

Breast Cancer Survivors' Decisions to Join a Dragon Boating Team

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Physical activity is associated with psychosocial and physical health benefits for breast cancer survivors. Little is known, however, about survivors' decision-making processes when considering joining group physical activity programs designed for survivors. Guided by interpretive description methodology (Thorne, 2008), $N = 15$ breast cancer survivors who were considering or had made the decision to join a dragon boating team were interviewed about their decisions to participate. Four patterns of decision making were identified: *searching for a way to care for physical and social needs, taking advantage of opportunities created by breast cancer, dove in with little contemplation, and hesitant to connect with other survivors*. Results have implications for understanding decisions to participate in physical activity groups in this population and overcoming challenges to participation.

Keywords: decision making, participation motivation, group exercise, interpretive description

Breast cancer (BC) survivors often face physical, emotional, social, spiritual, and financial challenges that affect well-being long after treatment ends (Hadd, Sabiston, McDonough, & Crocker, 2010; Vivar & McQueen, 2005). Physical activity is a promising avenue for enhancing quality of life postcancer, as it can address concerns including anxiety, quality of life, fitness, and the risk of recurrence (Courneya, Mackey, & McKenzie, 2002; Holmes, Chen, Feskanich, Kroenke, & Colditz, 2005; Schmitz et al., 2010). Social support is also an important intervention component, as it predicts positive outcomes including quality of life, posttraumatic growth, and physical activity (Alfano et al., 2009; McDonough, Sabiston, & Wrosch, 2014). Groups that bring survivors together can provide social support through sharing BC information and understanding of the BC experience (Bell, Lee, Foran, Kwong, & Christopherson, 2010; Deans, Bennett-Emslie, Weir, Smith, & Kaye, 1988; Docherty, 2004). Group physical activity may provide benefits of both group interaction and physical activity.

Participants in physical activity groups for BC survivors often experience physical, psychological, and social benefits. They frequently report improved perceptions of strength, fitness, and physical attractiveness (Emslie et al., 2007; McDonough, Sabiston, & Crocker, 2008; Pinto & Trunzo, 2004). Many also enjoy physical activity groups (Emslie et al., 2007), and experience increased

confidence and competence at a time when life seems out of control (McGrath, Joske, & Bouwman, 2011; Sabiston, McDonough, & Crocker, 2007). Group physical activities for survivors offer opportunities to build support networks, disclose experiences, receive support, and role model coping with BC (Hefferon, Greal, & Mutrie, 2008; McDonough et al., 2008; Sabiston et al., 2007). These opportunities for support and disclosure may also facilitate posttraumatic growth: perceptions that BC not only caused distress, but also led to positive psychological growth such as renewed appreciation of life, the ability to form closer relationships, psychological strength, new opportunities, and spiritual changes (McDonough, Sabiston, & Ullrich-French, 2011; Sabiston et al., 2007; Tedeschi & Calhoun, 2004). The unique manner in which support is provided is also valued: such groups create a network of survivors who can support each other, but the main focus is on physical activity (Emslie et al., 2007; McDonough et al., 2008; Sabiston et al., 2007).

Some authors have suggested that BC may be a "teachable moment" when people are open to adopting health behaviors (Park & Gaffey, 2007). However, most survivors are not sufficiently active to obtain health benefits (Harrison, Hayes, & Newman, 2009), and survivors' perceptions of exercise and programs offered, and their decision-making processes regarding participating may affect physical activity. Therefore, there is a need to better understand how BC survivors make decisions about joining group physical activity programs. While there is little research on this issue, one study that asked cancer survivors to choose to participate in either a walking group or dragon boat team found that younger, Caucasian

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participants tended to choose dragon boating, but other demographic, clinical, group participation history, physical function, quality of life, mental health, benefit finding, or spirituality variables did not predict participants' decisions (Carter et al., 2010). Those findings highlight the need to consider theoretical perspectives on decision making and survivors' perspectives when making decisions about joining a group physical activity program.

