy; Breast cancer; Follow-up; SASB; SCL-90

#### Author for correspondence:

Karin Egberg Thyme, Department of Clinical Sciences, Division of Psychiatry, Umeå University, SE-90187 Umeå, Sweden. E-mail: egbergthymekarin@gmail.com

© The Author(s), 2021. Published by Cambridge University Press



# Art therapy and self-image: A 5-year follow-up art therapy RCT study of women diagnosed with breast cancer

## Karin Egberg Thyme, PH.D., A.T.R., B.S.W.<sup>1</sup> (b, Björn Tavelin, B.Sc.<sup>2</sup>,

Inger Öster, PH.D., A.T.R., R.N.T.<sup>3,4</sup>, Jack Lindh, M.D., PH.D.<sup>2</sup> and Britt Wiberg, PH.D., M.SC.PSYCH.<sup>5</sup>

<sup>1</sup>Department of Clinical Sciences, Division of Psychiatry, Umeå University, Umeå, Sweden; <sup>2</sup>Department of Radiation Sciences, Umeå University, Umeå, Sweden; <sup>3</sup>Department of Nursing, Umeå University, Umeå, Sweden; <sup>4</sup>Department of Community Medicine and Rehabilitation, Umeå University, UmeåSweden and <sup>5</sup>Department of Psychology, Umeå University, Umeå, Sweden

#### Abstract

**Objective.** This follow-up study on perceived self-image and psychophysical distress/psychic symptoms was based on a ranomized contolled study of art therapy on women with breast cancer.

**Method.** The aim was to examine the long-term effects of time-limited art therapy using the instruments of *Structural Analysis of Social Behavior* (SASB) and *Symptom Check List-90* (SCL-90).

**Results.** Three attachment clusters of the SASB showed significant changes post therapy: *Autonomous self* (cluster 1), *Accepting self* (cluster 2), and *Loving self* (cluster 3). Clusters 2 and 3 continued to change in favor of the intervention group at the 5-year follow-up. There were no significant differences in the SCL-90 results between the intervention group and the control group in the follow-up study.

**Significance of results.** The art therapy intervention was both therapeutic and psycho-educative. The conclusion of this study is that approaching emotions through time-limited art therapy seems to have a long-lasting effect on the attachment behavioral system shown in the SASB model post intervention, and this effect remained 5 years later.

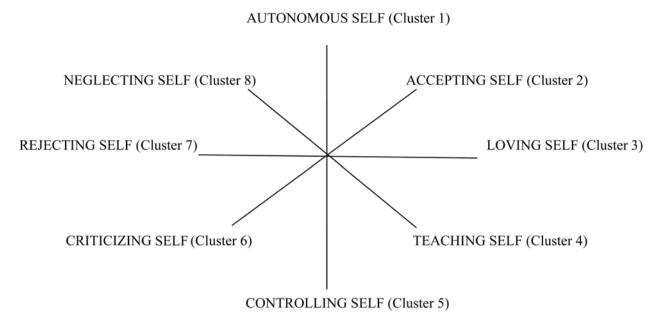
#### Introduction

The period of treatment with postoperative adjuvant radiotherapy for breast cancer can be stressful with a decrease in health-related quality of life (Luutonen et al., 2014). A recent systematic review found that women with a history of breast cancers have a greater risk of anxiety, depression, suicide, and neurocognitive and sexual dysfunction than women with no history of cancer (Carreira et al., 2018).

The present RCT 5-year follow-up study originated in three previous reports (Egberg Thyme et al., 2009; Öster et al., 2014; Norberg et al., 2015) based on a study of women from 2001 to 2004, then newly diagnosed with nonmetastatic breast cancer. This fourth report presents ratings from the participants' self-image according to the Structural Analysis of Social Behavior (SASB; Benjamin, 1974, 1996) and psychophysical distress/psychic symptoms according to the Symptom Check List (SCL-90<sup>1</sup>; Derogatis et al., 1973). The background for symptoms is complex. One important factor is self-image, which describes one's personality (Henry et al., 1990). The individual tries to maintain her/his self-image as it gives stability within their personality and in communication and connections with others. The cluster version of the SASB model (Benjamin, 1974, 1996, 2000) regarding *self* covers a person's self-image or inner feelings of herself/himself in eight dimensions/clusters (Figure 1).

Reviews have reported beneficial quantitative results on art-based therapy with cancer patients (e.g., Geue et al., 2010; Wood et al., 2011; Boehm et al., 2014; Maujean et al., 2015; Hertrampf and Wärja, 2017; Tang et al., 2019). A Canadian review on gender-related experiences of cancer survivors who explored their identities through creative arts reported four transformative moments: (1) fostering reflection after a cancer diagnosis, (2) constructing new narratives of gender post cancer, (3) navigating gender norms in search of support for new identities, and (4) interrogation of perceived gender norms (Saunders et al., 2019). A study of pre–post art therapy group intervention for cancer patients showed decreasing levels of anxiety, drowsiness, and tiredness post intervention (De Feudis et al., 2019), and Rakici and Karaman (2019) reported how cancer patients benefitted emotionally from art making. These authors regarded art as a human behavior.

<sup>1</sup>A table of the results of the SCL-90 will be obtained upon request from the corresponding author.



**Fig. 1.** The eight-cluster version of the SASB) (Benjamin, 1996; Ybrandt and Armelius, 2009). The SASB model shows positive social behavior toward the self on the right-hand side of the model and negative social behavior on the left-hand side. The basic behavior dimensions in the model are the vertical axis called the Independency axis (from *Autonomous self* to *Controlling self*) and the horizontal Affiliation axis (from *Rejecting self* to *Loving self*).

