Applied Behavioral Health and Psychology
https://ojs.bilpub.com/index.php/abhp

ARTICLE

Self-Compassion and Physical Activity in Relation to Women's Experiences with Breast Cancer

Kim A. Rogers * **, *Erin Mitchell, Bradley J. Cardinal***

School of Exercise, Sport, and Health Sciences, Oregon State University, Corvallis, OR 97330, USA

ABSTRACT

An understudied phenomenon in behavioral health is the role of self-compassion in relation to physical activity among women with breast cancer. Therefore, this study aimed: (a) to understand sources of suffering in the context of managing breast cancer, including issues associated with, and opportunities afforded by, physical activity; and (b) to document the interplay between the personal meaning attributed to self-compassion and physical activity involvement. Guided by a relativist ontology perspective, semi-structured interviews were conducted with 18 women (37–75 years of age). The severity of cancer ranged from Stage 0 to Stage 3. Thematic analysis of the data generated three themes reflecting the experiences that contribute to suffering for women with breast cancer—challenges related to self, challenges related to others, and challenges related to physical activity. In addition, three themes represented women's relationship with self-compassion and physical activity involvement—strained, developing, and part of one's life. In general, women who experienced self-compassion as more integral to their lives tended to engage in physical activity as a means of self-care, adjust their activity levels to align with their abilities, embrace where they were physically, and view their activity from a new perspective. The findings from this study support the role of self-compassion as a healthy coping strategy for women who have been diagnosed with breast cancer. Healthcare providers, public health officials, and physical activity professionals can reinforce and support self-compassion through appropriate policies, programs, and services, particularly those that foster understanding and build accommodating physical activity environments.

Keywords: Coping; Exercise; Malignancy; Public Health; Qualitative Research; Resilience; Self-Care

*CORRESPONDING AUTHOR:
Kim A. Rogers, School of Exercise, Sport, and Health Sciences, Oregon State University, Corvallis, OR 97330, USA;
Email: kim.rogers@oregonstate.edu

ARTICLE INFO
Received: 12 January 2026 | Revised: 24 February 2026 | Accepted: 6 March 2026 | Published Online: 28 March 2026
DOI: https://doi.org/10.55121/abhp.v2i1.1094

CITATION
Rogers, K.A., Mitchell, E., Cardinal, B.J., 2026. Self-Compassion and Physical Activity in Relation to Women's Experiences with Breast Cancer.
Applied Behavioral Health and Psychology. 2(1): 1–14. DOI: https://doi.org/10.55121/abhp.v2i1.1094

COPYRIGHT
Copyright © 2026 by the author(s). Published by Japan Bilingual Publishing Co. This is an open access article under the Creative Commons Attribution-NonCommercial 4.0 International (CC BY 4.0) License (https://creativecommons.org/licenses/by/4.0).

1. Introduction

The unfortunate reality is that a broad cross-section of adults, particularly women, continues to be diagnosed with breast cancer. Breast cancer is currently the most common cancer among women in the United States[1]. Recent research reveals, however, that regular participation in physical activity could significantly reduce the risk of breast cancer[2,3] and mitigate common side effects of breast cancer treatment, such as fatigue, depression, impaired quality of life, decreased muscular strength, decreased aerobic capacity, and weight gain[4,5]. Moreover, women themselves have credited exercise during and after treatment for breast cancer with helping them feel better, regain control over their bodies and lives, manage their emotions, and prepare to live healthfully in the future[6].

The obvious challenge is getting oncology patients and cancer survivors to engage in regular physical activity. For example, Szymlek-Gay and colleagues[7] found that when approached, an average of only 63% (with as few as 12%) of patients agreed to undertake an exercise intervention. Furthermore, physical inactivity has been reported as a common health behavior in breast cancer survivors[8], with only 37% of breast cancer survivors adhering to physical activity recommendations[9]. Similarly, Castonguay et al.[10] reported on the moderate to vigorous physical activity (MVPA) patterns of breast cancer survivors in their study at baseline and concluded, "a substantial portion of the sample may be at risk for poor health because they are not engaging in the recommended 150 min per week of MVPA" (p. 470). Moreover, they found that MVPA decreased across six months and that higher levels of body-related shame predicted the change in MVPA.

Interestingly, positive psychological attributes have been associated with increased participation in physical activity[11]. This is consistent with the positive psychology movement, which focuses on various psychological characteristics presumed to benefit well-being, thereby counterbalancing the traditional approach in psychology of investigating what needs fixing[12]. Self-compassion is one such positive attribute that may play a role in women's self-care from the initial diagnosis and throughout the process of treatment and recovery from breast cancer.

Self-compassion entails generating a desire to alleviate one's suffering and "offering nonjudgmental understanding to one's pain, inadequacies and failures, so that one's experience is seen as part of the larger human experience"[13] (p. 87). Self-compassion, as operationalized by Neff[13], has three components: self-kindness, common humanity, and mindfulness. Self-kindness is the act of being understanding toward oneself during difficult times, as opposed to engaging in self-criticism. Common humanity refers to the recognition that individuals are not alone in their experiences of suffering and feelings of inadequacy. Finally, mindfulness signifies an equanimity and acknowledgment of one's thoughts and emotions. Neff[13] considers these three components conceptually distinct, yet integrated.

Self-compassion is relevant to all personal experiences of suffering and is a concept that seems particularly germane to women with breast cancer, who, in addition to distress, show evidence of self-criticism, anxiety, depression, and negative body image[14–16]. Results of a meta-analysis examining the association between self-compassion and psychopathology showed a positive relationship between self-compassion and well-being, whereby higher levels of self-compassion were associated with lower levels of depression and anxiety, as well as higher levels of resilience[16]. Similarly, Garcia and colleagues[17] found that higher levels of self-compassion and mindfulness were associated with better quality of life. In addition, a recent study showed improved levels of self-compassion, satisfaction with life, and mindfulness among women undergoing treatment for cancer following a mindfulness-based intervention[18]. Study participants reported finding new ways to respond to themselves with more kindness and compassion, and felt the course had changed their lives for the future.

Reyes[19] presented a conceptual framework of self-compassion, which identifies the antecedent, attributes, and consequences of self-compassion, and highlights the role of self-compassion in facilitating engagement in proactive behaviors. Based on the model, suffering is characterized by diminished capacity for self-care as well as poor quality of life. According to Reyes, an appropriate trigger, defined as an occurrence that results in their person's realization that life has worth, can help individuals realize they can choose to break the cycle of negativity, practice the attributes of self-compassion (i.e., self-kindness, mindfulness, commonality, and wisdom) and become actively involved in chang-

ing their lives. Through experiences such as learning from failure, the motivation to try again, and self-mastery, the practice of self-compassion can result in numerous positive outcomes, including, but not limited to, increased relatedness, autonomy, sense of self, and the capacity for self-care. It is also important to note that self-compassion is not only a response to personal suffering, but the very impetus for proactive behaviors aimed at preventing suffering and promoting well-being, such as engaging in regular physical activity[20,21].