Research examining survivors' group physical activity experiences provide hints about this decision. Some survivors want to connect with others who share the BC experience, whereas others are explicitly seeking social support (McDonough et al., 2011; Parry, 2008; Unruh & Elvin, 2004). Others survivors cite exercise, competition, and athleticism as attractive elements (McDonough et al., 2011; Parry, 2008; Unruh & Elvin, 2004). Several factors affecting physical activity after BC have been documented, including physical barriers (limited mobility, fatigue, pain), environmental/organizational barriers (weather, cost, safety, inadequate facilities or equipment, lack of knowledge, and time), psychosocial barriers (lack of motivation, social support, and confidence or skill), physical motivators (improving weight, health, fitness, and energy), and psychosocial motivators (social support, moral obligation, enjoyment, body image, positive emotions, attitude, accomplishment, habit, and social norms; Brunet, Taran, Burke, & Sabiston, 2013).

Research on physical activity motivation and adherence has identified several predictors of involvement in this population. Better physical and mental health, autonomy, competence, social support, intentions, and subjective norms predict motivation for and adherence to physical activity (Courneya, Blanchard, & Laing, 2001; Milne, Wallman, Guilfoyle, Gordon, & Courneya, 2008; Pinto & Ciccolo, 2011; Wilson, Blanchard, Nehl, & Baker, 2006). Self-determination theory suggests that satisfying inherent needs for autonomy (volition over decisions and actions), competence (effectiveness at achieving desired outcomes), and relatedness (genuine social connections and inclusion) promotes more adaptive motivation and persistence (Deci & Ryan, 1991). According to the theory of planned behavior (Ajzen, 1991), physical activity is predicted by intentions, which are determined by attitudes (positive or negative evaluations of engaging in a behavior), subjective norms (perceived social pressures), and perceived behavioral control (extent to which the behavior is volitional). In the general population, subjective norms have weak-to-moderate effects on intention and exercise behavior (Buckworth & Dishman, 2007); however, subjective norms have been found to be the strongest predictor of intention to exercise among BC survivors (Courneya et al., 2001).

The literature on BC treatment and health behavior decisions may also inform research on the decision to join physical activity groups. The common sense model of self-regulation of health and illness suggests that health- and illness-related decisions are impacted by lay understandings of the symptoms, labels, causes, consequences, and controllability of the disease and one's health (Leventhal, 2012). Furthermore, emotions and

illness representations influence each other and interact to affect coping responses and health behavior decisions (Cameron & Jago, 2008). These "common-sense" understandings are a reflection of both one's experience, and social and cultural context. Empirical research on treatment decisions suggests beliefs about risks and benefits, appearance concerns, time, perceived involvement in the process, support, opinions, social norms, and beliefs about the causes of cancer can affect treatment decisions (Sivell, Edwards, Elwyn, & Manstead, 2011). Some patients want to defer to physicians for treatment decisions as it may make them feel more secure regarding the choice (Reaby, 1998; Stanton et al., 1998). However, consistent with research on physical activity behavior (Wilson et al., 2006), having some degree of choice or autonomy in treatment decisions has benefits such as enhanced quality of life, perceived control, self-worth, decision-making skills, and health outcomes (Andersen, Bowen, Morea, Stein, & Baker, 2009; Jansen, Otten, van de Velde, Nortier, & Stiggelbout, 2004). For survivors, choosing to participate in support groups is predicted by higher BC-related stress, lower avoidance tendencies, the belief that stress can cause BC, and younger age (Cameron et al., 2005). Similarly, beliefs that lack of exercise is a cause of cancer predicts physical activity (Costanzo, Lutgendorf, & Roeder, 2011).

A better understanding of the factors BC survivors consider when deciding to join a survivor physical activity group, and their interpretations of their decision-making processes would inform theory on how such decisions are made, and facilitate program design and outreach. Such knowledge would further our understanding of how individual survivors consider particular barriers and facilitating factors, and the variation in how individuals interpret and integrate those factors to arrive at a decision regarding participation. Such knowledge could enhance program promotion, as it could inform new approaches to engage with survivors in ways that align with how they are thinking about this decision. Therefore, the purpose of this study was to examine BC survivors' perceptions of the factors that influenced their decisions to join a physical activity group, and their experiences in making that decision.

