

Examining the Role of Leisure in the Process of Coping with Stress in Adult Women with Rheumatoid Arthritis

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Abstract

The purpose of this study was to explore the role of leisure in the process of coping with stress in adult women with rheumatoid arthritis (RA). Fourteen (14) women were interviewed with regard to their leisure history and experience before and after their diagnosis of RA. The results showed that leisure could be used as

- (a) as a means of escaping to release stress,
- (b) a means of expressing negative emotions to release stress,
- (c) a means of relaxing to release stress,
- (d) a means of enhancing mood to release stress, and
- (e) a means of being with friends and others to release stress.

While the negative impact of RA on the participants is dramatic and stressful, leisure plays an important role in the lives of people with RA. This study provides evidence that leisure serves as a useful and unique agent and contributes to the rehabilitation process of people with RA. Implications for therapeutic recreation practice are also provided.

Rheumatoid arthritis (RA) is a systemic inflammatory disease of unknown etiology. Approximately 46 million people in the United States have been diagnosed with arthritis and rheumatoid diseases; and this number was predicted to be 67 million by 2030 (Centers for Disease Control and Prevention, 2007). This estimation is expected to rise as the population ages, and the growing epidemic of obesity may play an important role contributing to the burden of arthritis (Hootman & Helmick, 2006). RA causes swelling and pain in the joints, fatigue, weakness, morning stiffness, deformity, and functional impairment as well as psychological problems (i.e., stress, lowered self-esteem, depression, and anxiety), a decreased perception in quality of life, and a lowered number of leisure activities in the course of the disease (Guo, Yang, & Malkin, 2007).

Stress and Coping with Rheumatoid Arthritis

A number of empirical studies reported pain, disability associated limitations, and the uncertainty about the disease as stressors associated with RA. Mahat (1997) identified that pain was the most frequently perceived stressor in daily life, followed by limitation in mobility, difficulties in carrying out activities of daily living, and helplessness. Melanson and Downe-Wamboldt (2003) found that depression was identified as a common experience for individuals with RA, who often had no control over this chronic, unpredictable disease with no known cause or cure and which often leads to depression.

In addition, quality of life may decrease as stress deteriorates the psychological well-being and physical

condition of individuals with RA (Husaini & Moore, 1990). Husaini and Moore documented that those with RA were more likely to experience a lower level of life satisfaction.

Different coping strategies have been employed to reduce the level of stress related to RA. In Mahat's (1997) study, an optimistic strategy was reported as the most frequently used and most effective coping strategy, followed by confrontive, self-reliant, and supportant coping strategies. Both problem-focused (confrontive) and emotion-focused (optimistic) coping strategies were used by RA patients to manage this stressful condition. Melanson and Downe-Wamboldt (2003) reported that confrontive coping was used most frequently by the respondents, followed by palliative, supportant, fatalistic, and self-reliant coping strategies. Emotion-focused coping has been found to be associated with negative affect over time (Griffin, Friend, Kaell, & Bennett, 2001). However, the stress experience, coping decisions, and the meaning of the experience can vary by individuals (Melanson & Downe-Wamboldt, 2003).

Leisure Stress Coping

Leisure contributes to reducing the level of stress (Sale, Guppy, & El-Sayed, 2000), reconstructing of the meaning of life (Parry & Shaw, 1999) and enhancing mental wellness (Hoge, Dattilo, & Williams, 1999). For example, Folkman, Moskowitz, Ozer, and Park (1997) pointed out that meaningful leisure activities have positive effects on individuals encountering stress.

Leisure Buffering Model

Coleman and Iso-Ahola (1993) proposed a buffering model linking leisure coping and health. They identified two important buffers against life stress:

- (a) leisure-generated social support, and
- (b) leisure-generated self-determination disposition.

They suggested that friendships and companionship through leisure could provide social support. The other buffer, self-determination, was discussed in two ways. One was associated with personality; the other with leisure. Certain types of personality traits, such as locus of control and hardiness, were characterized as consistent with self-determination. People who were categorized as possessing these types of personality traits showed better resistance to stress. In terms of leisure, it provided

the channel for people to experience and to develop the sense of self-determination. In addition, they pointed out that social support and self-determination were interconnected. For example, a person who lacked social competence would be more likely to experience isolation from others in community. Despite the buffering effect of leisure, they argued that leisure coping, like the other coping strategies, only has effects on health when stress is present. It has little effect if the person is healthy and in low stress.