For this project, we engaged women who had been diagnosed with breast cancer in one-on-one conversations to capture their lived experiences. The information garnered from the interviews addressed two specific aims: (a) to understand sources of suffering in the context of managing breast cancer, including issues associated with and opportunities afforded by physical activity; and (b) to document the interplay between the personal meaning attributed to self-compassion and physical activity involvement.

2. Materials and Methods

2.1. Design

Hermeneutic phenomenology[22,23] was used for this study in an attempt to more fully understand and appreciate the lived experiences of women with breast cancer, and how these experiences related to physical activity and self-compassion. This phenomenological approach allows not only the rich description of participants' experiences, but the interpretive process of those experiences by the researcher[24]. This approach was selected as being most appropriate for achieving the study's aims, as it allowed the researchers to explore and describe the lived experiences of women with breast cancer, and how they interpret and make sense of those experiences.

2.2. Participants

After receiving Institutional Review Board approval (IRB #6263), recruitment flyers were distributed via newspapers, magazines, newsletters, and online sites, as well as at facilities including hospitals and cancer clinics. Guided by the specific aims of our research, purposive, criterion-based sampling[25] was used for this study to recruit a more homogenous group of participants with relevant lived experiences with breast cancer. Therefore, study participants were selected based on three salient criteria: (a) women 21 years of age or older, (b) English-speaking/reading with access to a computer, and (c) recently or in the past diagnosed with breast cancer. Interested participants were directed to a secure website that took them directly to an Explanation of Research (EOR) page. After reading the EOR, individuals could either volunteer to proceed with the survey or exit the site. Those who chose to exit the survey were thanked for their interest in the study and directed out of the site. Those participants who clicked "proceed," confirming their willingness to participate in the survey (i.e., informed consent), completed demographic information and provided a contact email address. A researcher then contacted the interested participants via email and reiterated the inclusion criteria and what the study entailed. For those individuals who were still interested in participating, an appointment was scheduled to conduct a single 1 h semi-structured interview.

The final sample consisted of 18 adult women, which satisfied the number of participants necessary in order to provide rich descriptive data[26]. Participants' ages ranged from 37 to 75 years (M = 55.8; SD = 10.3), and all study participants identified as White. In reporting the severity of cancer, 38.9% of the sample reported Stage 0, 27.8% reported Stage 2, and 16.7% reported Stage 3. Time since the most recent diagnosis ranged from 1 month to 15 years, with diagnoses having occurred within the last five years for 55.6% of the sample (see **Table 1** for detailed participant profiles).

Table 1. Overview of Participant Background Information.

Pseudonym	Participant Background
Flannel	Before diagnosis, PA (physical activity) was very important. Participant was active and described herself as "pretty fit." Activities included swimming, running, and weight training. During treatment, the participant's PA decreased and eventually stopped running and swimming. Reduced to walking only. Rated herself from a 10 before diagnosis to a 2 during treatment. After treatment, approximately one year later, Flannel was back to 80–90% PA (swimming, hiking, running). Cancer returned. Flannel chose to have a bilateral mastectomy. Pattern and importance of PA went from 10 (diagnosis) to 2 (during treatment) and back to 10 (after treatment)

