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# The Contribution of Dragon Boat Racing to Women's Health and Breast Cancer Survivorship

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Survivorship is one of the least studied and thus least understood aspects of a breast cancer experience. Defined as a life-long, dynamic process, survivorship begins when people have completed medical treatment for breast cancer, yet live with the memories of their treatment and the possibility of a cancer reoccurrence. The numbers of women surviving breast cancer are growing, which means research on survivorship is imperative. In this article, I examine dragon boat racing (DBR) for breast cancer survivors. DBR has been adapted to a woman-centered, community-based leisure pursuit focused on life after medical treatment for breast cancer. Active interviews with 11 participants revealed that DBR contributes to women's social, emotional, physical, spiritual, and mental health. In turn, feeling healthy in these five dimensions enhanced the women's survivorship of breast cancer. The findings demonstrate the roles of leisure in the health and well-being of women who are breast cancer survivors.

**Keywords:** *breast cancer; feminism; leisure pursuits; quality of life; medicalization; women's health; survivorship; healing*

Breast cancer remains the most frequently diagnosed cancer in North American women. Within Canada alone, an estimated 22,300 women will develop breast cancer in 2007 (Canadian Breast Cancer Foundation, 2007). Breast cancer is perceived as fatal (Kearney, 2006), but women are increasingly surviving the life-threatening disease. That is, mortality rates are at their lowest since 1986, as the 5-year survival rate for breast cancer is approximately 76% (Oh et al., 2004). These statistics demonstrate that although breast cancer is a serious health issue for many North American women and others around the world, so, too, is survivorship. Defined as a life-long, dynamic process, survivorship begins when people have completed medical treatment for breast cancer yet live with the memories of their treatment and the possibility of a cancer reoccurrence (Pelusi, 1997; Thomas-MacLean, 2004). Even though survivorship is considered the most important outcome of a breast cancer experience, it is one of the least studied and thus least understood aspects of the disease. Toward this end, Thomas-MacLean (2004) argued,

"The growing population of breast cancer survivors affirms that research on [survivorship] . . . is imperative" (p. 628).

The purpose of this study was to address the gap in literature on survivorship through an examination of a leisure pursuit, namely, dragon boat racing, for breast cancer survivors. Dragon boat racing has been adapted as a woman-centered, community-based leisure pursuit focused on life after medical treatment for breast cancer. Although dragon boat racing has been identified anecdotally by many women with breast cancer as a key factor in their survivorship, scant research has explored the broad health benefits of the pursuit or how it might positively contribute to survivorship. Thus, this study sought to understand how participation in dragon boat racing contributes to women's health, broadly defined, throughout their lived experiences with survivorship.

## Literature Review

Dragon boat racing originated in China, where dragons are a symbol of guardians against evil spirits (Sofield & Sivan, 2003). No longer limited to China, dragon boat racing currently boasts international participation with

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both competitive and recreational teams. The sport of dragon boat racing involves the “strenuous, repetitive upper body activity of 18 to 20 paddlers propelling a 40-60 foot craft along a race course of 500 to 650 meters” (Harris & Niesen-Vertommen, 2000, p. 95). The bow of the boat is carved into the form of a dragon and participants paddle in unison to the rhythm of a drummer (McNicoll & Doyle, in press). “To achieve high racing speeds,” Unruh and Elvin (2004) explained, “the blade of the paddle must hit the water in a horizontal position with a quick, backward pull, an action that requires considerable trunk and upper extremity muscle strength” (p. 139). A well trained and experienced team has a rate of approximately 70 to 80 strokes per minute, which is an impressive accomplishment given that boats weigh up to 2,250 kilograms when fully loaded with participants (Unruh & Elvin, 2004).

“Abreast in a Boat,” located in British Columbia, Canada, was the first team of dragon boat racers for breast cancer survivors. The pursuit originated with a small research project designed to study the impact of paddling on lymphedema (McKenzie, 1998). At the end of the study, which concluded dragon boat racing did not increase lymphedema, the team was expected to disband. The participants, however, were so enthusiastic about their involvement, that the team continued to paddle. Moreover, the participants talked to others about their involvement in dragon boat racing. Word spread throughout the breast cancer community, initiating a social movement as participation rates in dragon boat racing for survivors climbed across Canada and the world. Thus, what started as a small, empirical study has grown to include 93 dragon boat racing teams for breast cancer survivors worldwide, including Canada, the United States, Australia, China, England, Italy, Malaysia, New Zealand, Poland, Singapore, and South Africa. Worldwide, the pursuit seems popular because dragon boat racing is open to all survivors who are 6 months posttreatment and attracts women of all ages, including women from underserved ethnocultural groups. Training for dragon boat racing can take place on a lake, river, or pool, and can involve dryland training, making it accessible to urban and rural women alike. Training for dragon boat racing takes place year-round and thus requires an ongoing commitment to the team (Mitchell & Nielsen, 2002). Corporate sponsorship and fund-raising frequently offset the financial burden of participation. If dragon boat racing is shown to provide a range of health benefits, it could be an important component of survivorship for many breast cancer survivors.