Coleman's (1993) empirical study supported the buffering model demonstrating that leisure self-determination dispositions, particularly perceived leisure freedom, buffer against life stress to help people maintain good health when life stress was high. Coleman surveyed 51 women and 51 men, with ages ranging from 20 to 81 years, and found that higher levels of life stress were significantly correlated with illness that was more serious. Those with lower levels of perceived leisure freedom and higher levels of life stress were more likely to experience more illnesses that were serious. In contrast, those with higher levels of perceived leisure freedom showed more resistance to life stress.

Hierarchical Dimensions Model of Leisure Stress Coping

Iwasaki and Mannell (2000) proposed the Hierarchical Dimensions Model of Leisure Stress Coping, in which three levels were identified. The first level of coping has two dimensions, that is, leisure coping beliefs (general beliefs about leisure functions as a way of coping with stress) and leisure coping strategies (behaviors or cognitions in the process of applying leisure to deal with stress in a certain situation).

Each of two dimensions in the first level of the model includes sub-dimensions, which become parts of the second level of the model. The leisure coping beliefs (the first level) include leisure autonomy and leisure friendships (the second level), while leisure coping strategy contains leisure companionship and leisure palliative coping, and leisure mood enhancement. Leisure companionship is distinguished from leisure friendships based on if it is a perception or an actual act, though both of them are a form of social support. Leisure palliative coping provided people with time-off from stressful states or events. Some types of leisure activities, if not all of them, served as mood enhancement function, which was demonstrated to reduce negative mood while enhancing positive mood.

A third level is only available for leisure coping beliefs, where leisure autonomy consisted of self-determination disposition and empowerment, and leisure friendships are specified as emotional support, esteem support, tangible aid, and informational support. Leisure empowerment is the belief that people have the power and control over their choices in leisure, which provides the context for them to express themselves freely and develop self-identity. Furthermore, leisure is social. Through leisure friendships, people with stress can receive emotional support, esteem support, tangible aid, and informational support to help them moderate stressful events.

Leisure Stress Coping with RA

With regard to arthritis, researchers have reported on the role of leisure as an effective intervention. LaPlante (1997) reported that people with arthritis tend to spend less time on leisure activities than those without arthritis, due to fatigue and pain. Arthritis, however, may influence participation only in vigorous exercise, and is not necessarily a constraint in mild leisure participation for people with arthritis. In a three-year longitudinal study, van Lankveld, Naring, van't Pad Bosch, and van de Putte (2000) assessed the relationship among different coping styles, psychological distress, and disease impact. After controlling for disease status, they found that behavioral copings (e.g., decreasing the level of activity) contributed to increases in psychological distress and a decline in health, while cognitive copings (e.g., comforting cognitions and diverting attention) were not related to changes in psychological distress over time.

Women and RA

The incidence of RA is typically two to three times higher in women than men (Badley & Kasman, 2004). In addition, compared with women with other chronic conditions, women with arthritis have lower incomes and fewer years of education, are more likely to experience long-term disability, and are more likely to be unemployed, which, consequently, make them to have fewer resources to deal with the impact of arthritis on their daily lives (Badley & Kasman, 2004). In a study with 58 women aged between 40 to 60 years old who had RA, Minnock, FitzGerald, and Bresnihan (2003) reported that 52% of the participants perceived their health status as fair, poor, or very poor and the other

25% anticipated poor future health status.

Because of the role of women, women with RA may experience restrictions in participation in leisure activity. Semanik, Wilbur, Sinacore, and Chang (2004) studied 185 older women with RA and reported that 67% of the physical activities they participated in were housework, while leisure activities and planned exercise counted only for 15% and 10%, respectively. They further recommended that older women with arthritis increase the level of participation in physical and leisure activities to enhance their health condition. Research studies proved that participation in leisure activities also helped promote a sense of normalcy, confidence and continuity after experiencing RA for women (Guo, Lee, & Malkin, 2007).