Table 1. *Cont.*

Pseudonym	Participant Background
Clair	Before diagnosis, the participant described herself as an avid swimmer and “pretty active.” Activities also included FSF (Faculty Staff Fitness) classes, walking, and hiking. During treatment, PA declined dramatically and included minimal walking. After treatment, PA returned to the same level as before diagnosis. The importance of PA remained the same before diagnosis, during treatment, and after treatment, which led to frustration and depression due to the inability to participate in PA.
Netta	Minimal physical activity prior to diagnosis. This continued after the first diagnosis of breast cancer, whereby the participant reported engaging in “the least physical activity possible.” Participant started systematic exercise (walking every day) after the second diagnosis, upon the recommendation of a nurse. The importance of physical activity increased after treatment. Current activities include walking, yoga, and tai chi.
Bonnie	Participant described herself as “very active” before diagnosis. Activities included yoga, lifting weights, spin classes, Pilates, swimming, and walking (six to seven days a week of moderate-vigorous intensity PA). PA decreased dramatically after diagnosis. The importance of physical activity remained very high before, during, and after treatment and continues today.
Parathon	Prior to diagnosis limited structured activity. Some walking. The focus was on raising 5 children. During treatment, the participant walked 2 mi every day with the dog. Continues to walk now, though has more trouble fitting it in. Became more important to her through treatment/diagnosis and since.
Anne	The importance of PA was high (scale of 1–10 = 10) before diagnosis, during treatment, and currently. However, mental, physical, and emotional energy were low during treatment and reconstruction. After a double mastectomy, PA was low, but “consistently moving upward.” Motivation to get back to PA was greater after treatment. Currently, PA is “great.” Participant reported PA not back to where it was as a result of surgeries.
Gertrude	Prior to diagnosis, very active. Placed a high importance on it. Swimming was the main form of activity. Since diagnosis and treatment, PA is lower. Still high importance, just not as much time and treatment made it challenging. Has struggled with lymopdemoa, so still can’t swim much. Bikes more but doesn’t like this as much.
Lynn	Participant described herself as “not much of an athlete.” Exercise came “late in life.” Began swimming later in life for stress reduction and as a source of energy. Frequency = 2 days a week. Within a year of diagnosis, the participant started walking for 60–90 min/day. After diagnosis, the participant increased swimming to 5 days/week. After surgery, participant reported no swimming for 3 weeks but started walking the day after surgery. Currently, the participant walks 6 days/week and swims 3 days/week. Participant views PA as a source of camaraderie. Importance of PA before diagnosis = 8. Importance of PA now = 8.9–9.
Emma	Participant was active prior to diagnosis, participating in Zumba, running on the treadmill, and Tabata. During treatment, PA level varied depending on the level of energy and strength. After chemo, the participant began feeling better and increased PA, including walking, biking, and lifting weights at home. Participant is preparing for reconstructive surgery, but planning to resume activity post-recovery. Currently, Emma participates in walking, gardening, and biking.
Loving Life	Prior to diagnosis, she identified herself as very active. She taught fitness classes, walked, golfed, hiked, and biked. This continued during treatment with some modifications. As treatment progressed, she backed off and allow herself to more fully heal. She was tired and could not use her upper body. Loving Life remains active today despite having some issues with scar tissue in the shoulder.
Tweet	Participant described herself as an “athlete” and PA as always being a huge part of her life. Prior to diagnosis, the participant ran and engaged in outdoor types of exercise (she never liked gyms). After surgery, the participant went running, fell on two different occasions, and significantly injured her biceps. Afterwards, she reduced running to “just hardly ever.” Currently, the participant describes herself as back “100% now.” Importance of PA before diagnosis = 10. Importance of PA now = 10
Sherri	Identified as very active prior to diagnosis. During treatment, activity declined. Walked, swam. The importance of PA was always high. What changed was her ability to do it.
Sandi	Participant described herself as “really active” until the age of 18. From 18 to 40, participants described herself as “not very active at all,” due to motherhood. At 40, the participant started exercising sporadically (a couple of times a week). PA included treadmill jogging & walking. After diagnosis, PA turned into a daily habit, 30 min a day. PA included running, bone strengthening exercising with weights. Now, the participant is running 6 days a week and incorporating a free weight routine for four days a week.
Dana	The participant rated her PA level a 10 prior to diagnosis and treatment. She biked, ran, swam, and played ultimate frisbee. She indicated that PA was ”not something that I even really [thought] about. It’s just kind of what [she did]…how [she] remain[ed] normal.” Since her diagnosis, and throughout treatment, physical activity has become more important. She indicated wanting to ”hold onto” her normal much as possible. The participant had a mastectomy, chemo, radiation, and her ovaries removed. She indicated that it was a challenge for her not to have ”ridiculous” expectations and to be realistic about her need to decrease activity during treatment. Since treatment, she has been increasing her level of PA back to where it was.
Susan	Prior to diagnosis, the participant described herself as “very active” and “very physical.” PA included running, hiking, skiing, and swimming. Participant viewed PA as important both mentally and physically. PA changed after treatment due to physical limitations and pain. However, PA remained important and although the types of PA changed, the level, according to participant, did not decrease.
Linda	Exercise always important. Made it more of a priority after diagnosis. Had more time to do so. When the participant was younger involved in lots of different sports. As an adult, the participant focused more on running and walking. Since diagnosis, walking has been a steadier activity, with some running involved. Struggles with body image and the idea of where she would like to be versus where she is.
Sheryl	Inactive prior to diagnosis. Sheryl started walking with a diagnosis and doing classes such as Better Bones and Balance, a boot camp-like program through the local community college. She has continued with some sort of class and walking through recovery. Sheryl has set up a morning workout schedule. The importance she placed on PA went up and has stayed up.
Ruth	Participant described leisure time activities at work, which included walking three flights of stairs (library) instead of using the elevator. Due to a thyroid disorder, the participant gained 30–40 lb, then in 2011, lost 50 lb with exercise and “watching what I eat.” After three breast surgeries, the participant gained 30 lb. After her three children left for school, the participant converted a bedroom into a state-of-the-art fitness room. Due to work, exercise was sporadic. At the time, the participant was also doing yoga at home (for the past 3 years). Once breast removal surgery was postponed, the participant decided to get in great shape (see quote below). Fitness routine included elliptical 45 min every morning, 6 days a week, and lower body, arms, and abs workouts with weights. The participant is currently two weeks post-surgery.

2.3. Procedures

Interviews were guided by a relativist ontology perspective, which is grounded in the belief that understanding is developed socially and experientially through conversations [26]. The semi-structured interviews allowed freedom to expand on personal situations as well as perspectives [27]. Prior to their scheduled interviews, participants were emailed an interview guide, including the time, date, and location of the interview, a brief description of physical activity and self-compassion, the research questions, and an overview of the interview process. This afforded the women the opportunity to consider the relevant definitions and questions in advance and provide more thoughtful responses. In this study, self-compassion was described as "treating yourself with kindness and understanding like you would treat a good friend who is struggling, feeling inadequate, or feeling alone." Furthermore, all participants' questions were answered to their satisfaction by the researchers before the interviews began. The interviews were guided by broad open-ended questions that encouraged the women to reflect upon and talk at length about their personal experiences with physical activity (e.g., "What was your experience with physical activity prior to and after your diagnosis with breast cancer?" and self-compassion (e.g., "Can you think of times during your experience with breast cancer where you could have benefited from more of a compassionate attitude toward yourself regarding your physical activity?). The complete interview guide is available upon request from the first author. The interviews were conducted in private locations, either in person (n = 17) or via Skype (n = 1), by two researchers with relevant training in interviewing and qualitative methodology. Interviews lasted between 60 and 90 min. Throughout this process, researchers were careful to consider the inherent risks associated with semi-structured interviewing, including over-rapport, over-empathizing, and projecting personal interests and values on the participants [22]. Reflexive journaling was utilized by the researchers throughout the interview process to address these concerns. Additionally, to protect the confidentiality of the participants, pseudonyms were selected by study participants and used throughout the study.

2.4. Data Analyses

A hybrid analytic approach informed by the existing self-compassion framework [19] (i.e., deductive) and generation of themes from the data (i.e., inductive) was employed [28]. Data from transcripts were analyzed according to the six distinct phases of thematic analysis proposed by Ahmed et al. [29]. In phase one of this approach, the verbal data is transcribed verbatim and the lead researcher closely reads each transcript several times (i.e., data immersion). Notes are taken throughout each reading based on relevant observations, reflections, thoughts or comments prompted by the data. The second phase entails the generation of initial codes, whereby the researcher systematically codes the entire data set and then gathers and collates the data relevant to each code. In phase three, the researcher begins grouping codes into broader patterns or themes. To assist with this iterative process, notes and other visual representations (e.g., thematic maps) are used to further organize higher and lower-order themes. Phase four includes carefully reviewing the themes to see if the generated themes appear to form a coherent pattern. Here, the researcher checks and rechecks each generated theme against the original indicative quotes, identifies problematic themes or themes that may have been missed in the preliminary analysis. When, and only when, the researcher is satisfied with the degree to which themes are clearly distinct and representative of the data, the researcher moves on to the next phase. In the fifth phase, generated themes are clearly defined, refined, and named. This involves a more in-depth process of analysis to ensure that the essence of each theme is fully captured. Names should be concise and give the reader an immediate sense of what each theme is about. The final phase of data analysis involves writing the report, which offers one additional opportunity to reevaluate the themes, names, and indicative quotes. The collective themes should provide a compelling story that represents the essence of the qualitative inquiry through meaningful interpretation, link the findings to the literature, and ensure methodological transparency.