Method

Methodology

Interpretive description guided design and analysis (Thorne, 2008). This methodology is designed to address research questions in health disciplines that pertain to individuals' understandings of an event. The product is a descriptive account that illuminates thematic patterns and commonalities believed to characterize the phenomenon being studied and individual variation (Thorne, Kirkham, & O'Flynn-Magee, 2004). Interpretive description is constructivist in that it acknowledges the presence of multiple constructed realities, an interaction between the inquirer and the object of inquiry, and the tenet that findings must be grounded in the data (Thorne et al., 2004). Therefore,

conducting data collection in a naturalistic setting, attending to subjective and experiential knowledge, examining commonalities and individual variations, recognizing time and context, and acknowledging that human experience is at least in part socially constructed are tenets of this method (Thorne, 2008).

Research Design

This study employed individual interviews with BC survivors who had considered joining a dragon boating team, conducted near their place of training. Dragon boating is a 22-person canoe-like activity that was used in the first study debunking the assumption that strenuous upper-body physical activity would result in lymphedema among BC survivors (Harris, 2012; McKenzie, 1998), and has become a popular group physical activity for BC survivors worldwide. Semistructured individual interviews allowed us to ask focused questions about the decision to join the team, while allowing participants to guide the discussion based on personal experiences. The sample size was selected to balance sampling enough participants to document commonalities and variation, and allowing analysis and comparison of individual, contextualized accounts. Based on observations that interpretive description studies tend to include 5–30 participants to examine individual experiences within a relatively homogenous group (Thorne, 2008), previous research with this population suggesting we may expect variety in psychological processes experienced (e.g., McDonough et al., 2011), and that previous qualitative research on psychological processes with this population have used sample sizes of 3–20 (e.g., Sabiston et al., 2007; Unruh & Elvin, 2004), our goal was to recruit 12–20 participants.

Participants

Fifteen women who had made the decision to participate on a dragon boating team for BC survivors in the Midwestern United States volunteered for this study. Participants ranged in age from 40 to 65 years ($M_{\text{age}} = 54$ years, $SD = 7.31$). All participants were Caucasian and had at least a postsecondary diploma or degree. Most were married or living with a life partner ($n = 11$), three were single and one was divorced. Household income ranged from \$20–39,999 to \$100,000 or higher (median = \$80,000–100,000). Time since first BC diagnosis ranged from 1 to 23 years. Four were undergoing treatment when they joined, and five joined within a year of completing treatment. Participants had undergone multiple treatments, including mastectomy, lumpectomy, lymph node removal, chemotherapy, radiation therapy, hormonal therapy, and breast reconstruction surgery. Six had attended a BC support group.

Procedures

Approval was obtained from the university research ethics board. Because interpretive description research

is grounded in prior knowledge, before data collection we conducted an extensive literature review of relevant theoretical and empirical knowledge, disciplinary orientation, and personal experience (Thorne, 2008). A summary of this literature review is represented in the introduction. Specifically, we reviewed theoretical and empirical literature regarding decision making and motivation for physical activity, social support programs, and health behaviors among BC survivors, and considered practical and personal experience with exercise program delivery and BC survivors. A semistructured interview guide was designed based on the concepts identified in the literature review, and to allow participants to provide their own perspectives. The interview guide contained questions about their experience of deciding to join, their thought process, factors they considered, and probes for elements such as barriers, autonomy, social support, subjective norms, and illness representations that were identified in the literature review. A pilot interview was conducted with a BC survivor to obtain feedback about the relevance and wording of questions, and resulted in minor modifications of some wording. Pilot interview data were not used in subsequent analysis. Sample questions from the interview guide include, “Tell me your story of joining the dragon boat team,” and “Tell me about the thought process you went through when you were thinking about joining.” A copy of the interview guide is available by request.

The dragon boating team board was contacted and permission was received to recruit participants. A recruitment e-mail was sent to team organizers who forwarded it to their e-mail list, which included current members, individuals who had contacted them to inquire about joining, and supporters of the team. The researchers also visited a team practice to explain the study and invite members to participate. Interested participants contacted the researchers to volunteer and schedule an interview, and provided written consent. While a precise response rate cannot be determined because the e-mail list also included individuals ineligible for the study (e.g., supporters of the team who were not BC survivors), the e-mail list contained approximately 120 addresses. Interviews were conducted by the first author and were on average 47.20 min ($SD = 14.65$ min). Interviews were audio recorded and transcribed verbatim by the first author. Participants were assigned pseudonyms. Data were stored and managed during analysis using QSR NVivo9 software.