The conclusion from reported studies is that art therapy is a psychological intervention that is beneficial in helping cancer survivors deal with the uncertainty of their position. The overall reported findings show improvements in symptoms, such as anxiety, depression, and mood, as well as the quality of life.

Longitudinal qualitative studies of women with breast cancer are rare. Salander et al. (2011) followed a group of female breast cancer survivors (n = 39) in their daily life 4.5–5 years post diagnosis. Four different styles of approach appeared in their article based on repeated thematic interviews. The first group of women (n = 8) met life and its changes after diagnosis and treatment in a positive way and made their choices in a more determined way. The second group of women (n = 12) let life carry on as it was before diagnosis. The cancer experience was negative and positive for the third group of women (n = 6), and both these sides were present when the women went on with their lives. The fourth group of women (n = 13), one third of the group, had difficulties owing to side effects and bodily pain that made life hard for them.

At the start of our original study, in 2001–2004, women with breast cancer, registered for five weeks of radiation treatment at a university hospital in the north of Sweden, were invited to take part in a Randomized Controlled Trial (RCT) using art therapy. Forty-two women participated (intervention group n = 20, control group n = 22). The objective was to look for the type of distress induced by the cancer crises. The results are both qualitative and quantitative and are presented in sex publications (Öster et al., 2006, 2007, 2008, 2009; Egberg Thyme et al., 2009; Svensk et al., 2009). The conclusions are that the results showed how art therapy stimulated progress in body and mind as described in narratives, and in mental and social health investigations.

Egberg Thyme et al. (2009) used the SCL-90 (Derogatis et al., 1973) and the SASB self-rating scale (Benjamin, 1996) in their study. The results showed that the perceived symptoms of anxiety, depression, and somatic and general symptoms rated according to

SCL-90 significantly decreased in the intervention group. They also found that all of the women's perceptions of themselves according to the SASB clusters that fell into the Attachment group (AG) and the Detachment group (DAG) remained unchanged despite diagnoses and treatment.

## Aim

The aim of this 5-year follow-up art therapy RCT study was to explore the long-term effects of time-limited art therapy with women with breast cancer during the radiation period in terms of self-reported self-image and self-reported psychophysical distress/psychic symptoms.

#### Specific research questions

- To what degree has the perceived self-image according to the eight-cluster version of SASB changed or remained the same within and between groups and compared with earlier measurements?
- To what degree have the perceived psychophysical distress/psychic symptoms according to SCL-90, changed or remained the same within and between groups and compared with earlier measurements?

## Methods

## Context of the study

The women in this 5-year follow-up study originally participated in an RCT study including a five-week art therapy intervention between the years 2001 and 2004 conducted at the Department of Oncology at Umeå University Hospital in northern Sweden (Egberg Thyme et al., 2009). Forty-two women participated and were divided into an intervention group (n = 20) and a control group (n = 22). All participants completed three occasions of measurements, including interviews, within 6 months (Öster et al., 2006).

## Participants and procedure

Thirty-seven women agreed to participate in the present follow-up study in 2009: 18 women from the intervention group and 19 women from the control group. Four women declined participation (two from the intervention group and two from the control group), and one woman in the control group died. The women came from diverse socioeconomic and educational backgrounds and lived in northern Sweden, which is a vast area consisting of Lapland and coastal and rural areas. At the time of the follow-up, the median age was 66.5 years (44–75 years) for the intervention group and 61 years (48–77 years) for the control group.

A written invitation to participate in a follow-up telephone interview was sent to each woman. In addition to the telephone interview, the same self-report inventories as in the original study were distributed. The self-rating questionnaires measured *coping resources* (CRI; Hammer and Marting, 1988), *quality of life assessments* (The WHOQOL Group, 1995; WHOQOL-BREF, Harper and Power, 1995; EORTC-QLQ-C30, Aaronson et al., 1993), *self-image* (SASB; Benjamin, 1974, 1996), and *psychophysical distress/psychic symptoms* (SCL-90; Derogatis and Cleary, 1977).

#### Instruments

The SASB (Benjamin, 1974, 1996) is a self-rating scale. The 36 items in the SASB questionnaire are phrased like statements reflecting the subject's view of herself (female participants) with a focus on self-introjects. In this follow-up study, the same self-rating scale was used as in the original study (Egberg Thyme et al., 2009). In the original study, we used a higher level of abstraction in the analysis of the SASB items. This means that the basic behavior dimensions were grouped together in two groups: AG and DAG (see, e.g., Florsheim et al., 1996; Granberg and Armelius, 2003). At that time, the SASB was examined in relation to Bowlby's attachment theory and to the basic needs of attachment and exploration proposed by e.g., Henry et al. (1990). In this follow-up study, we divided the 36 items into eight clusters according to the original analysis of the SASB instrument (Benjamin, 1974, 1996) (Figure 1).

The SASB instrument has been used in many studies on patients, e.g., with eating disorders (Björck et al., 2003, 2007; Birgegård et al., 2009; Forsén Mantilla et al., 2014; Gezelius et al., 2016) and with personality disorders (Wonderlich and Swift, 1990; Ruiz et al., 1999). The SASB rating scales have also been used in psychological intervention studies on depressed women (Egberg Thyme et al., 2009; Isaksson et al., 2009).