Although dragon boat racing for breast cancer survivors has the potential to affect various components of health, previous research has focused on its physiological benefits. Harris and Niesen-Vertommen (2000) studied exercise-induced lymphedema following breast cancer. Physiotherapists, health professionals, and surgeons had previously warned women who had had auxiliary lymph nodes removed for the management of breast cancer to avoid vigorous, repetitive, or excessive upper body exercise, believing such activity would induce lymphedema (Bogan, Powell, & Dudgeon, 2007). In addition to the original study by McKenzie (1998), mentioned above, the study by Harris and Niesen-Vertommen also showed that dragon boat racing did not induce lymphedema. A more recent study (Warburton et al., 2004) demonstrated the physiological benefits of dragon boat racing for transplant patients. Moreover, dragon boat racing has been studied with respect to exercise adherence demonstrating the physiological benefits of regular exercise for breast cancer patients (Courneya, Blanchard, & Laing, 2001). Taken together, these studies reveal that much of the research on dragon boat racing has demonstrated its physiological benefits, whereas scant research has examined how this leisure pursuit addresses other health benefits relevant to breast cancer survivorship. Consequently, despite the popularity of this leisure pursuit for breast cancer survivors, little is known about the broader health benefits of participation in dragon boat racing.

Closely linked to the need for studies on a wider range of health benefits is the lack of research examining dragon boat racing from a survivor’s standpoint. Bredin (1999) noted the paucity of research on breast cancer directly quoting women affected by the disease. In so doing, Bredin stated the need for research focused on a woman’s private perspective and results presenting a woman’s own words. Similarly, Loveys and Klaich (1991) argued women’s experiences with breast cancer need to be studied as women describe them, as opposed to following traditional or standardized models of research. Perhaps Thomas-MacLean (2004) summed up this perspective best when she noted that much can be learned from women speaking directly about their own experiences with breast cancer. Undoubtedly, there is a need for research, not only on the broad health benefits of dragon boat racing for breast cancer survivors, but from a woman’s private and personal perspective.

In one of the few studies examining the psychosocial impacts of dragon boat racing for breast cancer

survivors, Mitchell and Nielsen (2002) demonstrated the positive influence of dragon boat racing. More specifically, these researchers studied the meaning and psychological impact of dragon boat racing for breast cancer survivors in a qualitative study with two teams in Ontario, Canada. Their research identified the positive influence of dragon boat racing on the psychological recovery from the fear associated with diagnosis and treatment for breast cancer. Specifically, Mitchell and Nielsen found “all of the participants spoke of increased physical and emotional health, and a sense of aliveness, of living life to the limits” (p. 56). Similarly, Unruh and Elvin (2004) conducted a qualitative study with three women involved in dragon boat racing for breast cancer survivors. Their research also showed that dragon boat racing enhanced the physical and emotional well-being for participants and “was a positive medium through which women promote an energizing approach to life after a diagnosis of breast cancer” (Unruh & Elvin, 2004, p. 148).

These studies make a significant contribution to scholarship. First, both studies demonstrated that dragon boat racing can be a meaningful and powerful component of survivorship that serves to positively affect physical and emotional health. Second, both studies utilized qualitative research designs establishing the appropriateness of qualitative methods for expanding knowledge in breast cancer research. Although these studies represent an important first step in demonstrating the value and health benefits of dragon boat racing for breast cancer survivors, both projects were small pilot studies with a total of 9 participants from three of the 18 different dragon boat teams in Ontario. Moreover, both pilot studies were limited to studying physical and emotional health, which means there remains a paucity of research that has explored how dragon boat racing might positively affect other components of health, including social and spiritual well-being. Based on the limitations of their study, Mitchell and Nielsen (2002) concluded,

Further investigation of the findings of psychosocial impact is needed with a larger sample of dragon boaters. . . . Further research is required to test the hypothesis that dragon boating as a team sport provides a powerful communal context to engage in adult play while enhancing the physical and emotional health of breast cancer survivors. (pp. 56-57)

Unruh and Elvin (2004) echoed the need for further research into dragon boat racing in their concluding remarks but also noted the valuable role of participation