Data Analysis

The goal of interpretive description analysis is to document and interpret participants’ point of view in light of existing theory, research, and practical disciplinary knowledge (Thorne, 2008). Therefore, analysis involved inductively analyzing participants’ descriptions of their interpretations of their experiences, and reflecting upon, comparing, and challenging the findings in light of previous knowledge examined in the literature review. The first author read one participant’s transcript, and coded text relevant to the decision to join the dragon boating

team. Text with similar meaning was grouped within the same code. Codes with related ideas were organized into categories. This process was repeated with each participant's data. Once all transcripts were coded, they were reread to ensure consistent coding. The inductively derived codes were compared with concepts identified in the extant literature, and where ideas were conceptually similar, labels were chosen to be consistent with existing literature. The second author reviewed the coding, and questioned and challenged the first author's interpretations. Differences of opinion were resolved through discussion until consensus was reached.

Each case was then reviewed, considering the coded experiences relevant to the decision-making process and a rereading of the participant's transcript. A narrative of the decision-making process was written for each participant. Participants were then invited to take part in a follow-up interview. One attempt to contact a participant was unsuccessful; therefore, 14 follow-up interviews were conducted. Interviews lasted an average of 12.21 min ($SD = 4.19$ min). Participants were provided with a list of the codes relevant to their case and their individual narrative account and asked to clarify, elaborate, and/or reflect on interpretations of their individual narratives, and were asked questions that arose during the initial analyses. These interviews were recorded, transcribed, and coded, and new information was incorporated into the individual narratives. The individual narratives were then reviewed, compared with each other and with the concepts identified in the literature review, and organized into groups of participants with similar decision processes. A collective narrative was written for each group. Throughout data collection and analysis, the first author kept a notebook of analytic decisions, ideas, thematic similarities, and potentially meaningful elements that was reviewed by the second author and informed interpretation (Thorne, Reimer Kirkham, & MacDonald-Emes, 1997).

Quality Criteria

Efforts were made to attend to the four principles of quality in interpretive description (Thorne, 2008). Epistemological integrity (i.e., consistency between the research question, methodological approach, and decisions made in the research process) was addressed by outlining the tenets of interpretive description and discussing them when decisions about data collection, analysis, and interpretation were made. Representative credibility (i.e., making theoretical claims consistent with how the phenomenon was sampled) was attended to by conducting follow-up interviews that allowed participants to provide clarification regarding their individual experiences, and sampling multiple individuals to obtain a variety of perspectives. Analytic logic (i.e., consistent reasoning from the theoretical tenets through the research processes and knowledge claims) was addressed by the authors regularly meeting to discuss analytic decisions, and grounding interpretive claims in verbatim data. Interpretive authority (i.e., establishing the trustworthiness of the resulting

claims) was dealt with by analyzing and presenting both common experiences and individual variation on those experiences.

Results

The individual experiences of making the decision to join were grouped into four common narratives (a) searching for a way to care for physical and social needs, (c) taking advantage of opportunities created by BC, (c) dove in with little contemplation, and (d) hesitant to connect with other survivors.

Searching for a Way to Care for Physical and Social Support Needs

For Amelia, Leah, Paige, and Tara, the decision to join the dragon boating team was the culmination of an active search to find a way to take care of themselves post-BC:

“My doctor and her nurses just kept telling me I need a support team. . . . I just thought, if I could find something where I could exercise and meet people, that would be better. . . . On the computer one night . . . I started putting in things and I put in like [city], exercise, survivorship, support teams.” (Paige)

Their search was for programs where they could get a combination of physical activity and support from other survivors: “I needed some support, but I didn't know where to go to get it. . . . It was more about the support, but also about the physical activity” (Leah). Amelia, Leah, and Paige were in treatment and Tara had recently finished when they began searching for an activity that would meet their needs. All four of the women in this group were coping with the changes their bodies had undergone, and felt that physical activity and the support of other survivors would help them take care of themselves, improve their health, and help them fight cancer. For example, Paige saw physical activity as, “. . . a way that I could take care of myself, you know help to take care of my own health and myself,” while Leah explained that “I had to do something to get myself back into shape, um because if I was really going to recover and stay healthy I had to make that commitment.” Leah also articulated the importance of obtaining support from other survivors: “I was feeling very vulnerable at that point and needed to see that there was life after this, you know, that there was going to be some form of new normalcy. And those ladies kind of showed me that.”