The SCL-90 (Derogatis and Cleary, 1977) assesses psychophysical distress/psychic symptoms in 90 items combined in nine subscales: somatization, interpersonal sensitivity, depression, anxiety, hostility, phobic, paranoid, and psychotic symptoms, and a General Severity Index (GSI). Since 2010, a number of reports using mostly Symptom Check List-90-Revised (SCL-90-R; Derogatis, 1994) have presented results from studies on the psychophysical distress/psychic symptoms of women with breast cancer (Fafouti et al., 2010; Pan et al., 2013).

The results from previous studies by Armelius (2001), Fridell et al. (2002), and Armelius and Armelius (2010) are used as external reference groups in this study.

#### Statistical analysis

Mean and standard deviation were calculated and divided into scales for the SCL-90 and clusters for the SASB, on each of the four occasions for the intervention group and the control group. Differences between the scores and the baseline occasion were calculated (adjusted score), and the two groups were compared on the second, third, and fourth occasions with regard to the adjusted scores using the Mann–Whitney *U*-test. The adjusted scores were also tested on the second, third, and fourth occasions for each of the two groups using the Wilcoxon signed-rank test. A *p*-value of less than 0.05 was considered as statistically significant. Missing items were dealt with in accordance with the SCL-90 and SASB manuals. SPSS version 19 was used for data analysis.

## Ethical considerations

Ethical approval for this research study was granted by the Ethical Committee at the Medical Faculty, Umeå University (Archive number 09-034M).

#### Results

The results for the first research question "To what degree has the perceived self-image, according to the eight-cluster version of SASB, changed or remained the same within and between groups and compared to earlier measurements?" are presented in Figures 2 and 3.

The main finding was that cluster scores for the intervention group and for the control group before intervention and 5 years post intervention had changed places; on the latter occasion, the scores for the women in the intervention group were higher than the previous ones, and the scores for the women in the control group were lower than the previous ones (Figure 3).

The findings on occasion 4 in the 5-year follow-up showed that significant changes remained in the clusters *Accepting self* (cluster 2) and *Loving self* (cluster 3) for the intervention group (n = 18).

Table 1 illustrates a significant difference (0.036) in *Accepting self* (cluster 2) in a longitudinal intergroup analysis of the intervention group and the control group on the second occasion post intervention. The women in the control group had lower ratings than previously. On the fourth and final follow-up occasions, a borderline significance appeared (0.055) in favor of the intervention group in the same cluster. In *Loving self* (cluster 3), a significant difference between groups (0.023) on the second occasion in favor for the intervention group was seen, and on the third occasion, this advantage (0.20) remained, which was also the case on the fourth occasion (0.020).

The second specific research question was "To what degree have the perceived psychophysical distress/psychic symptoms according to SCL-90, changed or remained the same within and between groups and compared to earlier measurements?" The answer to this question is that there were no significant differences between the intervention group and the control group in this follow-up study.

## Discussion

The aim of this 5-year RCT follow-up study was to explore the long-term effects of time-limited art therapy on women with breast cancer during the radiation period in terms of self-reported

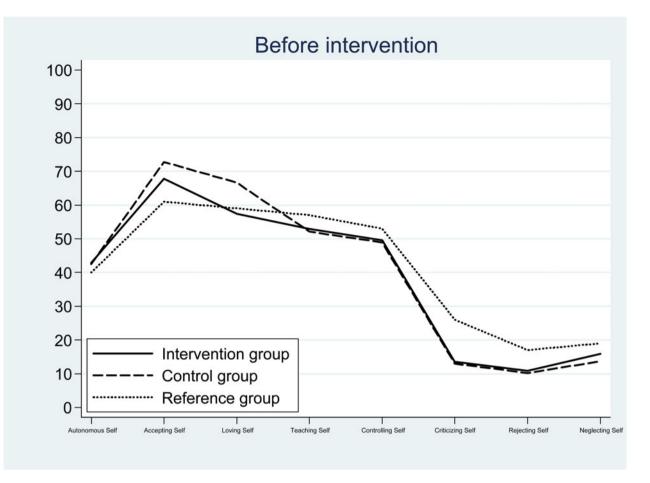


Fig. 2. Cluster scores for self-image before intervention for the intervention group and the control group compared with an external reference group (Armelius, 2001).

self-image via SASB and self-reported psychophysical distress/ psychic symptoms via SCL-90.

In the present follow-up study, we used the eight-cluster version of the SASB model (Benjamin, 1996), a lower level of abstraction of the SASB model than the model used in the original study (Egberg Thyme et al., 2009). In that study, data analysis was based on a higher level of abstraction of the SASB, which showed that the self-image of all the women in the intervention group and the control group went unaffected through diagnoses and treatments. In this present follow-up study, a reanalysis of the originally SASB data was done and we found that the earlier results were contradicted with the new analysis according to the eightcluster version of the SASB for all four occasions (Table 1). According to the new data analysis, the self-image of all the participants was affected by the cancer diagnosis. The participants of the intervention group had significantly raised their scores in the SASB in the clusters Autonomous self, Accepting self, and Loving self at 4 months post intervention, and these changes remained significant in the clusters Accepting self and Loving self in the 5-year follow-up study. This means that the art therapy treatment has caused an improvement in the intervention group. These SASB ratings are consistent with the narratives of the women through earlier publications by Öster et al., (2006, 2009, 2014) and Norberg et al. (2015).