in leisure pursuits as a coping mechanism for stressful life events, such as breast cancer. Leisure is defined as those experiences that are freely chosen, pleasant in anticipation, experience, or recollection, and that are intrinsically motivating (Iwasaki, 2003; Kelly, 1996; Mannell & Kleiber, 1997). Previous research has demonstrated that leisure pursuits, experiences, and satisfactions play an important role in promoting health and maintaining well-being in daily life. A considerable body of research suggests that exercise or physically active leisure has numerous health benefits for the population in general, including improved cardiovascular health and reduced risk of diabetes and osteoporosis (Bouchard, Shephard, & Stephens, 1994; Bouchard, Shephard, Stephens, Sutton, & McPherson, 1990). Apart from these physical health benefits, leisure in general, whether physically active or not, is also believed to be beneficial in other ways. In particular, leisure is thought to lead to improved psychological well-being through such mechanisms as stress reduction, improved mood, and increased self-esteem (Driver, Brown, & Peterson, 1991; Iwasaki & Schneider, 2003; Mannell & Kleiber, 1997). Some of the positive outcomes that have been associated with leisure participation are especially relevant to women who are survivors of breast cancer, including the role of leisure in the promotion of self-determination, a sense of personal entitlement, and resistance to prescribed gender roles (Freysinger & Flannery, 1992; Henderson & Bialeschki, 1991; Shaw, 2001). Leisure has also been found to positively enhance spiritual well-being (Heintzman & Mannell, 2003) and to reduce anxiety (Szabo, 2003). Moreover, Henderson and Ainsworth (2002) stated the connection between leisure and health is manifested through involvement in enjoyable and meaningful activity, which is particularly relevant to dragon boat racing for breast cancer survivors.

Despite the research into leisure outcomes and benefits, there has been relatively little research on the effect of leisure participation on women's health throughout the course of an illness. Insel and Roth (2006) argue that holistic conceptualizations of health, including physical, psychological, social, and environmental attributes, work together along with a woman's personal characteristics and social world to determine and manage her personal health and well-being. Research that has examined the role of leisure in women's psychosocial health from a holistic perspective suggests leisure plays a powerful and positive role in women's health encounters. For example, Parry and Shaw (1999) explored the roles of leisure in women's experiences of

menopause and mid-life. They found physically active leisure enhanced health through physical and emotional well-being. In addition, some leisure activities provided women with a sense of familiarity, security, and continuity, yet other practices allowed women to develop new interests, to focus on themselves, and to improve their self-attitudes. Finding an appropriate balance among these pursuits helped women negotiate their journey through the transitional years of menopause and midlife. Similarly, Parry (2005) demonstrated how leisure is a source of empowerment throughout women's experiences with infertility, thereby facilitating a sense of well-being and positively enhancing women's quality of life. Although limited in number, these studies suggest the relevance of leisure pursuits, experiences, and satisfactions to women's psychosocial health throughout a negative health experience.

Perhaps most surprising is the lack of research on the relationship between leisure and breast cancer. Breast cancer has generated a large and significant body of research on the medical aspects of the disease, including its causes, diagnosis, treatment options, and preventative measures (Boston Women's Health Collective, 2005). Nonmedical aspects of the disease have also been studied. For example, previous research has explored the psychosocial aspects of breast cancer, including topics such as the personal impact of chemically induced menopause (Carter, 1997), quality of life throughout medical treatments (Roberts et al., 2006), emotional and psychological suffering (Polinsky, 1994), and psychosocial adjustment to breast cancer (Dow & Lafferty, 2000). Although some research on the nonmedical aspects of breast cancer makes passing reference to leisure pursuits, "these studies do not focus on or provide a clear understanding of the leisure experiences or choices of women living with breast cancer" (Shannon & Shaw, 2005, p. 196). Shannon and Shaw (2005) studied the ways that breast cancer alters a woman's leisure experiences and choices post-treatment. Their research demonstrated that as a result of breast cancer, leisure is more meaningful and a new priority in life. Moreover, Shannon and Shaw found leisure is a context in which women who are survivors of breast cancer seek out health-promoting activities. Clearly, the psychosocial health benefits of dragon boat racing, a popular leisure pursuit for breast cancer survivors, warrants further investigation. A review of the literature demonstrates the need for research on the roles of leisure, namely, dragon boat racing, and survivors' psychosocial health from a holistic and personal perspective—a gap addressed by the current study.

## Theoretical Framework

Because all "illness experiences are mediated by gender" (Klawiter, 2004, p. 851), feminist theory provided the guiding theoretical framework in the current research. Although a variety of feminist epistemologies exists (Thompson, 1992), like many feminist scholars, I sought to "enhance the voices of women who have been overlooked in previous . . . research" (Ambert, Adler, Adler, & Detzner, 1995, p. 882). Similar to Thompson (1992), I agree that

- (a) all inquiry is value-sustaining, and feminist work is politicized inquiry;
- (b) separation between researcher and researched does not ensure objectivity, and a closer connection between the two may reconcile objectivity and subjectivity;
- (c) women's experience can be considered a source and justification of knowledge; and
- (d) there may be no such thing as truth and objectivity. (p. 9)

In sum, the feminist epistemology I adopted was underpinned by a philosophical framework in which there was a desire to focus on the voices of research participants from a holistic perspective, taking into account the broader social and cultural context of their lives. Moreover, I was concerned that the research process enabled women to speak with their own voices and explain their own experiences. In addition, I was concerned that the research process facilitate personal empowerment and positive social change, as well as improved theoretical understanding (Parry & Shaw, 1999).