All felt it was important to find an activity that was the right fit for them, and exercised considerable autonomy in their search and decision: “My doctor and her nurses just kept telling me I needed a support team . . . I wanted to do something more active . . . I just did it on my own. I didn't talk to anybody or ask permission from anybody” (Paige). All four considered joining a support group, but felt that was not the right fit because they were reticent about having to sit and talk about BC

(Paige and Tara), had participated in support groups but felt ready to move on (Amelia), or had been discouraged from attending (Leah). They were looking for an alternative to a support group by which they could continue to fight BC: “It was a way for me to address that breast cancer and continue to fight it” (Amelia).

Initially, participants were attracted to the focus on physical activity and uplifting and empowering attitude displayed by the dragon boating team members: “I was just impressed with their attitude and their outlook and you know, maybe this is something I really need to investigate further” (Leah). When they tried dragon boating, team members made them feel included immediately. All four had concerns about side effects of treatment making paddling difficult, and about being part of a team. Paige was shy, and Amelia worried there would be tensions in an all-female group. Leah, Paige, and Tara were concerned about letting teammates down, and publicly displaying that they were BC survivors:

It was a little bit of a risk for me to go because it is a pink boat. And it is, you know, cancer, and breast cancer. And I was still in the whole phase of thinking every time I told someone they would feel pity, or they would look at my chest. And that was, you know, awkward. . . . People know and I just wanted it, I wanted life to be back the way it was before. (Tara)

Ultimately, all felt that dragon boating was the fulfillment of their search: “I couldn’t believe I found it, ’cause there is nothing else like it that I know of. . . . These people had decided to do this right where I live, right at the time when I needed it” (Paige). Any challenges were outweighed by their perception of the ability of the program to fulfill their needs, and they ultimately all chose to join the team.

Taking Advantage of Opportunities Created by BC

Carly, Riley, and Sandy all believed that BC had opened up new opportunities in their lives: “Breast cancer for me has been a forum to do things that I never did before” (Riley). Specifically, they saw BC as creating a forum for them to participate in an activity like dragon boating—one that they may not have otherwise been aware of: “If I hadn’t had my breast cancer, I wouldn’t even know about the team” (Carly). This perspective was highlighted by their common view that dragon boating provided opportunities for fun, excitement, physical activity, and social interactions that was made available to them because of BC: “To get together as a group for a common goal, you know, to exercise and, you know, do something fun together. That’s what I’m more interested in” (Carly). As a result of being at least a few years postdiagnosis, they felt that they had coped with many of their own concerns, and also saw joining as an opportunity to support other survivors: “I guess at this, at this stage, I would look at myself more as being able to support other survivors”

(Sandy). All three had availed themselves of multiple opportunities to engage with other survivors, and joining dragon boating was part of that pattern: “Since my diagnosis, I’ve been active in one way or another with different breast cancer organizations . . . and that’s something I’ll probably keep up” (Sandy). All three learned about dragon boating via presentations given at a support group. While these presentations sparked their interest, they did not join immediately due to barriers such as time demands, which were in part due to participating in other survivor groups: “She came and talked to the support group . . . a year or two ago . . . I thought it sounded like something fun. And we’ve thought about it all this time, and then finally . . . it’s a good time in our lives” (Carly).