It is important to consider different theoretical approaches to the use of different levels of abstraction when analyzing data. In the original study, Egberg Thyme et al. (2009) were inspired by the attachment theory and William Henry's proposal of analyzing the SASB model (Bedics and Henry, 2005). In the present study, we returned to the original SASB formula according to Benjamin (1974, 1996) and her recommendation to stay narrow and closer to the subjects' original answers in the items. In this 5-year follow-up study, we returned to the psychodynamic theory when we set up hypothesis about how women in the intervention group used their psychic defense mechanism more consciously and flexibly as a consequence of the art therapy. No other circumstances have emerged that contradict this interpretation. Our hypothesis is that the women in the intervention group expressed emotions in both pictures and words and through this process opened up for their "internal life" and a change in the self-image in a positive way. We agree with Granberg and Armelius (2003, p. 228) that the "Self-image is theoretically as well as empirically firmly connected to a person's well-being/.../a positive self-image is generally associated with better mental health and psychological functioning on various psychological and psychiatric dimensions."

The analysis of the self-reported manifested psychophysical distress/psychic symptoms measured using SCL-90 confirmed the SASB ratings. The study results showed a significant decrease in depression, anxiety, somatic symptoms, and general symptoms (GSI) according to the SCL-90 (Derogatis et al., 1973) post intervention and afterwards. The results support the fact that art therapy is beneficial for use against the experienced side effects of breast cancer. Symptoms were fewer as time passed (Öster et al., 2014), and the participants' approach to life had been modified

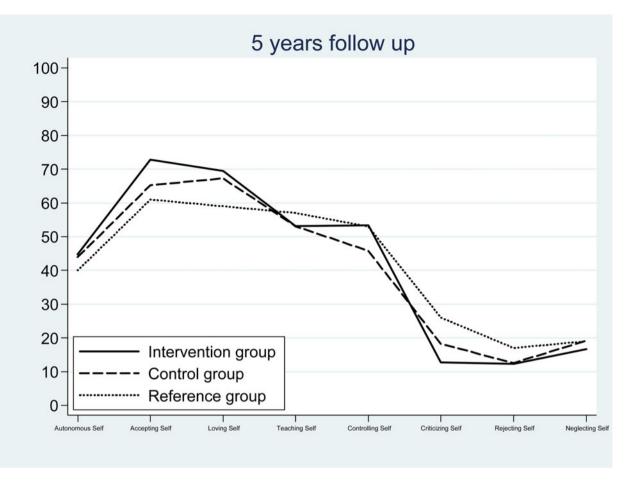


Fig. 3. Cluster scores for self-image after 5 years for the intervention group and the control group compared with an external reference group (Armelius, 2001).

according to the psychic dispositions for each individual woman (Norberg et al., 2015). SCL-90 in the present study showed that both groups were in parity with each other and the reference group (Fridell et al., 2002).

We generally address symptoms when examining psychic health. In this context, we interpreted our data within a psychodynamic framework and found that the SASB instrument added knowledge about the latent intrapsychic processes related to art therapy. The SASB ratings showed the effect of art therapy on the experiencing Subject, the Self, in growth and development. The participants seemed to have integrated the present crises as well as caught up with earlier crises (cf. Herman, 1992) using art therapy. The multiple crises were integrated as associative links in body and mind through the creative work in the art therapy process. This process was done with pictures, words, and reflections together with a therapist. This finding means that when a person is in crisis and turns for help, the motivation to accept help is high (Gillieron, 1989). We perceived that the therapeutic alliance (Henry et al., 1990; cf. Schaverien, 1992) had been developing from the beginning in this time-limited art therapy intervention. Czamanski-Cohen et al. (2019) have reported significant between-group differences in emotional awareness and the acceptance of emotions after an eight-week art therapy intervention. Those authors claimed that emotion processing in art therapy may be the potential mechanism through which women with breast cancer can reduce both depression and somatic symptoms.

The art therapy process following a breast cancer diagnosis changed the women's experience of body and mind and also dealt with their relationships in the real life. This means that art therapy seemed to address the women both nonverbally and verbally. We contributed with these findings that the women were given an opportunity to reorganize their "self-image". In art therapy, the individual in their own way can constructively alternate between loss-orientation and restoration-orientation in the dual process of coping with bereavement (Schut, 1999; Archer, 2008).

Time-limited psychodynamic psychotherapy (Mann, 1973) inspired us to believe in a limited amount of sessions (Junkert-Tress et al., 2001; Egberg-Thyme et al., 2007). Supported by the changes that remained in two clusters, we found that this therapeutic assumption worked, probably because of the strong motivation of the participants (Gillieron, 1989) and their hope and knowledge of upcoming follow-up interviews. Henry et al. (1990) has investigated short-term psychotherapy and considered the importance of the dyadic interpersonal process for the therapeutic outcome. They found a connection between the speech of the therapist and the patient and the patient's therapeutic changes measured using the SASB.

We have described intrapsychic processes measured by the SASB. In search for a deeper understanding, we turn to narratives from Swedish women with a history of breast cancer. Norberg et al. (2015) analyzed how the group of women from this follow-up described their situation. In that study, they used