Purpose of This Study

Although leisure has been recognized as an important coping resource, there are limitations in previous leisure stress coping literature. The mechanism of leisure stress coping is still unclear. In addition, studies with women with different disabilities should be conducted to expand the body of knowledge in this area of research. Thus, the purpose of this study was to explore the role of leisure in the process of coping with stress among adult women with RA.

Methods

Participants

A semi-structured interview method was employed in this study. Fourteen women with RA voluntarily participated in this study. Most of the participants were recruited from a local rheumatologic clinic, a Young Men's Christian Association (YMCA), and a swimming program for individuals with arthritis at a university. A colleague referred two of the participants. The criteria for selecting participants included individuals who

- (a) were 25 years or older,
- (b) were diagnosed with RA by physicians, and
- (c) were able to clearly express themselves and remember their disease history.

In this study, people of various ages, marital

Table 1

CHARACTERISTICS OF PARTICIPANTS

Coding Name*	Gender	Age	Education	Marriage	Occupation	Living With	Race
Ann	Female	72	High School	Married	Retired Receptionist	Spouse	Caucasian
Candice	Female	70	Lower than High school	Widowed	Retired cook	Parent	African-American
Cindy	Female	55	High school	Married	Retired Social worker	Spouse	Caucasian
Diane	Female	54	College	Married	Manager	Spouse	Caucasian
Emma	Female	72	Master degree	Divorced	Retired	Alone	Caucasian
Jen	Female	64	High school	Married	Retired Bus driver	Spouse	Caucasian
Katie	Female	80	College	Married	Retired Art teacher	Spouse	Caucasian
Kelly	Female	54	College	Single	Retired Administrator	Alone	Caucasian
Laura	Female	57	College	Single	Retired Office manager	Alone	Caucasian
Linda	Female	61	Doctor degree	Single	Professor	Alone	Caucasian
Liz	Female	46	Doctor degree	Married	Professor	Spouse Children	Caucasian
Mary	Female	37	Master degree	Divorced	Computer Consultant	Child	Asian
Sophia	Female	77	College	Widowed	Retired Teacher	Alone	Caucasian
Vicki	Female	57	College	Married	Retired nurse	Spouse	Caucasian

*The names in the table are all pseudonyms

status, education levels, living situations, and disease conditions were recruited to represent a diverse group of people with RA (See Table 1 and Table 2). Participants ranged from 37 to 80 years of age. Three of them were single, seven married, two widowed, and two divorced. Ten participants were retired, and the others were still working. Seven participants were living with a spouse; four lived alone; two lived with children; and one lived with a parent. Only one of them was Asian, one African-American, and all the others were Caucasians. The length

of illness history ranged from 3 to 52 years. Eleven of them had a mild to marked level of deformation. Six persons needed assistance in activities of daily living (ADL). Some of them ($n=10$) had other diseases in addition to RA (see Table 2).

Data Collection

Data were collected from in-depth semi-structured interviews, ranging from 45 to 90 minutes. The interviews were guided by an interview protocol (Table 3) that

Table 2

ILLNESS INFORMATION OF PARTICIPANTS

Coding Name	Length of Illness	Duration of Morning Stiffness	Degree of Pain	Degree of Deformity	Ability to ADL	Other disease
Ann	40 years	30-60 minutes	Discomforting/ Excruiating	None	With difficulty but without assistance	Osteoarthritis
Candice	20 years	15-30 minutes	Excruiating	Moderate	With difficulty but without assistance	None
Cindy	30 years	>60 minutes	Discomforting/ Excruiating	Mild	With some assistance from others	Lupus, Hypertension, Hypothyroidism
Diane	28 years	15-30 minutes	Mild	Moderate	With some assistance from others	Myelodysplastic Syndrome
Emma	25 years	15-30 minutes	Discomforting	None	With difficulty but without assistance	Osteoarthritis, Osteoporosis, Spinal Stenosis, Diabetes
Jen	52 years	>60 minutes	Discomforting/ Excruiating	Marked	With some assistance from others	Lupus, Diabetes
Katie	15 years	None	Mild	Mild	Without difficulty	Cancer, Strep, Asthma
Kelly	10 years	>60 minutes	Discomforting	Mild	With some assistance from others	Osteoarthritis, Bursitis, Diabetes, Hypertension
Laura	35 years	15-30 minutes	Discomforting/ Excruiating	Mild	With some assistance from others	Fibromyalgia, Migraine
Linda	3 years	None	Mild	Mild	Without difficulty	None
Liz	4.5 years	30-60 minutes	Discomforting	None	With difficulty but without assistance	Fibromyalgia
Mary	7 years	>60 minutes	Discomforting	Moderate	With difficulty but without assistance	None
Sophia	8 years	15-30 minutes	Mild	Moderate	With difficulty but without assistance	None
Vicki	32 years	30-60 minutes	Mild	Marked	With some assistance from others	Hypertension

included key research questions. All interviews were tape recorded and transcribed, with each of the participants being assigned a randomly chosen pseudonym.