2.5. Analytic Rigor

The researchers recognize that their own backgrounds, knowledge, and personal experiences with cancer, self-

compassion, and physical activity influenced various aspects of the study, including the conceptualization, how the interviews were conducted, the analysis, interpretations, and conclusions. Therefore, the researchers were diligent in maintaining an awareness of their own subjectivity and took several steps to enhance the quality of this phenomenological research. Tracy's[30] eight criteria for excellent qualitative research—worthy topic, rich rigor, sincerity, credibility, resonance, significant contribution, ethical, and meaningful coherence—guided this important process. To begin, the study of women's experiences with breast cancer, the importance of physical activity, and the potential role of self-compassion in recovery is a relevant, interesting, and significant topic of research. Rich rigor and credibility were reflected in our commitment to prolonged engagement with the research topic, purposive sampling, in-depth analysis of the data, and rich description via indicative quotes. To further enhance the credibility of the analysis, a second researcher checked the themes that were generated from the data in a process of consensual agreement. In other words, any discrepancies that were identified were addressed and the final thematic structure was completed when agreement had been reached among the researchers on all themes, sub themes, and indicative quotes that evidenced each theme/sub theme.

Resonance and sincerity were established through a detailed recorded account of the research process, self-reflexivity throughout the study, and aesthetic representation of participant profiles. Significant contribution and meaningful coherence were evidenced by the advancement of research and knowledge in the fields of public health, physical activity, and psychology, meaningful interpretations in the context of relevant literature, and the appropriate use of qualitative methodology and procedures that aligned with our specific aims of the current research. Ethical rigor was established via strict adherence to Institutional Review Board protocol, including institutional approval to conduct research, procedural ethics related to participants, and data management and sharing. Finally, to enhance the overall quality of the qualitative research, the researchers sent each participant a copy of the descriptions of the major findings as a form of member checking to determine if participants felt that an accurate representation of their thoughts and feelings were captured in the interviews[24]. Participants were asked to provide feedback by a certain date, where some responses were received; however, no changes were suggested by participants.

3. Results

Analysis of the data generated three main themes for women's experiences that contribute to suffering. A complete overview of core themes and sub themes, along with indicative participant comments and examples are shown in **Table 2**.

Table 2. Experiences that contribute to suffering: Core themes, sub themes, and indicative examples.

Core Themes	Sub Themes	Indicative Examples
Challenges in Relation to Self	Difficulty Accepting Change	• I am judgmental of my physical inability • I feel self-conscious of my body • I am frustrated with my body
	Defeating Self-Appraisal	• I am to blame • I deserve this • I should be doing more
	Striving to Keep Things Normal	• I push hard to carry on • I need to feel some control • I want to prove that cancer doesn't define me
Challenges in Relation to Others	Caring for Others is Easier	• I feel guilty when I care for myself • I let the needs of others outweigh mine • I obtain a sense of self by caring for others • I believe I need to protect others
	Taxing Social Dynamics	• I perceive that my authentic self is expected • I feel alone • I am negatively influence by others' attitudes

Table 2. *Cont.*

Core Themes	Sub Themes	Indicative Examples
Challenges in Relation to PA	Temporary Side Effects of Treatment	• Extreme fatigue • Poor balance/neuropathy • Mood shifts • Fear about what I can do and when • Frustrations with body's limitations • Coping mechanism compromised
	Lasting Side Effects	• Compromised CVS (cardiovascular system) • Restricted mobility • Limited strength • Damaged joints and tendons • Poor balance/neuropathy • Lymphedema

3.1. Experiences That Contribute to Suffering

The findings revealed that challenges in relation to self (e.g., difficulty accepting change, defeating self-appraisals, and striving to keep things normal), challenges in relation to others (e.g., taxing social dynamics, caring for others being easier than caring for self), and challenges in relation to physical activity (e.g., temporary and lasting side effects of treatment) all contributed to experiences with suffering for women diagnosed with breast cancer.

3.1.1. Challenges in Relation to Self

The majority of participants found it difficult to accept the physical changes related to diagnosis and treatment. This included being judgmental of their inability to perform certain physical activities and feeling self-conscious and frustrated with their bodies. As one participant expressed, "I've got pieces of me chopped off. I am fat and dumpy. I am sick. I have no energy…I hope my husband lives a long time, because who's going to want me? You know, a butchered-up person?" In general, women struggled with such self-defeating appraisals. This included feeling they were to blame for their diagnosis and should be doing more in the face of their diagnosis. As one woman put it, "You kind of beat yourself up because you think somehow you might be responsible…I'm not doing what I think I should be doing." Consequently, participants expressed striving to keep things normal by pushing hard to carry on with the status quo, which often resulted in women physically exhausting themselves.

3.1.2. Challenges in Relation to Others

In addition to struggles in relation to themselves, participants also expressed that challenges in relation to others contributed to their suffering. Specifically, taxing social dynamics was identified as an underlying issue. One woman expressed, "[People] don't know what you're still going through. They don't know everything on the inside…you tell them, "I'm sorry I'm a little slow"…[Suddenly], you're not running that marathon with those friends…you're walking with the guys in back…there's a lot of losses…you start realizing what it [is] to be born with a disability…now you're in a subgroup."

The majority of women perceived that family, friends, and coworkers are "waiting for the same you to come back…100% the same person." This often left participants with a sense that there was not space for their authentic selves in relation to others and this further contributed to a deep sense of loneliness. Complicated by the fact that participants expressed that caring for others was easier than caring for themselves, women expressed a significant amount of guilt when they did care for themselves. They let the needs of others outweigh their own needs and derived a sense of self by caring for others. In this, many held a sense that they needed to protect others from their cancer. One participant indicated, "…I didn't even tell my family [that I had cancer] until after I had my surgery and heard that things were okay…I didn't tell any friends…I didn't want the attention. I didn't want people caring for me, taking their time for me."

3.1.3. Challenges in Relation to Physical Activity

Beyond challenges in relation to the self and others, temporary and lasting burdens with physical activity were identified as contributing elements to women's suffering. The majority of participants expressed how physically ex-

hausted they were during treatment and how challenging this was for them. As one woman described, "'I remember waking up in the hospital and my arms were so weak from the surgery that I could not lift a plastic spoon with ice chips and pick it up. It was too heavy…It was too painful…That was the bottom." Such side effects of treatment contributed to inactivity. In turn, women associated inactivity with negative mood shifts due to their coping mechanisms being compromised. As one participant expressed, "[inactivity] just made the treatment process harder…it's already kind of depressing and weird and scary to have cancer…I didn't exactly have one of my major emotional outlets…So that was hard."