## Methods

Applying this theoretical framework to the proposed study led to the adoption of in-depth, face-to-face active interviews. Active interviews are conversational in nature and allow for open-ended questions about the details of women's everyday lives after medical treatment for breast cancer and their participation in dragon boat racing. As part of the conversational nature of the active interviews, a dynamic interplay between researchers and respondents is fostered (Dupuis, 1999). In this way, the active interviews enabled emergent ideas to be probed and followed-up on. Thus, active interviews created a space where the women could share their own experiences with breast cancer survivorship and dragon boat racing (Kaufman, 1992). Accordingly, "knowledge was generated

through dialogue, listening, and talking” (Thompson, 1992, p. 10). The generation of knowledge through active interviews was important because “women speaking for themselves, about their own experiences, can contribute much knowledge about the complexity of life after breast cancer” (Thomas-MacLean, 2004, p. 629).

Participants for the study were recruited through a dragon boat racing team located in a large city in Southern Ontario, Canada. Members of the dragon boat racing team were sent an information letter about the study and were encouraged to contact me through e-mail or the telephone if they wished to participate. A total of 11 people volunteered for the study. The interviews lasted between 1 and 2 hours. They were arranged for a day, time, and place that were convenient for the participants. One participant asked to be interviewed at a coffee shop, whereas the others asked to be interviewed in their homes.

Although the interview process was flexible, each participant was first asked a question regarding diagnosis and treatment for breast cancer because I realized from previous research that it would “be difficult for women to share their current experiences without first addressing diagnosis and treatment” (Thomas-MacLean, 2004, p. 631). Participants were also asked broad questions about the links between dragon boat racing and their physical health (i.e., What are some of the physical rewards of participation in dragon boat racing?), emotional health (i.e., What are some of the emotional benefits you notice from dragon boat racing?), social health (i.e., How has dragon boat racing contributed to your sense of social well-being?), and spiritual health (i.e., How does dragon boat racing contribute to the meaning of your life?). Other topics of conversation included where/how women gained information about dragon boat racing (i.e., How did you hear about dragon boat racing for breast cancer survivors?), factors that affect the decision to join or not (i.e., How did you decide to get involved in dragon boat racing?), and motivations and expectations for participation, and barriers, if any, that prevent participation (i.e., What did you expect to get out of the experience? Did anything make your decision to get involved with dragon boat racing difficult?). Many women discussed the importance of dragon boat racing in their lives and the social context of each woman’s involvement in dragon boat racing.

My procedures for collecting, analyzing, and storing data were approved by the appropriate institutional review board. More specifically, to ensure confidentiality, I received written consent from each participant to

tape-record the interviews and to use anonymous quotations in any article or report stemming from the interview. In addition, each participant was informed that a paid transcriptionist would transcribe the interview and none objected to this process. To keep the data confidential, each participant was assigned a pseudonym and all other identifying information (including names of partners, family members, friends, doctors, nurses) was changed in any written document. Finally, the data and field notes were stored in a locked cabinet in my office, which, again, was approved by each participant in the study.

## Data Analysis

The data were analyzed through the constant comparison method (Glaser & Strauss, 1967). That is, the data were coded inductively, and each segment of the data was compared to other categories and other segments of data within the same category. This helped to ensure relevance and consistency and allowed for new categories and relationships to develop as appropriate. Specifically, each interview transcript was first analyzed using open categories to develop initial descriptive categories, such as physical rewards of dragon boat racing. Axial coding was then used to compare categories both within and between interviews and to look for emerging conceptual themes. Subsequently, patterns of relationships among themes were also examined. Consistent with the constant comparison method, the data analyses and coding processes proceeded simultaneously with the data collection process. In this sense, the process was iterative so that emergent ideas from the analysis of the first interviews were used to provide direction for later interviews, so that interesting ideas were followed-up on (Rubin & Rubin, 1995).

Although individual transcripts were analyzed through the development of themes, the group of transcripts was also analyzed as a whole. More specifically, once the interviews were complete the individual analysis from each interview was compared and contrasted to develop patterns of relationships among the women’s comments and experiences. In this regard, the themes were inclusive of data across the interviews. Also, member checks were completed in which participants were sent their transcript and overall findings of the research project to solicit their input. That is, each participant was assigned a pseudonym and sent her individual transcript, along with my analysis, for review and comment. In addition, on completion of the data

collection, all the participants were sent the overall findings of the research project to solicit their input, which allowed them to make certain the data represented their stories and experiences.