In this qualitative study, data collection and data analysis were processed simultaneously. When new data

contributed little to the construction of new categories, and reached data saturation, the processes of data collection and data analysis were terminated. Then the research team began to concentrate completely on data analysis.

Table 3

INTERVIEW PROTOCOL

1. Could you describe the history of your disease first? When did it occur? What was the disease development process? How did you treat it?
2. What was your feeling when you knew you had RA?
3. Could you describe the impact of the RA on your life? How did RA impact you psychologically? What do you fear the most about RA?
4. What kind of strategies do you use to cope with the stress of RA? Did you feel emotional distress or depression? How did you cope with depression? How did you cope with pain? How did you cope with disability?
5. What kind of support did you get?
6. How do you see the changes of your life because of RA? What are your feelings about the changes?
7. What are the impacts of RA on your leisure activities? Did you start new leisure activities or exercises after you were diagnosed with RA? What do they mean to you?
8. When you look back, how much did leisure activities help you cope with stress from RA?
9. What are the impacts of RA on your leisure activities? Do you have the same level of satisfaction from leisure activities participation as before?
10. Could you tell me a story about how you used leisure activities to cope with the stress from RA?
11. What is the meaning of leisure activities for you in coping with the stress from RA?
12. What did you learn from the process of fighting with RA?
13. How do you see the role of leisure as a coping strategy of RA?

Data Analysis

Data analysis was guided by using the constant comparative method (Glaser & Strauss, 1967). First, while reading the transcripts, any concepts or categories were written down. The purpose of this coding process was to create as many categories of analysis as possible based on the concepts that emerged from the data. Then, while coding a phenomenon for a category, the researchers compared it first with the previous categories to determine if it was a new concept or if it belonged in an existing category. Thus the categorizing process by which the similar concepts were grouped was used in order to reduce the number of units of analysis. Finally, categories that related to the role of leisure in coping with stress from RA were selected and reported.

Member-Checks

Member checking was used to increase the trustworthiness of this study. All the participants received

a phone call to set up a phone interview. The first author introduced the findings from this study and all of them agreed with the interpretations of their own stories by the researchers.

Results

Through the analysis of the data, the roles of leisure in coping with stress from RA are identified

- (a) as a means of escaping to release stress,
- (b) a means of expressing negative emotions to release stress,
- (c) a means of relaxing to release stress,
- (d) a means of enhancing mood to release stress, and
- (e) a means of being with friends and others to release stress.

Leisure as a Means of Escaping to Release Stress

Some participants expressed that leisure activity in which they participated provided opportunities for them to escape from their daily living environment so that they might forget their current stressful situation. In this study, participants experienced escaping to release stress in two distinctive ways: getting out of their usual environment, and getting involved in activities. For some participants, getting out of the house was a common way to experience an escape from the stress. For example, Jen described that leisure to her was to "get out of the environment and the house," and "that helps release a lot of stress." The ways to escape used by Jen were to be out of her house, sometimes just going out around the neighborhood, and at other times traveling out of town: "... sometimes my strategy [to release stress] is just going out and riding around the neighborhood." A few other participants in this study reported this type of escape through traveling and getting out of house to release stress. It appeared that physically separating oneself from the usual environment was a common way to experience escape from daily stress.

Escaping from daily stress also occurred through getting involved in various leisure activities. Liz, for example, succinctly reported: "Books on tape are purely sort of escape or fantasy. For a while I can forget all about everything in my life and just be someone else." Ann mentioned that she liked going to movies because it helped her escape from daily stress related to her RA:

[Going to movies lets] you get away from what you feel, 'cause I guess I'm always thinking I have to do this and I have to do that. And you just get away from things. You get off from yourself. You get involved in the story. ...so I liked to go to movies.