Lasting physical ramifications such as restricted mobility, limited strength, poor balance/neuropathy, and lymphedema were identified as a challenge to being physically active. With breast cancer, lymphedema requires wrapping of the arm and this can limit activity, and there is also the consideration of the time it takes to wrap and un-wrap the arm. As one woman expressed, "I'm less active…I'm not able to swim that much during the week. Because [that means]…I'm unwrapped. And the longer I'm unwrapped, the more I swell up…I've had to curtail it to once, maybe twice a week." Furthermore, women struggled with mental hardships such as fear around what they could physically do and when they could do it, as well as the frustrations that came along with being physically limited. Across the sample, individuals tended to either push themselves to the extreme of exhaustion in an effort to keep things normal or disengage from self-care and more basic physical activity.

Analysis of the data also generated three main themes representing women's relationship with self-compassion and how that was associated with physical activity involvement. A complete overview of core themes and sub themes, along with indicative participant comments and examples is shown in **Table 3**.

Table 3. Relationship with self-compassion: Core themes, sub themes, and indicative examples.

Core Themes	Sub Themes	Indicative Examples
Strained Relationship	Intellectually	• I have never considered SC (self-compassion) • I do not know what SC would look like for me • I am unsure of the benefits of SC
	Experientially	• I don't know what SC is • Practicing SC feels uncomfortable • I lack the skill and understanding for how to be self-compassionate
Developing Relationship	I Am on a Path of Understanding SC	• It is an individual journey • It has various faces • Shared experiences • Others' support • Permission from others
	I Am Learning How to Be Self-Compassionate	• To advocate for myself • To trust in myself • To not self-blame
	I Am Practicing a Mindset of SC	• To acknowledge and allow experience • To change what I can and accept what I cannot change • To adopt a mindset that is temporary • To cultivate an awareness around thought
Integrated Relationship	I Cared for Myself	• I engaged in self-soothing behavior • I did something nice for myself
	I Had a Positive Change in Perspective	• I experience gratitude • I enjoy my life as it is
	I Accepted Myself	• I gave myself permission • I learned to be gentle

3.2. Relationship with Self-Compassion and Physical Activity Involvement

The women in this study described their relationship to self-compassion as strained, developing, and/or a more integral part of their lives. Though the women did not speak of their relationship with self-compassion as a continuum, the data indicate that it could be conceptualized as such. Women's relationship to self-compassion was associated with the suffering they experienced and their ability to navigate physical activity during diagnosis, treatment, and recovery.

3.2.1. Strained Relationship

Women who described their relationship with self-compassion as strained, questioned the benefits of self-compassion and indicated that practicing self-compassion felt uncomfortable. Some participants indicated they had never considered self-compassion and did not know what self-compassion would constitute for them. Other participants shared an intellectual understanding of self-compassion, yet a limited experiential understanding of the concept. As one stated, "…you can know something intellectually…in your mind. And sometimes your heart just doesn't match up with it." Several women shared the sentiment that, "I don't know what it's like, to just take care of me. Not yet." They also expressed a desire to do so, yet a lack of skill and understanding in how to do so. Physical activity was not discussed in the context of self-compassion with these individuals, who did not readily relate to experiencing self-compassion.

3.2.2. Developing Relationship

A developing relationship with self-compassion was described by participants as an individual journey that requires individuals to 1) understand what self-compassion means to them, 2) learn how to be self-compassionate, and 3) practice a mindset of self-compassion. Developing self-compassion was associated with one's ability to allow for shared human connections. As one woman expressed, "a support group is really helpful…you meet with people going through similar things…[they] understand what you're feeling and experiencing…[this helps] make self-compassion not just be something…in your head, but…in your heart." Such connections support the development of one's unique relationship with self-compassion and ability to care for oneself. One woman stated, "somebody who has had [cancer], they've been there, they've walked in the shoes that you're getting ready to walk in. So if they can tell you, look, you're going to feel like, 'Why should I even bother walking to that mailbox, because what is it even going to do?…[yet] it will help you. It will help you to go to that mailbox every single day.' Such experiences make a difference."

Practicing a mindset of self-compassion involves acknowledging and allowing for one's experience, accepting what one cannot change, and changing what one can. As one participant shared, "I had to learn that it's okay to have certain feelings. Even though they might be feelings I don't necessarily want or like, that's okay. Their feelings. They don't have to dictate my life or define my life." Such a mindset requires cultivating awareness around one's thought. One woman described how she is "in the process of trying to acknowledge and be aware…[of] what am I really feeling, what's behind this feeling" as a means of being better able to engage in self-care and advocate for her own needs. Another shared that by "being truthful with yourself…acknowledging what life is rather than trying to pretend that it's something that it's not" helps her be kinder towards herself and her physical activity.

For some, being kinder involved encouraging themselves to do more physical activity, while for others, it involved giving themselves a break from physical activity. A participant stated, "One of the most helpful things a friend, who's a doctor, said to me [was] 'Look. Just give in to it. And just pretend it's the flu. And have a few days on the couch…it was just that permission…to kind of let go and not attempt to do everything I felt I should be doing."

3.2.3. Integrated Relationship

A more established relationship with self-compassion nurtured more positive physical activity experiences. Women who identified self-compassion as being integral to their lives tended to engage in movement from a kinder place (i.e., as a means of self-care), adjust their activity levels to align with their abilities, embrace where they were physically, and view their activity from a new perspective. Participants felt practicing self-compassion allowed them to be gentler and more accepting of the changes in their bodies and physical activity levels. As one woman indicated, "I'm not giving myself…permission to do nothing, just enough leniency to allow myself to be proud of the things I can do and…to accept that physical activity is going to be of benefit, no matter how small." This acceptance is in contrast to the suffering expressed by women who pushed to keep things normal through their experience with cancer. Such positive adjustments in perspective supported congruency between women's expectations around physical activity and their ability. As one participant expressed, "I never thought dishes and vacuuming were physical activity until after these surgeries. And suddenly it became, 'Oh, I think I'm sweating!' So it's amazing how your focus on what physical activity becomes changes after you have surgery."