About half of the participants responded and provided feedback. The respondents had minor corrections to the findings, mostly focused on the chronological order of their experiences, as opposed to any substantive changes. For example, one woman commented, "I liked what you wrote. I found it very interesting and realistic. Thank you for sending me the entire article! Please let me know if I can give you more inside information for your research. Focus in the boat! Paddles up! Take it away!" Another woman replied, "I have updated slightly below . . . and attached a picture of my last chemo . . . so ya know I didn't make it up!! Ha! Oh, and did I tell you . . . it is beautiful! You did a wonderful job capturing and combining our thoughts and feelings." Finally, one other participant replied, "What a wonderful treat to hear from you. Thank you so much for sending the analysis. Didn't realize I used the words 'breast cancer' so many times! Your study has so much content, I plan to read in more detail when I have more leisure time—unfortunately not in the immediate future. You have been so creative with 'nom de plume.' Call me anything you want but, please, please, please, NOT Fannie—Absolutely the top of the list of names I hate to be called! Be well." All of the changes were incorporated into the findings and sent back to the participants for final approval.

### Profile of the Participants

Five of the participants were in their first or second season of dragon boat racing, whereas the others had been involved for a number of years. The participants ranged in age from mid-40s to early 60s. Although all of the participants had been employed full-time before their diagnosis of breast cancer, few had returned to their previous workload. More specifically, 3 of the participants were employed full-time, 1 was working part-time and the others were on leaves of absence from their positions. All of the participants were at least 6 months post-medical treatment for breast cancer. Eight of the participants were married and the other 3 participants were divorced. All of the participants had children, most of whom had left home to pursue educational and employment opportunities.

### Findings

The women were remarkably enthusiastic about their involvement in dragon boat racing. They described the pursuit as "physically challenging," but nonetheless "fun," "rewarding," and "enjoyable." One participant stated, "Dragon boat racing is the highlight of my week. The 4 hours I spend each week dragon boat racing is wonderful. I can't wait to go, I have a great time once I am there, and I leave already looking forward to the next practice." Similarly, another participant remarked, "I love dragon boat racing. I just love it. I have even joined the national team and gone to training camps in Florida. I just love paddling." Clearly, these women enjoyed their participation in dragon boat racing and freely initiated additional involvement in the pursuit. These types of comments were common across the participants. The quotes reflect the intrinsic motivation and sense of perceived freedom the women associated with dragon boat racing, which are considered central determinants of a leisure experience (Iwasaki, 2003; Kelly, 1996; Mannell & Kleiber, 1997).

Even though the women viewed dragon boat racing as a leisure pursuit and gained considerable enjoyment from their involvement, they were serious about their participation. Specifically, the women viewed dragon boat racing as a key component of a holistic approach to health. For example, one woman described her belief system as focused on "healing, not treating." In her words,

I'm into healing. I'm treating my cancer naturally so I've been to the naturopathic clinic and I'm into holistic medicine. So I believe in healing. I don't believe in treatments. I don't believe in allopathic medicine. I believe in the whole. I deliberately sought out an emotional connection with other dragon boat racers who had breast cancer.

Dragon boat racing, for this woman, was a key component of her healing process. She felt so strongly about the contribution of dragon boat racing to her health that she described it as the "only forum for me that was viable, meaningful." This woman was the only participant who was treating her cancer naturally. All of the other participants had been involved in medical treatments for breast cancer, but still viewed dragon boat racing as an essential component

of their health. Most importantly, the participants viewed dragon boat racing as a way they could positively contribute to their own health. For example, one woman remarked,

Things that are not medical that I can do for myself are really important to me, to help myself. Rather than just relying on the medical profession and giving myself over to them, saying, “here I am, fix me.” Yes I need you (the medical professionals), we’re a team here. I’m the main part of this team and you’re on my committee and I need information from you, but at the same time I need these other inputs over here. Dragon boat racing is what I do to look after myself healthwise.

When asked how dragon boat racing contributed to their health, the women described three main dimensions. These dimensions will be discussed under the following themed categories: (a) solidary and emotional benefits, (b) physicality and stress coping, and (c) spiritual awakening.

### **Solidary and Emotional Benefits**

Many of the participants joined dragon boat racing out of a desire to connect with other women who were also breast cancer survivors. Almost all of the women stated they were “looking to connect with others like me.” For 1 participant, participating in dragon boat racing was “really just such a lovely thing to do for social reasons, to meet new people, and meet people in the same situation as you’re in as well.” Not only did she seek out a social experience, but she did so with the intent to share the company of other survivors. The common experience with breast cancer allowed other participants to bridge social divides that might otherwise have mitigated the possibility for relationship building. A participant explained,

Connecting with other people of different walks of life, every walk of life is attached to breast cancer. So, meeting new people in different circumstances, them enriching your life, you touching theirs. I feel I could do that with every single woman on that team. And who’d have thought you could have 68 new friends?

The shared experience of breast cancer and a shared interest in dragon boat racing brought these women together and facilitated many new friendships, which brought their own rewards.

Many of the participants described how their emotional connections with other survivors contributed positively to their well-being. For example, a participant discussed “deliberately seeking out an emotional connection” with other breast cancer survivors. In her words,

I needed some emotional support. When you’re diagnosed [with breast cancer] I guess some people might isolate themselves, but other people think omigod, I gotta find more ladies like me. I joined [dragon boat racing] recognizing the need for emotional support and the emotional support is huge. I mean, the girls in my group, a certain number of the girls in my group are my best friends.