	SASB		Interve group		Control (n =	• •	Intervention	group ( <i>n</i> = 21)	Control gr	oup ( <i>n</i> = 21)		Intervention group (n = 21)	Control group (n = 21)
Cluster	Occ	•	М	SD	М	SD	Adjusted <i>M</i>	Adjusted SD	Adjusted <i>M</i>	Adjusted SD	Two-tailed <i>p-</i> value <sup>†</sup>	Two-tailed <i>p</i> -value <sup>††</sup>	Two-tailed <i>p</i> -value <sup>††</sup>
Auto.	Cl. 1	1*	42.79	15.34	42.47	13.23	0		0				
Auto.	Cl. 1	2*	51.00	14.55	43.88	19.74	8.47	18.06	g1.40	15.19	0.192	0.062	0.917
Auto	Cl. 1	3*	46.43	12.32	42.10	14.30	3.90	17.61	-0.38	13.87	0.506	0.386	0.866
Auto.	Cl1	4*	44.71	11.40	43.92.	19.43	0.21	13.78	0.14	20.55	0.791	0.977	0.744
Accept.	Cl 2	1*	67.73	18.06	72.74	17.87	0		0				
Accept.	Cl. 2	2*	65.75	19.45	65.71	21.24	-0.75	20.55	-7.02	14.31	0.367	0.532	0.036
Accept.	Cl. 2	3*	69.92	19.12	67.02	20.40	3.42	19.16	-5.71	18.39	0.126	0.337	0.214
Accept.	Cl. 2	4*	72.79	19.20	65.23	21.18	5.44	16.68	-8.47	28.34	0.055	0.214	0.116
Loving	Cl. 3	1*	57.33	21.93	66.62	21.18	0		0				
Loving	Cl. 3	2*	65.88	16.36	62.29	21.88	6.68	15.09	-4.33	11.65	0.023	0.091	0.096
Loving	Cl. 3	3*	67.90	18.02	66.86	17.77	8.70	15.72	0.24	10.41	0.053	0.020	0.881
Loving	Cl. 3	4′*	69.41	15.36	67.28	20.54	10.24	17.03	-1.44	26.06	0.077	0.020	0.868
Teach.	Cl. 4	1*	52.86	13.54	52.11	18.19	0		0				
Teach	Cl. 4	2*	53.25	15.14	52.73	18.56	0.09	12.28	0.63	17.33	0.839	0.827	0.736
Teach.	Cl. 4	3*	52.00	14.42	54.17	16.68	-1.25	19.00	2.06.	18.70	0.620	0.840	0.722
Teach.	Cl. 4	4*	53.09	13.91	53.06	21.08	1.91	13.85	0.42	24.12	0.757	0.395	0.670
Contr.	Cl. 5	1*	49.60	19.57	48.92	21.55	0		0				
Contr.	Cl. 5	2*	51.60	17.67	44.86	18.92	0.92	19.05	-4.07	17.50	0.354	0.550	0.380
Contr.	Cl. 5	3*	49.03	19.36	43.62	20.06	-1.65	16.84	-5.31	19.80	0.834	0.420	0.313
Contr.	Cl. 5	4*	53.41	16.86	45.81	22.00	2.38	22.86	-2.39	23.80	0.987	0.917	0.845
Critic.	Cl. 6	1*	13.57	14.68	12.98	12.35	0		0				
Critic.	Cl. 6	2*	17.17	15.92	16.43	19.02	3.67	15.76	3.45	17.47	0.553	0.348	0.754
Critic.	Cl. 6	3*	13.50	15.82	13.45	16.31	0.00	16.65	0.48	17.55	0.979	0.900	0.975
Critic.	Cl. 6	4*	12.79	17.43	18.18	16.80	-0.74	21.95	2.87	19.87	0.757	0.969	0.589
Reject.	Cl. 7	1*	10.86	16.32	10.19	11.71	0		0				
Reject.	Cl. 7	2*	10.80	12.44	11.43	17.87	-0.50	12.81	1.24	14.59	0.843	0.944	0.876
Reject.	Cl. 7	3*	9.20	15.83	10.48	14.20	-2.10	11.25	0.28	13.54	0.790	0.276	0.507
Reject.	Cl. 7	4*	12.35	17.41	12.56	15.26	-0.59	21.99	1.56	17.70	0.590	0.700	0.955

**Table 1.** Mean (*M*) scores and standard deviations (SD) of the SASB total scores and the scores for the differences compared with the baseline (adjusted scores) for the first, second, third, and fourth occasions\* for the intervention and control groups. Comparison of adjusted scores between the intervention and control group (†) and a longitudinal inter-group analysis (††)

https://doi.org/10.1017/S1478951521001437 Published online by Cambridge University Press

487

	SASB		Intervention group $(n = 21)$	ention n = 21)	Control group (n = 21)	l group 21)	Intervention	Intervention group $(n = 21)$	Control gr	Control group $(n = 21)$		Intervention group (n = 21)	Control group $(n = 21)$
Cluster	Occ.*	*.	W	SD	W	SD	Adjusted M	Adjusted SD	Adjusted M	Adjusted SD	Two-tailed <i>p</i> -value <sup>†</sup>	Two-tailed <i>p</i> -value <sup>††</sup>	Two-tailed <i>p</i> -value <sup>††</sup>
Neglect.	Neglect. Cl. 8 1* 15.83	1*	15.83	16.81	13.69	15.56	0	0					
Neglect.	Cl. 8	1*	13.38	12.98	13.33	17.77	-2.88	16.81	-0.36	14.04	0.813	0.641	0.669
Neglect.	Cl. 8 3*	*œ	12.88	15.01	12.85	14.78	-3.38	14.76	-0.83	17.58	0.311	0.219	0.905
Neglect.	Neglect. Cl. 8 4*		16.62	16.62 15.49 19.17	19.17	15.88	-0.44	20.70	5.42	16.79	0.386	0.775	0.147
Significance and borderline significance in bold italic style *1 = before intervention (week 0, before support group part foromotion intervention control to control action bood o	d borderline : vention (wee	significance k 0, before	e in bold itali support gro	ic style up participati	on); 2 = end o	of intervention	Significance and borderline significance in bold italic style *1= before intervention (week 0, before support group participation); 2 = end of intervention (week 5, at the end of the and the state of the state o	nd of support group	- participation); 3 =	at 6 months after t	Significance and borderline significance in bold italic style <sup>1</sup> = before intervention (week 0, before support group participation); 2 = end of intervention (week 5, at the end of support group participation); 3 = at 6 months after the intervention ended, 4 = at 5-year follow-up.	4= at 5-year follow-up.	

comparison intervention group vs. control group, based on the adjusted scores with the nominal face value of 1.