Re-defining what physical activity meant to participants offered them a renewed approach to activity. As one woman described regarding a white water rafting trip she went on after treatment, "I remember being really upset that I couldn't take the raft and keep it in a straight line. That I zigzagged. And then I remember at one point finally being able to laugh about it. Because now all I could do was say we're seeing more of the river." Another participant described a similar experience when she tried to go for a run, yet was unable. She indicated that now she has a "…different definition [to physical activity]…I get to like look around, I feel other parts of my body…it's more enjoyable." Practicing an attitude of self-compassion offered these women an alternative view to the situation.

Lastly, when self-compassion was experienced as more integral to a woman's life, physical activity was seen as a method of self-care (e.g., an avenue for self-soothing and to reward oneself). As one participant described, "until the day you get your diagnosis, you're not thinking about [cancer]…And then when [it] happens, [cancer is] always kind of there…it was wonderful to find activities where you're not thinking about cancer. And that's one thing that I can say that I loved about running." For this participant, running was a means of coping and self-soothing. Similar experiences were shared by other participants. Another woman described how swimming was used as an avenue to reward herself during her experience with cancer. She indicated, "You don't know when your treatment is over…your last chemotherapy? When your hair grows back?…at some marker, I wanted to swim in warm water…we went to this island in the Caribbean. And I swam… twice a day. Not vigorously, [I was] just being embraced in warm water. Warm, salty, floaty water."

4. Discussion

It was readily apparent that the women in this study who had been diagnosed with breast cancer could relate to suffering. The challenges associated with physical activity compounded the two additional sources of suffering that included challenges with self and challenges with others. Noteworthy to the researchers was that an emphasis on physical activity in this investigation conjured up the idea for some participants that if indeed physical activity is desirable and can even possibly reduce the incidence of breast cancer, then could their own diagnosis be something they could have prevented with more physical activity (or other healthy lifestyle choices) in the past? For example, some women reported feeling that they were to blame for their own diagnosis. Thus, having clinicians discuss with their patients the role that physical activity plays in breast cancer prevention, diagnosis, treatment, and the recovery process could benefit from a self-compassionate approach. A forward focused approach such as this would overshadow notions of self-blame.

The practice of self-compassion also seemed to have assisted women in this study in better relating to themselves and their experiences with breast cancer in new and healthier ways. For example, as a coping mechanism, participants reported either pushing too hard in an effort to keep things normal or withdrawing from daily activities. This is consistent with previous work that found those with breast cancer avoided reminders of their diagnosis by disengaging from normal life activities [31].

Perception of personal control also influences self-care, specifically physical activity after breast cancer treatment [32]. This may result in women over-exerting themselves in an effort to create a sense of normalcy in their lives. While strategies such as pushing hard or withdrawing may be useful in dealing with the immediate situation, they may not be beneficial long-term. Rather, a more balanced approach of self-care and self-compassion would be healthier coping strategies. For example, the women in this study with a more established relationship with self-compassion were better at identifying their needs and meeting those needs. This encouraged women to meet their situation with greater acceptance and ease. By doing so, they were able to give themselves the appropriate amount of leniency in their physical activity and moderate their behavior. This is consistent with the work of others who have found that self-compassionate people who have a balance of positive and negative coping strategies, such as moderation of emotional experiences instead of engaging in maladaptive behaviors, obtain better outcomes [33–37].

More self-compassionate women appear better able to cope with physical changes to their bodies, including the temporary and lasting side effects associated with medical treatment. For example, Berry and colleagues [38] proposed a sub-domain of "body" self-compassion, in which individuals

have a gentler approach to their body and perceived physical imperfections and limitations. Specifically, initial research suggests that self-compassion mediates the relationship between physiological distress and body image disturbances among women who have experienced breast cancer [39–41]. Moreover, body image is an important determinant of phys -ical activity participation among women who have experi -enced breast cancer [10,32,42].

In sum, self-compassion may act as an internal resource for women, one that allows them to shift their view of what is acceptable, desirable, and/or even possible in terms of different forms of physical activity (e.g., lifestyle, routine physical activities versus formal, structured forms of exercise). This holistic shift helps them move from a primary focus on goal-oriented physical activity experiences (e.g., miles, speed, time), toward one that embraces a broader range of physical activity experiences. As such, women described noticing the intricacies of their environment and subtle aspects of being in their bodies. Others, too, have observed that greater levels of self-compassion are associated with greater experiences of embodiment and decreases in self-critical thinking [43]. Therefore, it is reasonable that women who have a more rooted relationship with self-compassion will be better able to engage in physical activity in new and meaningful ways despite the hardship of changing circumstances associated with breast cancer diagnosis and treatment.

5. Conclusions

This study contributes to the body of literature by offering detailed accounts of women's lived experiences with physical activity and self-compassion in the context of breast cancer diagnosis, treatment, and recovery. There are, how -ever, some limitations with this study that should be con -sidered. First, the racial and cultural homogeneity of the participants may limit the transferability of the findings. Se-lection bias also needs to be acknowledged as the participants,though targeted because of their experience with breast can-cer, self-selected to participate in the study and, as such,might hold different views and experiences compared to the women who did not choose to engage. In addition, emo-tional recall may be an issue. Participants in this study were at different stages of diagnosis and treatment, and it is rea-sonable that the time and degree of distress may influence a woman's appraisal and reporting of her situation. For example, Reyes [19] conceptualization of self-compassion indicates that when a person experiences an appropriate trigger, they have the realization their life has worth and changes can be made, such that the experience of being diagnosed and treated for breast cancer might conceivably influence a woman's relationship with self-compassion. Future research could investigate the nature of the relationship between traumatic experiences and one's development and/or maintenance of self-compassion.

The implications of the current study suggest that women with breast cancer experience suffering in multiple dimensions and that self-compassion has relevance as a potential adaptive response to such suffering. Moreover, by fostering a greater sense of self-compassion, higher levels of self-care will be achieved. Fostering a climate of self-compassion, which encourages individuals to relate to themselves and their experience in the world with tenderness, needs to be a focus for women who have experienced breast cancer, as such attention will likely lead to more enduring and positive health behaviors, including regular physical activity engagement.

Healthcare providers, public health officials, and physical activity professionals can reinforce and support self-compassion through appropriate policies, programs, and services. For example, educating the public about the benefits of self-compassion as a healthy coping strategy to empower women diagnosed with breast cancer to engage in self-care and other positive health behaviors (e.g., physical activity). Additionally, those who deliver physical activity interventions to cancer patients and survivors ought to pay particular attention to building self-compassion among their participants and within their settings.