Social connections with other survivors meant establishing an empathetic support network that made the participants “feel normal.” As another participant explained,

I think you go through more emotional strain after the treatments than you do during them. During the treatments you’re too busy trying to get better. And afterwards you’re just left with this life that you have to rebuild from scratch, that you’re so weak and so tired from everything that you’ve just been through. During that time it’s hard to feel normal because everything has changed, but with dragon boat racing I just felt so, so normal. And from my everyday life, that was so uncomfortable for so long, for this 2 hours that I’m with them [teammates], twice a week, it was a reprieve. It was 4 hours a week that made me feel normal, 4 hours a week that I felt so good and felt a little bit like I could cope. It’s so important to feel normal [throughout breast cancer survivorship]. I think it helps you recover a lot faster and better. I think if I wasn’t doing the dragon boat racing I think I would be in really bad shape emotionally. And no matter how bad I’m feeling physically, emotionally I feel really happy.

Dragon boat racing helped normalize the experience of breast cancer and created an empathetic environment in which participants could be themselves. In this regard, it functioned as an effective coping strategy for most of the women (more on this below). Participation in dragon boat racing also represented a form of resistance against the dominant cultural narrative of the sick, disabled cancer patient. As one participant explained, “We go out there [to race] to show that breast cancer people can survive, even we can be happy and healthy and whole.” In other words, dragon boat racing was a

demonstration that the women were capable of thriving in their everyday living, despite their association with breast cancer.

Part of the emotional support the women received from the other dragon boat racers was feeling unconditionally supported by their teammates. For example, one woman stated,

When you're diagnosed [with breast cancer], you lose some friends. Then when you begin treatment, more friends leave. They're frightened for themselves, they don't know how to speak to you. And when you finish the treatment, finally after you know your 8 months or however long you have it, um, then they [your remaining friends] want you to stop talking about it. But the dragon boaters are always there for you . . . it's unconditional support and it is amazing.

Again, empathy was fundamental to the benefits of dragon boat racing. That teammates could understand and appreciate the experiences each woman had undergone was instrumental in forging a supportive environment for all participants.

Unconditional support was so integral to dragon boat racing that 1 participant described the team as a "floating support group." She explained,

Any crisis in my life, and there have been a few, I've always joined a support group. I don't know, it's just the way I am. I'm an extrovert and I get a lot of energy from people and it's always helped me just to talk about it.

"Getting energy" within a team environment was emphasized by other participants, as well. The team served as an important source of motivation for the women. As one participant explained, "The emotional support you get from your teammates, the friendship, um, the feeling of not being alone, the feeling of ah, encouragement that you feel that you're doing well, ah, [teammates] make you feel that way." Another participant reiterated this point by stating, "To be part of a team of women is very powerful, extremely powerful."

In sum, many of the women deliberately sought and enjoyed a social and emotional connection with other survivors through dragon boat racing. Through dragon boat racing, the women connected with other survivors, felt normal and emotionally supported, and viewed their teammates as a source of motivation.

## Physicality and Stress Coping

Many of the participants underscored the physical benefits of their participation in dragon boat racing. Some of the women were surprised that dragon boat racing actually improved physical ailments with which they were dealing. For example, 1 participant stated,

I found [dragon boat racing] actually improved my physical condition. I used to have very severe osteoporosis, and I had lower back pain, and when I started paddling, because you use your whole body and you use your lower back, I was worried that it would cause too much strain on my back and it would be difficult, but it had the opposite effect. After a while, my back pain actually went away, so it was really beneficial.

A different participant offered a similar story: "I have a very bad lower back. I have some discs that are disintegrating and I found that doing the dragon boating, you know putting your body, top body forward and paddling, it actually helped my back pain." These physical gains also combined with other benefits of physical exercise to positively affect the women's health and well-being.

Most of the women discussed the associated benefits of the fitness connected with dragon boat racing. One participant said she enjoyed dragon boat racing "on a physical level [because] it makes me feel challenged because there's a lot of technique and you require a lot of stamina." When asked what she enjoyed most about dragon boat racing, a participant replied, "The physical activity 'cause I love being on the water. I love when I paddle I don't think about anything else but moving the water, like you know, moving that boat through the water." In answer to the same question, another participant said, "I just felt so good, I felt like I was in great shape and I felt energetic and I felt positive." Similarly, a different participant said she was drawn to dragon boat racing

for health. The fact that I would be able to overcome a life-threatening illness to the point that I could become physically fit and compete at a level that would be like an international level, that for me was like the carrot before the horse. So, if I get through this, that's my goal. And the thought was if I can become as healthy as I can, be as fit as I can, to be wanted on a team to compete at that level and to be

successful and make a positive contribution, then, whatever else life throws my way, I should be able to handle.

The notion of “handling” other matters represented the link many women made between dragon boat racing and stress coping.