 $^{\dagger}$ Longitudinal intergroup analysis, comparing results on occasions 2, 3, and 4 with baseline (occasion 1).

discourse analysis and found three approaches to life in the long term "the female survivor", "the "good" woman", and "the individual response". Salander et al. (2011) also reported from long-term experiences of breast cancer. They used thematic analysis and found four lines of progress: 8 women were positive and made more conscious choices, 12 women lived life as before the cancer diagnosis, 6 women balanced negative and positive experiences and went on as before, and 13 women had side effects and bodily pain. Similarities between these follow-up studies were that all the women expressed their conscious progress, and the authors searched for identifying themes in the narratives. All conclusions in Salander et al. (2011) as well as in Norberg et al. (2015) describe the integration of challenges after a severe illness. In our follow-up study, we assume that the SCL-90 and the SASB ratings would have exposed problems like those in the fourth group in the study of Salander et al. (2011). We do not know anything about the four women who dropped out of our study; nevertheless, they were distributed equally in both the intervention and the control groups.

Sherman et al. (2012) support our writing about intersecting gendered discourses. They state that breast cancer survivorship is about "Reclaiming life on one's own terms" (Ibid, p. 261) and requires coming to terms with threats and fears. Furthermore, taking an active role in self-healing, and reconciling paradoxes when creating new perspectives moving into a "new normal" (Ibid, p. 264). The participants in our intervention group fully regained their agent self, i.e., the executive function that allows someone to act, which is hypothesized as one effect of successful therapy as described by Adler and Olin (2012) and Wilhelmsson-Göstas et al. (2012). These findings are presented from other perspectives in Öster et al. (2007, 2009), who used gender theory (Kaschak, 1992). They found that through subject positions, women participants reconstructed self, body, and their own meaning and challenged dominating discourses on breast cancer. Sherman et al. (2012) found another way of describing the developing self in navigating gender norms, and questioning perceived gender norms was crucial in search for support for a new identity.

## Conclusions

To the best of our knowledge, the SASB rating scale has not been used in cancer studies previously. The results of the 5-year follow-up study show that the women in the art therapy intervention group had significantly higher ratings on the SASB self-rating scale than the women in the control group. The actual crises were linked to earlier and present experiences, and the art therapy sessions provided a "safe space" (Öster et al., 2009) for each woman to work the experiences through. The triangular relationship between the patient, the therapist, and the picture in art therapy (Schaverian, 2000) made it possible to reflect over emotions, memories, and experiences. This led to lasting insights and deeper understanding. The long-term effects of time-limited art therapy are, to our knowledge, not found elsewhere.

The study has a number of limitations. The cultural homogeneity and the small sample size limit the generalizability of the findings. Despite these limitations, this study contributes unique results.

A proposal for future research in art therapy would be to study patients in larger sample sizes of different cultures, ages, and sexes, and with different cancer diagnoses. Long-term follow-up studies are recommendable.

Table 1. (Continued.)

Acknowledgments. We wish to thank all the women who participated in this studyand the Cancer and Traffic Injuries Association (CTRF no. C47421) who funded this study. We also wish to thank Håkan Jonsson, Associate Professor and Statistician, at the Department of Epidemiology and Global Health, Umeå University, Sweden, for his statistical analysis.

Conflict of interest. There are no conflicts of interest in the manuscript.

#### References

- Aaronson NK, Ahmedzai S, Bergman B, et al. (1993) The European Organization for research and treatment of cancer QLQ-C30: A qualityof-life instrument for use in international clinical trials in oncology. JNCI: Journal of the National Cancer Institute 85(5), 365–376. doi:10.1093/jnci/ 85.5.365.
- Adler JM and Olin FW (2012) Living into the story: Agency and coherence in a longitudinal study of narrative identity development and mental health over the course of psychotherapy. *Journal of Personality and Social Psychology* **102**(2), 367–389.
- Archer J (2008) Theories of grief: Past, present, and future perspectives. In Stroebe MS, Hansson RO, Schut H & Stroebe W (eds.), *Handbook of Bereavement Research and Practice*. Washington: American Psychological Association, pp. 45–65.
- Armelius K (2001). Reliabilitet och validitet för den svenska versionen av SASB-självbildstestet. (Reliability and validity for the Swedish version of SASB – the self-image test). Prepublished manuscript. Umeå, Sweden: Institutionen för psykologi, Umeå Universitet.
- **Armelius K and Armelius B-Å** (2010). SASB-modellen: En introduktion (SASB An introduktion). Prepublished manuscript. Umeå, Sweden: Instutionen för psykologi, Umeå Universitet.
- Bedics JD and Henry WP (2005) The therapeutic process as a predictor of change in patients' important relationships during time-limited dynamic psychotherapy. Psychotherapy: Theory, Research, Practice, Training 42(3), 279–284.
- Benjamin LS (1974) Structural analysis of social behavior. Psychological Review 81, 392–425.
- **Benjamin LS** (1996) A clinician-friendly version of the interpersonal circumplex: Structural analysis of social behavior (SASB). *Journal of Personality Assessment* **66**, 248–266.
- Benjamin LS (2000) Reference Manual for Coding Interactions in Terms of Structural Analysis of Social Behavior (SASB\Intrex). Salt Lake City: University of Utah.
- Birgegård A, Björck C, Norring C, et al. (2009) Anorexic self-control and bulimic self-hate: Differential outcome prediction from initial self-image. International Journal of Eating Disorders 42, 522–530.
- Björck C, Clinton D, Sohlberg S, et al. (2003) Interpersonal profiles in eating disorders: Ratings of SASB self-image. *Psychology and Psychotherapy: Theory, Research and Practice* 76(4), 337–349.
- Björck C, Clinton D, Sohlberg S, et al. (2007) Negative self-image and outcome in eating disorders: Results at 3-year follow-up. Eating Behaviors 8, 398–406.
- Boehm K, Cramer H, Staroszynski T, et al. (2014) Arts therapies for anxiety, depression, and quality of life in breast cancer patients: A systematic review and meta-analysis. Evidence-Based Complementary and Alternative Medicine 2014. doi:10.1155/2014/103297.
- Carreira H, Williams R, Müller M, et al. (2018) Associations between breast cancer survivorship and adverse mental health outcomes: A systematic review. JNCI Journal of National Cancer Institute 110, 12. doi:10.101093/ jnci/djy177.
- Czamanski-Cohen J, Wiley JF, Sela N, et al. (2019) The role of emotional processing in art therapy (REPAT) for breast cancer patients. Journal of Psychosocial Oncology 37(5), 586–598. doi:10.1080/07347332.2019.1590491.
- De Feudis RL, Graziano G, Lanciano T, et al. (2019) An art therapy group intervention for cancer patients to counter distress before chemotherapy. *Arts & Health* 10, 1–14. doi:10.1080/17533015.2019.1608566.
- **Derogatis LR** (1994) *SCL-90-R: Administration, Scoring, and Procedures Manual*, 3rd ed. Minneapolis, MN: National Computer Systems.