Carly and Riley were in the process of joining the team at the time of their interviews. They had participated in support groups for years, but were ready to move on to a new opportunity that better suited their needs several years posttreatment. Carly had lost interest in the support group’s focus on illness, while Riley was frustrated with the high turnover and passive endeavor, and saw dragon boating as a chance to move on to a new stage in her life postcancer: “The support group’s net can kind of give you a place where you can feel safe and comforted and valued, but you can’t, nobody wants to stay there . . . Dragon boating for me is more like getting back up there” (Riley). Their impression was that dragon boating would be more positive and engaged: “I really look at it as an opportunity. . . . Because of my breast cancer I get to join this team and I get to engage in a level of physical activity that I don’t currently do and that excites me” (Riley). Carly and Sandy had concerns about the time commitment and the distance to practices but these were alleviated when they learned that attendance was flexible: “One of the nice things at the time, they said well it doesn’t matter how often you go. Just come when you can” (Sandy). Although comfortable talking about BC, Carly did not like to publicly display that she is a survivor: “I don’t want to be too visible to the community as a survivor . . . I just don’t want to be labeled that way” (Carly). She left the team soon after joining. Riley and Sandy, although slow to join, felt that dragon boating was an opportunity that they wanted to commit to: “This wouldn’t be open to me except that I am a breast cancer survivor. I mean yeah, another bonus for having to deal with this. But you had to say yes to it” (Riley).

Dove in With Little Consideration

Donna, Emma, Heather, Madeline, and Wendy joined immediately after hearing about it without much consideration: “I knew nothing about it. I didn’t read anything before I went. I just, pardon the pun, just dove in” (Donna). The five women in this group did not spend a lot of time thinking about the decision, and therefore had few expectations or goals, other than that it would be fun and novel. As Wendy expressed: “I think I was just curious and thought it would be a fun thing to get into.” All five women had previously been involved in physical

activities and valued an active lifestyle, which made it easy for them to choose to become involved because they were comfortable with physical activity contexts and viewed participation as being in line with their values: “That was the reason why I wanted to join. I wanted to be active and I wanted to, I wanted to be healthy” (Wendy). In contrast, BC and social support were not major considerations. For example, Wendy expressed an interest in adding survivors to her social network, but didn’t want BC emphasized: “I wanted to be part of a group that had something to do with breast cancer, but wasn’t focused on it The focus is on the sport and on the activity as opposed to talking about [cancer].” Despite not being focused on social considerations, all found the group to be welcoming and inclusive when they met them, and that ultimately encouraged them to join. “I came out and checked it out and saw the attitudes. . . . When I met the women, it was enough to get me to come back.” (Heather).

All except Madeline learned about the team through trusted friends who recommended the activity and encouraged them to join. Those recommendations made it easier to make a quick decision because they saw themselves as similar to their friend and believed that they would like what they liked, they felt their friend knew them well and would not recommend an activity that was not well suited for them, or they were interested in emulating the friend: “I joined at the recommendation of one person. . . . She just said come on, be in our group. . . . She is a stage four survivor. She is incredible. And, so whatever she said do, I did” (Emma). Most also acknowledged that diving into new things was typical for them: “I’m kind of a joiner without ever really, just diving without, without giving it a lot of thought. Sometimes I can be pretty impulsive” (Donna). Because of their ease with making decisions and the personal recommendation, they did not feel as if they needed to research or deliberate joining: “I’m not sure that I really had much of a thought process. I went to the first meeting and it sounded appealing” (Madeline). Heather and Wendy were still in treatment when they joined, and most cited one or two potential challenges, but they expressed that these were minor concerns: “It was harder than I thought it would be . . . [but] I’m not a giver upper” (Donna).

Hesitant About Connecting With Other Survivors

Joyce, Nora, and Therese all vacillated in their decision to join: “I probably spent three months saying no, that I wasn’t interested, I wouldn’t join. And then um, ended up saying oh, I might as well try it” (Therese). The reasons they considered it at all included the belief that physical activity was important to their health, including preventing recurrence: “I must have gotten it in my mind that exercise would be maybe a preventative thing” (Joyce), but they all also had a variety of other things that attracted them, including the aesthetically pleasing environment, and opportunities for fun, social support, and an uplifting atmosphere. Their reluctance stemmed at least in part

from social challenges, such as their discomfort with initiating new social connections:

I remember showing up really early, and sitting in the car, and seeing the girls talking. And I am thinking, oh, I don’t fit in. I’m new, you know. And I stayed in the car for a little longer probably than I should have. But I finally made myself get out. I think I actually showed up for a practice before that, and I drove off because I just didn’t think it was for me. (Therese)

They also shared hesitation due to concerns that dragon boating would be like a support group. In particular, they did not want to participate in an activity that would require talking about or focusing on BC: “I’m sick of talking about breast cancer. . . . In order to get in the boat and do this paddling on water I was going to have to set that aside” (Joyce). What typically got these women to finally try dragon boating was pressure from another friend who was on the team: “I don’t know if, if I wouldn’t have been asked personally, if I would have done it” (Nora).