Sophia said that exercise provided a sense of escape. She said: "if you are out walking, if it is a beautiful day, you can't feel horrible." Liz said that she would prefer to use physical activities, such as yoga and hot water baths, as a means to manage pain rather than taking pain medicines. While involved in leisure activities, many participants reported that they forgot the pain; therefore, pain related stress was reduced.

It takes your mind away from pain. That's the biggest thing. If I say it in one sentence, that's what it is. If you are doing something else

that you really enjoy, your joints seem to not hurt a lot. I don't know why, but it does... (Laura)

You can say "let's go fishing." Within 30 minutes I'm ready to go, when I get there, I forgot all about the pain. (Cindy)

You have something to do to keep you away from the words all the time, and you always have a goal to look up to do, so I don't worry about my pain, what's going on and that kind of stuff. (Candice)

It was clear that leisure activities gave the participants a break from their disease or work so that they were mentally switched to something that was fun and relaxing, and they forgot the problems they were encountering. Although it could be just a very short mental break, it helped release a lot of daily stress related to RA.

Leisure as a Means of Expressing Negative Emotions to Release Stress

Feelings of sadness, frustration, and depression were expressed by every participant because of the impact of RA. These negative emotions, without proper coping, could cause tremendous amounts of stress. Since leisure has an expressive function, it was used as a means to discharge negative emotions in order to release stress. Mary suggested that doing exercises, for her, was a way to release the feeling of "frustration" because of RA. Liz believed that "leisure is the expression of my soul and spirit." Liz found that she could use leisure activities, such as writing poems, playing drums, and drawing pictures, to release her negative feelings:

When I'm really upset, or feeling very bad... it's two ways, if you feel bad physically, then you can feel bad psychologically, or if you feel bad psychologically, then the rheumatoid will act up. So when that happens, I can write poetry and I can draw and paint a little bit, and I drum, and you can release your sadness.

When she was asked to describe more about what she wanted to express, she further explained:

Sadness, frustration. I want people to

understand that what they see...part of this is my own growth, I think "this is not who I am, this is what used to be who I am," but this is not true, this is who I am. I have to accept who I am, my new person, my new life, my new body. So I want to be different. So I think the expression of that is part of the adjustment. So I can write a poem about not being able to be with my children when they are riding on their bikes, because I can't do that, I'm too sore that my legs can hardly move. So I can write a poem about that, or a small essay, or draw a picture of a very sad woman, and that's me, feeling sad in my heart. So the expression is released and it is very therapeutic.

Leisure as a Means of Relaxing to Release Stress

Some of the participants mentioned that leisure activities were relaxing. When participating in these leisure activities, they felt relaxed and stress was reduced. Diane described: "Even as I was doing physical activity, I was mentally relaxing. It's relaxing to paint. I found I'm totally relaxing to do beads." Some of them mentioned that traveling or just going out for a walk could make them feel relaxed:

Getting out and traveling, it will just release it [stress], 'cause I enjoy going around and looking at things, and that relaxed me. Even going to Florida, I love going to Florida. And that relaxed me. (Jen)

In the morning, after I take a hot bath, I make a cup of coffee, I get dressed, and then I walk outside and walk around my yard and look at the plants, and drink a cup of coffee, (like on the weekend, not on a week day). That's very relaxing, very stress reducing. (Liz)

Feeling of relaxation could be important motivation for people with RA to participate in leisure activities because they had to find effective ways to release their stress from RA. Linda explained that she enjoyed swimming because it was relaxing:

One thing that I don't have to do and I always look forward to because it relaxes me and just makes me feel better, is getting into the

water. Even when there is no class, like over the break, I still come and dive into the water and swim around. I'm not a good swimmer. I do not enjoy swimming because I'm a good swimmer. I'm actually a poor swimmer. But it is just something about being in the water that I found very relaxing.

Leisure as a Means of Enhancing Mood to Release Stress

The participants described their leisure activities as something "fun" and "enjoyable." Therefore, leisure participation may result in good mood states, which help reduce stress and enhance psychological well-being (Iwasaki, Mannell, Smale, & Butcher, 2002). For example, Sophia described that when she participated in leisure activities with other people, she would feel "cheery" and that would help her release stress. Some participants suggested that "laughing" and "breathing techniques" were good ways of enhancing moods.