- Derogatis LR and Cleary PA (1977) Confirmation of the dimensional structure of the SCL-90: A study in construct validation. *Journal of Clinical Psychology* **33**(4), 981–989.
- Derogatis LR, Lipman RS and Covi L (1973) SCL-90: An outpatients psychiatric rating scale—A preliminary report. Psychopharmacological Bulletin 9, 13–28.
- Egberg Thyme K, Sundin EC, Stahlberg G, *et al.* (2007) The outcome of short-term psychodynamic art therapy compared to short-term psychodynamic verbal therapy for depressed women. *Psychoanalytic Psychotherapy* **21**, 250–264.
- Egberg Thyme K, Sundin EC, Wiberg B, *et al.* (2009) Individual brief art therapy can be helpful for women with breast cancer: A randomized controlled clinical study. *Palliative and Supportive Care* 7, 87–95.
- Fafouti M, Paparrigopoulos T, Zervas Y, et al. (2010) Depression, anxiety and general psychopathology in breast cancer patients: A cross-sectional control study. In Vivo 24, 803–810.
- Florsheim P, Henry WP and Benjamin LS (1996) Integrating individual and interpersonal approaches to diagnosis: The structural analysis of social behavior and attachment theory. In Kaslow FW (ed.), *Handbook of Relational Diagnosis and Dysfunctional Family Patterns. Wiley Series in Couples and Family Dynamics and Treatment*. New York: John Wiley & Sons, pp. 81–101.
- Forsén Mantilla E, Bergsten K and Birgegård A (2014) Self-image and eating disorder symptoms in normal and clinical adolescents. *Eating Behaviors* 15(1), 125–131.
- Fridell M, Cesarec Z, Johansson M, et al. (2002). Symptom Checklist 90 (SCL-90): Swedish standardization and validation of the symptom scale. [Original title: SCL-90: Svensk normering, standardisering och validering av symtomskalan]. Rapport. Stockholm: Statens Institutionsstyrelse (SiS).
- Geue K, Goetze H, Buttstaedt M, *et al.* (2010) An overview of art therapy interventions for cancer patients and the results of research. *Complementary Therapies in Medicine* **18**(3-4), 160–170.
- Gezelius C, Wahlund B, Carlsson L, et al. (2016) Adolescent patients with eating disorders and their parents: A study of self-image and outcome at an intensive outpatient program. *Eating and Weight Disorders—Studies* on Anorexia, Bulimia and Obesity **21**(4), 607–616. doi:10.1007/ s40519.016-0286-4.
- Gillieron E (1989) Short psychotherapeutic interventions (four sessions). *Psychotherapy and Psychosomatics* 51, 32–37.
- Granberg Å and Armelius K (2003) Change of self-image in patients with neurotic, borderline and psychotic disturbances. *Clinical Psychology and Psychotherapy* **10**, 228–237.
- Hammer AL and Marting MS (1988) Manual for the Coping Resources Inventory. Palo Alto, CA: Consulting Psychologists Press.
- Harper A and Power M (1995) Development of the World Health Organization WHOQOL-BREF quality of life assessment? *Psychological Medicine* 28(3), 551–558.
- Henry WP, Schacht TE and Strupp HH (1990) Patient and therapist introject, interpersonal process, and differential psychotherapy outcome. *Journal of Consulting and Clinical Psychology* 58(6), 768–774. doi:10.1037/ 0022-006X.58.6.768.
- Herman J (1992) Trauma and Recovery. London: Pandora.
- Hertrampf RS and Wärja M (2017) The effect of creative arts therapy and arts medicine on psychological outcomes in women with breast or gynaecological cancer: A systematic review of arts-based interventions. *The Arts in Psychotherapy* 56, 93–322.
- Isaksson C, Norlén AK, Englund B, et al. (2009) Changes in self-image as seen in tree paintings. *The Arts in Psychotherapy* **36**(5), 304–312.
- Junkert-Tress B, Schnierda U, Hartkamp N, et al. (2001) Effects of shortterm dynamic psychotherapy for neurotic, somatoform, and personality disorders: A prospective 1-year follow-up. *Psychotherapy Research* 11(2), 187–200.
- Kaschak E (1992) Engendered Lives. A New Psychology of Women's Experiences. New York: Basic Books.
- Luutonen S, Sintonen H, Stormi T, et al. (2014) Health-related quality of life during adjuvant radiotherapy in breast cancer. Quality of Life Research 23, 1363–1369.
- Mann J (1973) *Time-Limited Psychotherapy*. Cambridge, MA: Harvard University Press.