Despite their hesitance, all were curious enough about dragon boating that they eventually agreed to attend a team event. They were drawn to the physical activity, and aesthetically pleasing environment, albeit reluctantly: “It just sounded like fun. So it would be a fun activity. And I qualify, I guess” (Joyce). This group also experienced significant hesitation due to perceived barriers to participation. For example, the time and travel involved were concerning for all: “I don’t know that I need another activity in my life cause I have a lot of things” (Nora). Once they did finally meet the team, the athletic, positive focus of the team members helped dissipate many concerns: “I thought it would be support, a typical support group. . . . But it was totally not that way. Nobody talks about it unless they want to. And, you know, we just kind of are out there for exercise . . . and camaraderie” (Therese). However, Joyce was still uncomfortable with the degree of focus on BC and similarity to a support group, and remained reticent:

“If I had thought it was a support group I might not have gone. I guess, I don’t know what I was thinking, I don’t know why I would think it wouldn’t be [like a support group], it just didn’t occur to me that’s what it would be” (Joyce).

Discussion

The findings of this study suggest that BC survivors who consider joining a group exercise program weigh a complex array of factors. Furthermore, they may experience this decision as (1) conducting an active search for a program that meets their needs postcancer; (2) part of a pattern of taking advantage of opportunities made available to them because of BC; (3) making a quick decision to do something new and fun at the recommendation of a trusted friend, with minimal consideration; and (4) being

reluctant about joining before giving in to pressure to try it, and vacillating about the decision. These patterns have implications for understanding the decision to join a group physical activity program for BC survivors, and for how to practically design such programs to make them accessible and attractive.

Consistent with the common sense model proposition that beliefs about the consequences of physical activity and controllability of BC play a critical role in health-related decisions (Leventhal, 2012), survivors who were searching for a program that met their needs, and those who were hesitant to join expressed the belief that physical activity would help prevent cancer and help address the physical effects of BC. While research regarding the decision to join a support group found that perceptions of control of the illness were not predictive of participation, they suggested that they could be predictive of decisions to participate in other interventions if participants thought those programs were more effective at preventing the disease (Cameron et al., 2005). Given the evidence that physical activity reduces risk of recurrence and death among BC survivors (Holmes et al., 2005), the increasingly widespread dissemination of that knowledge, and the implementation of physical activity programs as part of the standard of care for BC survivors, this knowledge may play an increasing role in decisions about physical activity for survivors. Furthermore, the belief that by engaging in physical activity they were exerting some control over BC has implications for mental health. Perceptions of control are thought to relate to posttraumatic growth and psychological well-being by enabling mastery, improved self-perceptions, and self-schema change, and satisfying psychological needs for autonomy (Deci & Ryan, 1991; Hefferon et al., 2008; Sabiston et al., 2007). Furthermore, information that physical activity may help prevent BC may be more salient for survivors because personal experience and emotional reactions can motivate behavior (Cameron & Jago, 2008).

That some survivors were actively searching for a program that creates a space to meet survivors and obtain social support, while simultaneously deemphasizing BC through its focus on physical activity deserves particular consideration in designing interventions for BC survivors. This interest went beyond wanting both social support and physical activity in one package. The search was for an activity that would not emphasize talking about BC, which may be a difficult search in a culture that emphasizes participating in awareness raising and activism around BC (Thorne & Murray, 2000). Being around others who have been through a similar illness can aid in the coping process (Leventhal, 2012). Conversely, some survivors do not join support groups because they do not like thinking about their illness (Winefield, Coventry, Lewis, & Harvey, 2003). Physical activity does not eliminate this issue, as even in dragon boating discussing BC and getting close to other survivors who may face recurrence have been cited as reasons to discontinue participation (McDonough et al.,

2011). However, physical activity-based groups may be well positioned to provide access to support, as physical goals provide a positive, healthy focus that deemphasizes discussing BC.