[Leisure is] very important. Because it gets you away from your everyday life, you don't need to worry about whether...you just need to get into a different mindset. Well, like even laughing. I do a lot of laughing when we get together. It's good for your soul. (Ann)

People with arthritis, especially rheumatoid arthritis, you tend to have chronic fatigue. A good breathing habit expending the chest, expending the belly, brings in as much fresh air as possible, getting plenty of oxygen all the time. It is very helpful in elevating and combating the fatigue. I think it is also helpful for one's mood. I think that probably has to do with keeping one's energy up. When one's energy is improved, it also helps combat depression and keeps one's mood. (Linda)

Leisure as a Means of Being with Friends and Others to Release Stress

Leisure activities provided opportunities for the participants to meet friends and other people. Most of the participants reported that being with friends and other people helped release stress. Participants described that they could meet people in the activity classes, invite friends to their homes, or just talk with friends on the phone.

I'd like to have a companion to come to my house. I had a lot of friends. I got a lot of different networks. I got a network at the Y. I have my quilting group; I have my church group. I know some of the wives of my husband's colleagues. I might have two or three good friends that are my son's friends' parents. (Vicki)

Laura mentioned that she went to the YMCA for water exercise, and that was the place where she could meet with other people. Laura further explained that sometimes meeting with people, rather than doing exercise, was the main reason for her to go there.

We start walking, back and forth, and we talk with each other. It's like walking around the park with somebody, instead of walking in the water. That's where I get a lot of the interactions with people, it's in that class, 'cause we talk about what's on TV; anybody see the latest movie; what's going on around the world; what's going on in Bloomington. So, we are doing our group activity while we are talking to other people. To me, it's very nice. That's relaxing and fun. I go to the Y not just to work out, but to have fun and interact with people. Interacting with people is one of the things I miss doing on an every day basis. (Laura)

In the context of leisure, the participants reported that they could express their problems to friends, talk about other things so that they forgot their pain, and positively influence each other emotionally in a group atmosphere.

Sometimes I just want to go there to have fun and meet with other women. And we talked about what we did about our family, where we went for vacation, so there was something to do and put you not just sitting at home and not doing anything and just thinking about your pain and stiffness. So it was fun to get with somebody, we talked about all the problems. (Candice)

You are in the aerobic class with a few people you know, and they are all cheery and get

along well. And somehow you react to them and you do well, and you cheer up yourself. So, I think it helps to be with people, and just not to be alone all the time. (Sophia)

Friends could mean different things for different participants. Kelly expressed that friends were "those I'm close with...we create together...we make things." To Vicki, friends were a "source of occupying my time, talking, laughing, sharing experiences, listening, comparing how I would handle the situation to how somebody else might." Vicki expressed that she was not expecting help from friends:

Friends mean to me that I can rely on them; that I can share with them. And sometimes I don't rely on friends to help me very much, because I'm stubborn, and I'm independent. I want to do it myself. It's tough to accept somebody's help.

Discussion

Devins et al. (1993) suggested that stress from chronic illness may lead to reduced positive experiences and perceptions of personal control. Therefore, how to deal with stress becomes one of the important issues for TR professionals in order to help individuals with disabilities maintain health and have quality of life (Lazarus, 1993). Concerning the role of leisure in coping with stress from RA, the findings from this study showed that leisure buffers against stress in six different ways: escaping, expressing negative emotions, relaxing, enhancing mood, taking one's mind off, and being with friends and other people.

Leisure escape is similar to what is called leisure palliative coping in Iwasaki and Mannell's (2000) Hierarchical Dimensions of the Leisure Stress-Coping Model, where leisure palliative coping is defined as "an escape-oriented coping strategy" in which people "temporarily escape from stressful events through leisure" (p. 168). Although this break could be short, it provided the participants an important opportunity to refresh and restore energy, gain positive experiences, and find meaning of life, which are resistant elements against stress (Folkman, Moskowitz, Ozer, & Park, 1997).