- Maujean A, Pepping CA and Kendall E (2015) A systematic review of randomized controlled studies of art therapy. Art Therapy: Journal of the American Art Therapy Association 31, 37–44.
- Norberg M, Magnusson E, Egberg Thyme K, et al. (2015) Breast cancer survivorship—intersecting gendered discourses in a 5-year follow-up study. Health Care for Women International 36, 617–633. doi:10.1080/ 07399332.2015.1017640.
- Öster I, Svensk A-C, Magnusson E, et al. (2006) Art therapy improves coping resources: A randomized controlled study among women with breast cancer. *Palliative and Supportive Care* 4, 57–64.
- Öster I, Magnusson E, Egberg Thyme K, et al. (2007) Art therapy for women with breast cancer: The therapeutic consequences of boundary strengthening. The Arts in Psychotherapy 34(3), 277–288.
- Öster I, Magnusson E, Egberg Thyme K, *et al.* (2008) Erratum to "Art therapy for women with breast cancer: The therapeutic consequences of boundary strengthening". *The Arts in Psychotherapy* **35**(3), 242.
- Öster I, Åström S, Lindh J, *et al.* (2009) Women with breast cancer and gendered limits and boundaries—Art therapy as a "safe space" for enacting alternative subject positions. *The Arts in Psychotherapy* **36**, 29–38.
- Öster I, Tavelin B, Egberg Thyme K, et al. (2014) Art therapy during radiotherapy—A five-year follow-up study with women diagnosed with breast cancer. The Arts in Psychotherapy **41**, 36–40.
- Pan XF, Fei MD, Zhang KY, et al. (2013) Psychopathological profile of women with breast cancer based on the symptom checklist-90-R. Asian Pacific Journal of Cancer Prevention 14, 6579–6584.
- Rakici SY and Karaman E (2019) Colorful screams of silent emotions: A study with oncology patients. *Indian Journal of Palliative Care* 25(3), 361–366.
- Ruiz MA, Pincus AL and Bedics JB (1999) Using the structural analysis of social behavior (SASB) to differentiate young adults with borderline personality disorder features. *Journal of Personality Disorders* 13(2), 187–198.
- Salander P, Lilliehorn S, Hamberg K, et al. (2011) The impact of breast cancer on living an everyday life 4.5–5 years post-diagnosis—A qualitative prospective study of 39 women. Acta Oncologica 50, 399–407.

- Saunders S, Hammond C and Thomas R (2019) Exploring gender-related experiences of cancer survivors through creative arts: A scoping review. *Qualitative Health Research* **29**(1), 135–148.
- Schaverian J (2000) The triangular relationship and the aesthetic countertransference in analytical art psychotherapy. In Gilroy A & McNielly G (eds.), The Changing Shape of art Therapy: New Developments in Theory and Practice. UK, London: Jessica Kingsley, pp. 55–83.
- Schaverien J (1992) The Revealing Image. Analytical Art Psychotherapy in Theory and Practice. London: Routledge.
- Schut MSH (1999) The dual process model of coping with bereavement: Rationale and description. *Death studies* 23(3), 197–224.
- Sherman DW, Rosedale M and Haber J (2012) Reclaiming life on one's own terms: A grounded theory study of the process of breast cancer survivorship. Oncology Nursing Forum 39(3), 258–268.
- Svensk A-C, Öster I, Egberg Thyme K, et al. (2009) Art therapy improves experienced quality of life among women undergoing treatment for breast cancer: A randomized controlled study. European Journal of Cancer Care 18, 69–77.
- Tang Y, Fu F, Gau H, et al. (2019) Art therapy for anxiety, depression, and fatigue in females with breast cancer: A systematic review. Journal of Psychosocial Oncology 37(1), 79–95.
- The WHOQOL Group (1995). The World Health Organization quality of life assessment (WHOQOL): Position paper from the World Health Organization. *Social Science and Medicine* **41**(10), 1403–1409.
- Wilhelmsson-Göstas M, Wiberg B and Kjellin L (2012) Increased participation in the life context: A qualitative study of clients' experiences of problems and changes after psychotherapy. *European Journal of Psychotherapy* and Counselling 14(4), 365–380. doi:10.1080/13642537.2012.734498.
- Wonderlich SA and Swift WJ (1990) Borderline versus other personality disorders in the eating disorders: Clinical description. *International Journal of Eating Disorders* 9, 629–638.
- Wood MJM, Molassiotis A and Payne S (2011) What research evidence is there for the use of art therapy in the management of symptoms in adults with cancer? A systematic review. *Psycho-Oncology* 20, 135–145.
- Ybrandt H and Armelius K (2009) Changes in self-image in a psychotherapy supervisor training program. *The Clinical Supervisor* 28(2), 113–123.