Framing BC as creating new possibilities was a hallmark of some participants' decision process. This perception is consistent with the contention from posttraumatic growth theory that people who have been through BC may come to understand the traumatic experience as leading to positive change, including recognizing and engaging in new opportunities (Tedeschi & Calhoun, 2004). It is unclear how long after BC posttraumatic growth typically occurs (Park & Lechner, 2006). Yet time is needed for the cognitive processing and coping that lead to growth (Koutrouli, Anagnostopoulos, & Potamianos, 2012), so it is notable that participants who experienced their decision as taking advantage of an opportunity that was brought about because of BC had completed treatment several years before. These participants had also spent some of that intervening time participating in other BC organizations, including support groups. Those opportunities to obtain support may have helped them develop this perspective on the effect of BC. While participation in physical activity groups may potentially facilitate posttraumatic growth in this population (McDonough et al., 2011; Sabiston et al., 2007), this study suggests posttraumatic growth may also affect the decision-making process regarding initiating participation.

A factor in many participants' decision to join, particularly in the *dove in with little contemplation* and *hesitant to connect with other survivors* groups, was receiving a personal invitation from a team member. These invitations provided information and encouragement, and often served as a recommendation and social contract: they enhanced trust that the group would be a good fit, and often involved making a commitment to a friend to try the program. These personal invitations likely contribute to satisfying relatedness needs by making the person feel wanted and included, and affecting perceptions of social norms. In particular, those who saw the invitation as coming from someone who had similar interests and concerns as themselves to not take part in something that would involve too much talking about or focusing on BC interpreted that recommendation as helping them quickly form intentions to participate. Their experience bears similarity to studies demonstrating that social norms is a particularly important predictor of physical activity for BC survivors (Courneya et al., 2001). It also suggests that social norms may be important to this decision not only in terms of demonstrating that the activity is normative for BC survivors, or women of their age generally. It may also be influential to know that survivors who share similar interest in participating in a program that is active and does not focus on discussing BC are team members. While the more hesitant participants also mentioned receiving invitations, they described feeling social pressure. While they described eventually giving in to these invitations,

when considered in light of self-determination theory, it seems likely that these more controlling social interactions may have undermined perceptions of autonomy and contributed to their hesitation. Personal invitation from a fellow participant is a method whereby group (or dyadic) physical activity interventions are uniquely able to increase outreach to new members, if they ensure such interventions are autonomy supportive and address social norms relevant to the individual. Future research could explore whether, and what characteristics of, personal invitations could be effective for reaching inactive or underserved populations.

There are several limitations to this study that need to be addressed. Only 3 of the 15 participants were interviewed at the time they were thinking about joining but had not yet made a decision, whereas the other interviews were retrospective. It is possible that retrospective accounts were affected by experiences subsequent to joining. Whereas some participants joined the team and left shortly afterward, the sample did not include BC survivors who considered it and decided not to try it. Although we sought to examine participants' understandings of their decision to join, some influences on that process may not be within participants' awareness. The study is also limited in that it is not representative of BC survivors: all participants were female, Caucasian, and of moderate-to-high socioeconomic status. Even though the participants in this study were not demographically diverse, they were representative of the team from which they were recruited, as only a small proportion of BC is found in men, and BC survivor dragon boating teams tend to have higher participation rates among Caucasian and moderate-to-high-income participants.

These findings provide insight into how individual perspectives on BC, physical activity, social support, and a host of personal and contextual factors contribute to the decision to join a BC survivor dragon boating team. Decisions to join involve complex interactions among these factors, and results highlight four ways in which the decision to join a team was considered. Theoretically, the results provide insight into how lay understandings of BC and social support options for survivors, posttraumatic psychological growth, social norms and interactions, autonomy, and barriers and motivators of physical activity may affect participation in group physical activity programs in a clinical population. From a practice perspective, the results have implications for future study of interventions that address some BC survivors' needs for a physical and social intervention, opportunities to connect with survivors without emphasizing discussion of the disease, providing information and feelings of inclusion that are inviting and not pressuring, and creating opportunities that meet the diverse needs of BC survivors.

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