Author Contributions

Conceptualization, K.A.R. and E.M.; methodology, K.A.R. and E.M.; validation, K.A.R., E.M. and B.J.C.; formal analysis, K.A.R. and E.M.; investigation, K.A.R. and E.M.; data curation, K.A.R. and E.M.; writing—original draft preparation, E.M.; writing—review and editing, K.A.R. and B.J.C.; supervision, B.J.C. All authors have read and agreed to the published version of the manuscript.

Funding

This work was supported by the Celia S. and G. Kenneth Austin Innovative Research Fund, administered through the College of Public Health and Human Sciences at Oregon State University.

Institutional Review Board Statement

The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Review Board of Oregon State University (#6298) for studies involving humans.

Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

Data Availability Statement

Data is unavailable due to privacy or ethical restrictions.

Conflicts of Interest

The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

References

[1] National Cancer Institute, 2025. Cancer Stat Facts: Common Cancer Sites. Available from: National Institutes of Health. Available from: https://seer.cancer.gov/statfacts/html/common.html (cited 9 November 2025).

[2] Loprinzi, P.D., Cardinal, B.J., Smit, E., et al., 2012. Physical Activity and Breast Cancer Risk. Journal of Exercise Science and Fitness. 10(1), 1–7. DOI: https://doi.org/10.1016/j.jesf.2012.04.004

[3] Timmins, I.R., Jones, M.E., O'Brien, K.M., et al., 2024. International Pooled Analysis of Leisure-Time Physical Activity and Premenopausal Breast Cancer in Women from 19 Cohorts. Journal of Clinical Oncology. 42(8), 927–939. DOI: https://ascopubs.org/doi/10.1200/JCO.23.01101

[4] Loprinzi, P.D., Cardinal, B.J., 2012. Effects of Physical Activity on Common Side Effects of Breast Cancer Treatment. Breast Cancer. 19(1), 4–10. DOI: https://doi.org/10.1007/s12282-011-0292-3

[5] Agussalim, N.Q., Ahmad, M., Prihantono, P., et al., 2024. Physical Activity and Quality of Life in Breast Cancer Survivors. Breast Disease. 43(1), 161–171. DOI: https://pubmed.ncbi.nlm.nih.gov/38875025/

[6] Liu, M., Kibreath, S., Yee, J., et al., 2025. Motivations and Perceptions for Physical Activity in Women Living with Metastatic Breast Cancer: A Qualitative Interview Study. BMC Cancer. 25(1), 80. DOI: https://doi.org/10.1186/s12885-023-11335-x

[7] Szymlek-Gay, E.A., Richards, R., Egan, R., 2011. Physical Activity Among Cancer Survivors: A Literature Review. The New Zealand Medical Journal. 124(1337), 77–89. Available from: https://pubmed.ncbi.nlm.nih.gov/21946880/

[8] Howard-Anderson, J., Ganz, P.A., Bower, J.E., et al., 2012. Quality of Life, Fertility Concerns, and Behavioral Health Outcomes in Younger Breast Cancer Survivors: A Systematic Review. Journal of the National Cancer Institute. 104(5), 386–405. DOI: https://doi.org/10.1093/jnci/djr541

[9] Blanchard, C.M., Courneya, K.S., Stein, K., 2008. Cancer Survivors' Adherence to Lifestyle Behavior Recommendations and Associations with Health-Related Quality of Life: Results from the American Cancer Society's SCS-II. Journal of Clinical Oncology. 26(13), 2198–2204. DOI: https://doi.org/10.1200/jco.2007.14.6217

[10] Castonguay, A.L., Wrosch, C., Pila, E., et al., 2017. Body-Related Shame and Guilt Predict Physical Activity in Cancer Survivors Over Time. Oncology Nursing Forum. 44(4), 465–475. DOI: https://doi.org/10.1188/17.onf.465-475

[11] Zhang, Y., Li, G., Zhang, S., et al., 2025. Effects of Exercise on Depression and Anxiety in Breast Cancer Survivors: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. Cancer Medicine. 14(5), e70671. DOI: https://doi.org/10.1002/cam4.70671

[12] Seligman, M.E.P., Csikszentmihalyi, M., 2000. Positive Psychology: An Introduction. American Psychologist. 55(1), 5–14. DOI: http://dx.doi.org/10.1037/0003-066X.55.1.5

[13] Neff, K., 2003. Self-Compassion: An Alternative Conceptualization of a Healthy Attitude toward Oneself. Self and Identity. 2(2), 85–101. DOI: https://doi.org/10.1080/15298860309032

[14] Campos, R.C., Besser, A., Ferreira, R., et al., 2012. Self-Criticism, Neediness, and Distress among Women Undergoing Treatment for Breast Cancer: A Preliminary Test of the Moderation Role of Adjustment to Illness. International Journal of Stress Management. 19(2), 151–174. DOI: https://psycnet.apa.org/doi/10.1

037/a0027996

[15] Chen, Y., Liu, R., Xiao, J., et al., 2024. Effects of Online Mindfulness Self-Compassion Intervention on Negative Body Image in Breast Cancer Patients: A Randomized Controlled Trial. European Journal of Oncology Nursing. 72, 102664. DOI: https://doi.org/10.1016/j.ejon.2024.102664

[16] de Castro Coelho, E.M.R.T., Mendes, H.I.A., Varajidas, C.F., et al., 2024. Impact of Physical Exercise on Quality of Life, Self-Esteem, and Depression in Breast Cancer Survivors: A Pilot Study. Onco. 4(3), 207–216. DOI: https://doi.org/10.3390/onco4030015

[17] Garcia, A.C.M., Camargos, J.B., Sarto, K.K., et al., 2021. Quality of Life, Self-Compassion, and Mindfulness in Cancer Patients Undergoing Chemotherapy: A Cross-Sectional Study. European Journal of Oncology Nursing. 51, 101924. DOI: https://doi.org/10.1016/j.ejon.2021.101924

[18] Hoffman, C., Baker, B., 2023. Effects of Mindful Self-Compassion Program on Psychological Well-Being and Levels of Compassion in People Affected by Breast Cancer. Alternative Therapies in Health and Medicine. 29(6), 36–41. Available from: https://self-compassion.org/wp-content/uploads/2024/06/Hoffman2023.pdf

[19] Reyes, D., 2012. Self-Compassion: A Concept Analysis. Journal of Holistic Nursing. 30(2), 81–89. DOI: https://doi.org/10.1177/0898010111423421

[20] Zhang, S., Roscoe, C., Pringle, A., 2023. Self-Compassion and Physical Activity: The Underpinning Role of Psychological Distress and Barrier Self-Efficacy. International Journal of Environmental Research and Public Health. 20, 1480. DOI: https://doi.org/10.3390/ijerph20021480