Many women discussed the stress release that accompanied the physical activity associated with dragon boat racing. One participant explicitly said, “Dragon boating for me fills a physical need through stress relief.” Another explained that the “physical fitness and endorphins helped me more than any drug ever. I believe every woman, every man, everybody, if you’re suffering from depression or you’re in a funk, those are the days you most need to do something physical.” Similarly, another woman talked about how dragon boat racing fights depression:

At the end of the race there’s, I guess it’s a natural high. You’re exhausted, they say paddle ’till you puke! And, I mean, you’ve giving everything and there’s a good physical, emotional, spiritual feeling, when you’ve done that, when at the end of the race when you hear let it run, you think oh thank God because I can’t do another stroke. And that’s how you’re supposed to be at the end of a race. Nothing left. And when you really feel like that, it’s great. For me it’s my own kind of a high.

This “natural high” was evidently effective in countering the lows of living with cancer.

Perhaps the most powerful account of the connection between dragon boat racing and stress coping came from a woman who credited her involvement in dragon boat racing with saving her life. In addition to her own experience, her husband and son were battling cancer. Given that she and her husband were both ill, they were unable to work, which led to the loss of their business. As a result, she was dealing with financial stress, including the loss of their family home. Clearly, this woman had major stress in her life, stress that led to depression and suicidal thoughts. In discussing how she battled her recurrence with cancer, she said,

My doctor said to me, “You’re going to have to go on anti-depressants because physically, emotionally you can’t cope with all this.” And since I started the dragon boating, I have not had to take anything. No anti-depressants. You get out there and you physically beat the water, so you get out all your negative emotions and it just brings all the, you know, the natural little endorphins forward, so it fights actual depression.

That dragon boat racing would be credited with addressing this woman’s depression speaks to its powerful stress-coping properties.

In sum, the physicality of dragon boat racing contributed to the women’s health by improving their physical health, helping them feel positive, and increasing their energy levels. Dragon boat racing also helped the women feel physically healthy by reducing their stress levels and helping them cope.

## Spiritual Awakening

Dragon boat racing was not about solidary and physical benefits alone. It also served to foster appreciation for the everyday:

When we paddle out there at our practices and we’re paddling along and we turn and head west we see those sunsets, yeah we love that. And yes, we, we might not paddle quite as aggressively while we’re watching. The coach might say, “ladies,” and then we’re going, “well, look at the sunset!” We’re the lucky ones.

Another woman described a similar scenario:

I was riding my bike home from practice. And, I stopped [along the way] because I realized the sun was setting and I was missing it. So I stopped with my bike and I looked at the sunset that I wouldn’t have appreciated or known it existed if I wasn’t dragon boating, and I cried, because it was so amazing. And every night is amazing. Even on the shittiest night, you know, when I don’t really want to go paddle, every time I think that it was the best night out. And I know that sounds stupid or weird, and it is but, we’ll either see the waves from the water and two swans would come out, and truly every night it’s magical.

Yet another participant explained,

I could live 30 years, I could live 2 years. And that’s not, actually, it’s not that depressing ‘cause it forces you to think, okay, I’m really enjoying this tea or I’m really enjoying this conversation and then you sort of think oh God, I feel great today, thank God, you know.

Taken together, these quotes reveal how dragon boat racing reminded the women of the wonders of everyday life and how fortunate they were to be alive. “It just frees your spirit,” commented one woman.

The connection between dragon boat racing and spiritual awakening was evident in most of the women’s

experiences. One participant explained, “I could make [dragon boat racing] the most important thing in my life. It’s like a religion almost. The whole purpose in my life now is changing. I ask myself every day, ‘Well, what am I doing here?’ I’m interacting with people. I’m going to, um, maybe make somebody feel happier.” This woman developed a new purpose in life through dragon boat racing and, consequently, a new commitment to life. Another participant discussed the role of dragon boat racing in showing her that there was “life after breast cancer”:

Even though we’ve had breast cancer, it hasn’t stopped us from living and from enjoying life. I think what it does, well for me personally, it um, changed the outlook I have a life-threatening illness that could kill me. I’ve been through it. Um, and it’s not going to kill me. I’m going to overcome it and I am strong, I know I’ll be strong, and I will show people that there is *life* after breast cancer. And life is good after breast cancer.

The mind-set that dragon boat racing “made [participants] feel alive again” led several participants to appreciate *quality* of life over *quantity* of life. As one participant explained, “You know it’s not about longevity now or, or length of life. It’s about being a full participant in that life.” In short, the women felt as though dragon boat racing contributed to the spiritual dimensions of their life throughout breast cancer survivorship.

In sum, dragon boat racing contributed to the women’s health throughout breast cancer survivorship through solidary and emotional benefits, physicality and stress coping, and initiation into a spiritual awakening. Although these three dimensions were outlined separately, the themes are not discreet categories, but rather overlap. That is, the various dimensions interact to positively contribute to the women’s experiences with survivorship. One participant noted how dragon boat racing contributes to various dimensions of health: “You know it’s absolutely imperative that you get into these things for your physical, emotional, spiritual, everything, well-being.” When asked how the three dimensions came together, the women discussed how they positively enhanced their experiences with survivorship. For example, one woman stated, “I’m doing really well as a survivor. Through my involvement in dragon boat racing, I demonstrate an example of not just being a survivor, but a *thriver*.”