In Iso-Ahola's (1984) model of leisure behavior,

escape is proposed as one of the important leisure motivation dimensions. In escaping experiences, participants may be able to totally immerse themselves into the activities they are enjoying and forget the problems they are enduring. Iwasaki, Bartlett, and O'Neil (2005) reported that leisure activities, such as fishing and traveling, served as a "time-out" from stress and allowed the participants under stress to "feel refreshed and gain renewed energy and perspective, and to help them regroup to better handle stressors" (p. 984). Thus, women with RA in this study were able to experience a temporary release from stress through their leisure escaping experiences, even becoming stronger in coping with stress after they returned to normal life.

Self-expression has been defined as one of the important characteristics of leisure (Iso-Ahola, 1999), in which people are able to express self or emotion freely. In this study, some participants indicated that they expressed their negative emotions through leisure activities to release stress, which is consistent with Iaquinta and Larrabee's (2004) interview study with women with RA, where negative emotions such as anger, fear, frustration, and depression were reported. Hamilton, Karoly, and Kitzman (2004) proposed that because negative emotions, such as sadness and anxiety associated with pain, might disrupt the ongoing activities and reinforce the negative experiences with people's illnesses, people with negative emotions tended to find ways to avoid establishing long-term goals. Further study may explore if leisure activities help establish long-term goals for people with RA.

According to this study, leisure activity may serve as an effective emotion-focused coping strategy that helps individuals release their negative emotions. In contrast, if one's negative emotions are not released, it may result in cumulative stress that leads to serious problems (Greenberg, Wortman, & Stone, 1996). This can be explained by the inhibition-confrontation theory, which holds that inhibiting one's thoughts or emotions after traumatic events "requires physiological work, which, over time, places cumulative stress on the body, increasing vulnerability to illness," and confronting negative events "should undo the cumulative physiological stress of inhibition and strengthen resistance to disease" (Greenberg, Wortman, & Stone, 1996, p. 588).

Relaxation has been recognized as one of the salient characteristics of leisure for decades. Shaw (1985) suggested that relaxation is one of the most important

characteristics of leisure. Similarly, Tinsley and Tinsley (1986) and Tinsley and Eldredge (1995) supported that leisure experiences influence individuals' physical and mental health because of the positive attributes of leisure, including relaxation. In a study with a sample of college students, Cai (2000) reported that relaxation in leisure activities significantly reduced anxiety and depression. Kleiber (2000), however, argued that relaxation is an area that has been neglected in the field of leisure studies. He stated, "leisure is most essentially a position of relaxation, of faithful openness to immediate reality and ease of movement and thinking" (pp. 83-84). Consistent with Kleiber's (2000) proposal, this study supported that relaxation is an essential leisure participation motivation for women with RA and serves as an effective stress coping means as well.

In addition, Blalock, DeVellis, Holt, and Hahn (1993) reported that individuals with RA tend to need more time for relaxing due to the pain and fatigue. Ailinger and Deer (1997) argued that individuals with RA have to frequently and deliberately maintain a balance between activity and rest by using different personal care management strategies. For example, Yoshida and Stephens (2004) found that three types of strategies are used by individuals with RA to carry on their everyday life:

- (a) organizing their living and working environments to facilitate daily activities,
- (b) paying more attention to ongoing activities to prevent risk or harmful outcomes, and
- (c) prioritizing and reducing activities.

Yoshida and Stephens suggested that these strategies help individuals with RA reduce stress and fatigue, relax, and conserve energy.

In Iwasaki and Mannell's (2000) Hierarchical Dimensions of the Leisure Stress-Coping Model, mood enhancement is proposed as one of the leisure stress coping strategies. Leisure mood enhancement refers to the "enhancement of positive mood and/or the reduction of negative mood through leisure to regulate the emotions/moods of individuals under stress" (Iwasaki, 2003, p. 188). Finegan and Seligman (1993) suggested that mood may influence one's attitude. They found that when people were in a positive mood, they were more likely to have a positive attitude, and this effect was enduring. This may imply that a positive mood from leisure participation helps form a positive attitude when

encountering negative life events. The positive mood may lead people to the belief that a negative event is a challenge and opportunity rather than a threat (Finegan & Seligman, 1993).