[21] Wong, M.Y.C., Chung, P.-K., Leung, K.-M., 2021. The Relationship Between Physical Activity and Self-Compassion: A Systematic Review and Meta-Analysis. Mindfulness. 12(3), 547–563. DOI: https://psycnet.apa.org/doi/10.1007/s12671-020-01513-4

[22] Sparkes, A.C., Smith, B., 2014. Qualitative Research Methods in Sport, Exercise, and Health: From Process to Product. Routledge: London, UK. DOI: https://doi.org/10.4324/9780203852187

[23] van Manen, M., 2016. Researching Lived Experience: Human Science for Action Sensitive Pedagogy, 2nd ed. Routledge: New York, NY, USA. Available from: https://www.routledge.com/Researching-Lived-Experience-Human-Science-for-an-Action-Sensitive-Pedagogy/vanManen/p/book/9781629584164

[24] Creswell, J.W., 2007. Qualitative Inquiry & Research Design: Choosing among Five Approaches, 2nd ed. Sage Publications: Thousand Oaks, CA, USA.

[25] Patton, M., 1990. Qualitative Evaluation and Research Methods, 2nd ed. Sage Publications: London, UK. Available from: https://psycnet.apa.org/record/1990-97369-000

[26] Sparkes, A.C., Smith, B., 2009. Judging the Quality of Qualitative Inquiry: Criteriology and Relativism in Action. Psychology of Sport and Exercise. 10(5), 491–497. DOI: https://psycnet.apa.org/doi/10.1016/j.psychsport.2009.02.006

[27] Smith, B., Caddick, N., 2012. Qualitative Methods in Sport: A Concise Overview for Guiding Social Scientific Sport Research. Asia Pacific Journal of Sport and Social Science. 1(1), 60–73. DOI: http://dx.doi.org/10.1080/21640599.2012.701373

[28] Proudfoot, K., 2022. Inductive/Deductive Hybrid Thematic Analysis in Mixed Methods Research. Journal of Mixed Methods Research. 17(3), 308–326. DOI: https://doi.org/10.1177/15586898221126816

[29] Ahmed, S.K., Mohammed, R.A., Nashwan, A.J., et al., 2025. Using Thematic Analysis in Qualitative Research. Journal of Medicine, Surgery, and Public Health. 6, 100198. DOI: https://doi.org/10.1016/j.glmedi.2025.100198

[30] Tracy, S.J., 2010. Qualitative Quality: Eight "Big-Tent" Criteria for Excellent Qualitative Research. Qualitative Inquiry. 16(10), 837–851. DOI: https://doi.org/10.1177/1077800410383121

[31] Maddocks, M., 2020. Physical Activity and Exercise Training in Cancer Patients. Clinical Nutrition ESPEN. 40, 1–6. DOI: https://doi.org/10.1016/j.clnesp.2020.09.027

[32] Charlier, C., Van Hoof, E., Pauwels, E., et al., 2012. Treatment-Related and Psychosocial Variables in Explaining Physical Activity in Women Three Week to Six Months Post-Treatment of Breast Cancer. Patient Education and Counseling. 89(1), 171–177. DOI: https://doi.org/10.1016/j.pec.2012.06.029

[33] Agedini, A., Joibari, A.Y., 2022. The Relationship Between Resilience and Mindfulness with Mental Toughness by the Mediating Role of Self-Compassion in Cancer Patients. Basic Clinical Cancer Research. 14(1), 59–69. DOI: https://doi.org/10.18502/bccr.v14i1.14390

[34] Ben-Artzi, T.J., Bazilansky, S., Cohen, M., 2024. The Associations of Emotion Regulation, Self-Compassion, and Perceived Lifestyle Discrepancy with Breast Cancer Survivors' Healthy Lifestyle Management. Journal of Cancer Survivorship. 20, 369–378. DOI: https://doi.org/10.1007/s11764-024-01656-6

[35] Sirois, F.M., Molnar, D.S., Hirsch, J.K., 2015. Self-Compassion, Stress, and Coping in the Context of Chronic Illness. Self and Identity. 14(3), 334–347. DOI: http://dx.doi.org/10.1080/15298868.2014.996249

[36] Kyrchan, N., Skulphan, S., Thapinta, D., et al., 2024. Factors Predicting Self-compassion among Patients with Breast Cancer Undergoing Chemotherapy in Thailand: A Cross-Sectional Study. Belitung Nursing Journal. 10(3), 341–350. DOI: https://doi.org/10.33546/bnj.3359

[37] Stutts, L.A., Blomquist, K.K., 2018. The Moderating Role of Self-Compassion on Weight and Shape Concerns and Eating Pathology: A Longitudinal Study. International Journal of Eating Disorders. 511(8), 878–889. DOI: https://doi.org/10.1002/eat.22880

[38] Berry, K.-A., Kowalski, K.C., Ferguson, L.J., et al., 2010. An Empirical Phenomenology of Young Adult Women Exercisers' Body Self-Compassion. Qualitative Research in Sport and Exercise. 2(3), 293–312. DOI: https://doi.org/10.1080/19398441.2010.517035

[39] Pinto-Gouveia, J., Duarte, C., Matos, M., et al., 2014. The Protective Role of Self-Compassion in Relation to Psychopathology Symptoms and Quality of Life in Chronic and in Cancer Patients. Clinical Psychology and Psychotherapy. 21(4), 311–323. DOI: https://doi.org/10.1002/cpp.1838

[40] Przezdziecki, A., Alcorsco, J., Sherman, K.A., 2016. My Changed Body: Background, Development and Acceptability of Self-Compassion Based Writing Activity for Female Survivors of Breast Cancer. Patient Education and Counseling. 99(5), 870–874. DOI: https://doi.org/10.1016/j.pec.2015.12.011

[41] Przezdziecki, A., Sherman, K.A., Baillie, A., et al., 2013. My Changed Body: Breast Cancer, Body Image, Distress, and Self-Compassion. Psycho-Oncology. 22, 1872–1879. DOI: https://doi.org/10.1002/pon.3230

[42] Chan, N.C., Chow, K.M., 2022. A Critical Review: Effects of Exercise and Psychosocial Interventions on the Body Image of Breast Cancer Survivors. Nursing Open. 10(4), 1954–1965. DOI: https://doi.org/10.1002/nop2.1507

[43] Falconer, C.J., Slater, M., Rovira, A., et al., 2014. Embodying Compassion: A Virtual Reality Paradigm for Overcoming Excessive Self-Criticism. PLoS ONE. 9(11), e111933. DOI: https://doi.org/10.1371/journal.pone.0111933