## Discussion and Conclusion

The purpose of this research was to study women’s lived experiences with dragon boat racing to understand how this leisure pursuit contributes to their health and survivorship of breast cancer. The findings demonstrate that dragon boat racing contributed to social, emotional, physical, mental, and spiritual dimensions of health. In turn, feeling healthy in these five dimensions enhanced the women’s survivorship of breast cancer. The significance of the study lies not only in its investigation of a leisure pursuit—namely, dragon boat racing—and its link to health, but also in its focus on survivorship after medical treatment. Moreover, the study is significant in that the knowledge is grounded in women’s personal and private perspectives of breast cancer survivorship, thereby addressing the gap in knowledge on experiences with survivorship as women describe them (Thomas-MacLean, 2004).

The stories also reinforce that health is manifested through involvement in enjoyable and meaningful leisure activities (Henderson & Ainsworth, 2002). Health, in this sense, is conceptualized holistically to encompass a variety of dimensions. Insel and Roth (2006) identify dimensions of health, including social, emotional, spiritual, intellectual, environmental, and physical dimensions. This multidimensional view of health resists the separation of mind, body, and spirit but does not necessarily preclude a biomedical perspective. It redefines health as the ability to live life fully—with vitality and meaning (Insel & Roth, 2006). Health is determined by decisions about living one’s life, including one’s leisure decisions. The current research extends this body of literature, however, by demonstrating how individual dimensions of health can cumulatively enhance health and, in particular, contribute to life after a life-threatening illness such as breast cancer. In doing so, the findings demonstrate the importance of leisure pursuits such as dragon boat racing to health and well-being. In other words, the current research reveals the social relevance of leisure in the context of women’s health and well-being.

The health literature has tended to view leisure as trivial, if not completely irrelevant, to health outcomes, because of the medicalization of health. Medicalization occurs when health experiences come to be understood narrowly as questions of illness and are then subjected to the authority of medical institutions (Thomas-MacLean, 2004). Once a health experience becomes

medicalized, it is then described in medical terminology, treated in medical institutions, and people affected by it are regarded as patients. Critics of a narrow medical model argue that the biological and individualistic focus of medicalization has provided few other ways for people to understand or make sense of their health and well-being (Woliver, 2002). Consequently, the general trend toward the medicalization of health and the resultant emphasis on medical research for solutions have been widely criticized by scholars and activists alike for failing to appreciate other factors and contexts that affect health. Clearly, the current research demonstrates the need to reframe health research so that a broader, more holistic approach to health, including leisure pursuits, is appreciated as also affecting women's health. In short, dragon boat racing demonstrates the role and impact of leisure in women's health.

The findings of the current study suggest four areas for future research. First, the women in this study were all located within Ontario, Canada. Given that dragon boat racing is a worldwide sport encompassing 93 teams in many countries, including the United States, Australia, New Zealand, Poland, and Italy, among others, research is needed within countries and across countries. In other words, research is needed on dragon boat racing teams for breast cancer survivors within a country, but located in different areas (provinces, states). Moreover, research is needed to compare findings between different countries. This type of cross-cultural research will provide a broader understanding of the dimensions of women's health that might be positively affected through dragon boat racing.

A second area for future research is connected to knowledge translation. Information is needed to assess how knowledge about dragon boat racing is currently translated within Canada and other countries with dragon boat racing teams. A greater understanding of how such knowledge is translated will help determine facilitators and barriers to participation. This research will help identify the best way to share the knowledge gained about the positive impact of dragon boat racing on health and survivorship. In doing so, the goal is to affect the survivorship of even greater numbers of women.

A third area for future research is connected to other leisure pursuits. Although dragon boat racing is perhaps the largest organized pursuit of this nature for breast cancer survivors, there are other similar activities such as fly fishing and snowmobiling. The focus

of these studies could be on the differences in benefits for dragon boat racing as compared to participation in other activities.

Finally, the current study focused on short-term benefits for health. Dragon boat racing for breast cancer survivors has been in existence for a decade now, and it would be helpful to understand the long-term health implications of involvement in such a leisure pursuit. This could be accomplished by interviewing women who have been involved in the pursuit for an extended period of time. Another possible approach would be longitudinal research that starts with women who have just started dragon boat racing and follows them for a number of years to shed light on the long-term health benefits of dragon boat racing.

In conclusion, the current study demonstrates the link between a leisure pursuit—dragon boat racing—and women's health. In doing so, the current research highlights the importance of leisure to health and the need to study health experiences as women describe them. Given the areas for future research that the current study has identified, we hope we will see further study in this exciting area of women's health and well-being. Paddles up!

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