In a focus group study with Aboriginal women and men with diabetes, Iwasaki et al. (2005) concluded that "taking one's mind off" is one of the functions that leisure activities serve in coping with stress. While discussing the role of leisure activities as a buffer against the impact of negative life events, Kleiber, Hutchinson, and Williams (2002) stated:

Watching television, listening to music, using drugs and alcohol, sleeping, playing video games, playing with a pet, exercising, eating, shopping, engaging in sex, and other forms of diversion are emotion-focused strategies used to keep one's mind off the problem and reduce the negative feelings that are associated with negative life events and resulting stressors. (p. 225)

Similarly, in a study of individuals with spinal cord injuries, Kleiber, Dattilo, Loy, and Hutchinson (as cited in Kleiber et al. 2002) reported that after having severe injuries many individuals expressed the need to keep their mind off their worries. Therefore, leisure as a means of "taking one's mind off" provides a positive way to allow individuals under stress to have a mental break from the stressor.

Social support has been well documented as associated with stress coping (Cohen & McKay, 1984; Langford, Bowsher, Maloney, & Lillis, 1997; Thoits, 1995). Langford et al. (1997) suggested that social support mediates stress because of its association with such positive factors such as personal competence, perceived control, perceived self-worth, psychological well-being, decreased anxiety, and decreased depression. Krohne and Slangen (2005) reported that patients who perceived higher social support demonstrated less anxiety and experienced shorter hospital stays than those with low support.

Coleman and Iso-Ahola (1993) suggested that friendships and companionship through leisure provide social support. Socialization has been found to be an important motivation for leisure participation (Kelly, 1987). Through the process of socialization in leisure, people may make friends, share information, and express emotions, which are all different kinds of social support.

Even the perception of the availability of social support, not the actual support, has the effect of buffering against stress (Wethington & Kessler, 1986).

Limitations should be noted when interpreting the findings. Although the participants recruited in this study represented diverse racial groups, the majority were white females with relatively high educational backgrounds. Furthermore, all the participants in this study were recruited from two small towns in the United States. They might have different leisure lifestyles than people living in larger cities. In addition, most of the participants in this study had illness or disability along with RA. It seems that it is very common that people with RA tend to develop other diseases due to the side effects of medications they take or the development of RA itself. Therefore, the findings of this study may not reflect the impact on life and leisure activities only from RA, although RA is reported by the participants as their major problem.

Implications for Recreation Therapy Practice

Understanding the positive roles that leisure may play as a means of coping with daily stress has clinical implications for developing and designing intervention strategies. For recreation therapists working closely with people with RA, there are at least two major implications from this study. First, recreation therapists may need to increase awareness of various important roles of leisure in dealing with daily stress of adults with RA. Adult women with RA in this study group appear to recognize that leisure provided various important roles to cope with stress related to RA. As discussed earlier, the current study along with other studies provide evidence of leisure benefits for those who experience stress and trauma. Thus, having an evidence-based understanding of leisure benefits help develop clinical programs for this population.

Second, recreation therapists have an important opportunity to maximize health and quality of life of adults with RA by introducing leisure activities and encouraging them to participate in leisure activities in spite of constant pains and stress associated with RA. It may be helpful to strongly encourage and support those who have not had a previously active lifestyle. It is not an easy task to maintain and/or encourage adults with RA to stay active in leisure. However, through leisure education programs, clients with RA need to learn the

benefits of leisure participation in coping with stress. Leisure education programs should also include teaching various leisure options and help clients increase their leisure repertoire. Promoting healthy living in spite of daily stress associated with RA is an important aspect of recreation therapy intervention, and the health benefits of leisure participation should be emphasized with clients.

Implications for Recreation Therapy Research

Leisure stress coping is a relatively new research area that has stimulated new perspectives in leisure studies, and represents the trend of interdisciplinary studies that connect leisure studies with research in psychology, sociology, and physiology. Moreover, leisure stress coping theories have the potential to connect other leisure theories, such as leisure motivation, leisure satisfaction, and leisure constraints. Therefore, leisure stress coping is an area that is worth further inquiry. Leisure phenomena, however, are complex and multiple dimensional. People's leisure experience is subjective and difficult to measure objectively. No single type of research method is able to accomplish the goal to completely understand the role of leisure as a stress coping strategy. Thus, more studies with different research methods, both qualitative and quantitative, are encouraged to explore the role of leisure in coping with stress for people with disabilities.

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