
SERIOUS LEISURE, HEALTH PERCEPTION, DISPOSITIONAL OPTIMISM, AND LIFE SATISFACTION AMONG SENIOR GAMES PARTICIPANTS

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This study investigated factors that explain the life satisfaction of Senior Games participants. One 193 older adults from the 2005 Michigan State Senior Games and the 2005 New York State Senior Games participated in the study. The results of the study show that one of the indicators of serious leisure (affective attachment) was positively correlated to optimism (.16, $p < .05$), age (.28, $p < .01$), and the number of years participated (.28, $p < .01$). Regression analysis was also used to identify which variables contribute to predicting life satisfaction. It was found that dispositional optimism ($\beta = .308$, $p < .001$) and perceived health ($\beta = .185$, $p < .05$) were significant predictors of life satisfaction.

The concept of subjective well-being (SWB) involves the assessment that people provide relating to the quality of their lives (Pavot & Diener, 2004). According to Diener, Suh, Lucas, and Smith (1999),

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positive affects, negative affects, and life satisfaction are components of SWB. While positive affects and negative affects are useful for measuring transient experiences of SWB, life satisfaction is used to indicate relatively long-term feelings. Life satisfaction is a judgmental process whereby individuals evaluate the quality of life based on sets of criteria (Pavot & Diener, 1993). Studies have proposed that life satisfaction is mutually influenced by personality traits and psychosocial variables of life events (Headey & Wearing, 1989; Diener, 1996; Lu, 1999).

For instance, research has shown that optimism is one of the indicators for predicting life satisfaction (Scheier & Carver, 1992). Scheier and Carver (1987) defined dispositional optimism as a generalized expectancy that good things will happen. They claim that an individual's tendency to be optimistic and pessimistic is a relatively stable characteristic across time and context. Optimism positively influences both physical (Brenes, Rapp, Rajeski, & Miller, 2002; Scheier & Carver, 1987, 1992) and psychological well-being (Ferreira & Sherman, 2007; Mroczek, Spiro, Aldwin, Ozer, & Bosse, 1993; Scheier & Carver, 1992; Uskull & Greenglass, 2005). Optimism is also associated with level of activity (Peterson & Bossio, 1991). Austrom, Perkins, Damush, and Hendrie (2003) also reported a positive relationship between life satisfaction and optimism among retired physicians and their spouse. A greater sense of optimism was significantly related to fewer psychological problems and greater life satisfaction in older adults (Chang, 2002; Chang & Sanna, 2001; Ferreira & Sherman, 2007). Restaurant managers who reported higher dispositional optimism also reported higher life satisfaction (Austrom et al., 2003; Hayes & Weathington, 2007; Kim & Feldman, 2000; Szinovacz & Davey, 2005; Wu, Tang, & Yan, 2005).

In addition to personality traits, general findings show that health perception is related to life satisfaction (Arrindell, Heesink, & Feij, 1999; Lohr, Essex, & Klein, 1988; Rapkin & Fischer, 1992; Willits & Crider, 1988). Health perceptions refer to subjective evaluations of how people are feeling, and it is an important aspect of life satisfaction because life satisfaction may have a stronger correlation with health perception than with objective measures of health (Brief, Butcher, George, & Link, 1993). Research studies demonstrate that poor perceptions of health are significantly associated with diminished perceptions of life satisfaction for older adults (Jones, Rapport, Hanks, Lichtenberg, & Telmet, 2003; Leung, Moneta, & McBride-Chang, 2005). Furthermore, a number of research studies have also reported the positive relationship between health perceptions and life satisfaction (e.g., Berg, Hassing, McClearn, & Johansson, 2006; Borg,

Hallberg, & Blomqvist, 2006; Peterson & Bossio, 1991; Siahpush, Spittal, & Singh, 2008).

As people age, the role of leisure becomes an important part of life. A number of previous studies have investigated issues of older adults with regard to their well-being, and the significant role that leisure plays (Sasidharan, Payne, Mowen, & Montoro-Rodriguez, 2006; Sener, Terzioglu, & Karabulut, 2007; Thang, 2005; Yau & Packer, 2002). Riddick and Stewart (1994), for example, in reporting determinants of life satisfaction for older adults, indicate that participation in leisure activities was the most significant predictor of life satisfaction. Stathi, Fox, and McKenna (2002) also demonstrated that physical activity contributes to subjective well-being as well as mental health among older adults. Furthermore, Silverstein and Parker (2002) found that older adults who increased leisure activities participation are likely to maintain their well-being.

Specifically, being engaged in activities such as club meetings, watching movies, and gardening is positively related to positive affects among older adults (Lawton, 1994). Therefore, leisure is an important aspect of our daily lives, and being engaged in meaningful leisure activity can be considered a vital part of enhancing well-being. According to Driver and Bruns (1999), over 100 benefits of leisure have been identified by researchers, with claims that these benefits contribute to our satisfaction in life. These benefits encompass personal, social and cultural, economic, and environmental categories. With regard to the beneficial aspects of leisure, Stebbins (1992) has taken an approach to understand leisure from a viewpoint that explores the degree to which one is involved, committed, and identified through leisure activities. In other words, examining the depth of involvement and the degree of identification are important concerns in this perspective, and Stebbins (1992) conceptualized the involvement in leisure as casual or serious.

In a sense, serious leisure can be seen as personally meaningful engagement and a strong commitment to enjoyable activities. Stebbins (1992) defines serious leisure as a systematic pursuit of amateur, hobbyist, or volunteer activities that is substantial and interesting for the participants. Stebbins has also identified six defining characteristics of serious leisure: (a) perseverance, (b) significant effort, (c) career development, (d) personal and social benefits, (e) expression of self and identity, and (f) unique ethos. Diverse groups of people have been the targets of research in serious leisure literature, as researchers have examined older golfers (Siegenthaler & O'Dell, 2003); people with disabilities (Patterson, 2000); runners

(Major, 2001); master swimmers (Hastings, Kurth, Schloder, & Cyr, 1995); volunteers (Gravelle & Larocque, 2005); adventure tourists (Kane & Zink, 2004); and football fans (Gibson, Willming, & Holdnak, 2002). Some studies of serious leisure have investigated the behavior of older adults and discovered that it is conducive to their well-being (Brown, McGuire, & Voelkl, 2008; Siegenthaler & O'Dell, 2003). For example, in a study of older golfers by Siegenthaler and O'Dell, older adults who are seriously devoted to golf are able to appreciate the contribution of serious leisure to their well-being.

Participating in Senior Games may be exemplary cases of older adults' serious leisure engagement. Senior Games are annual state-wide multievents for individuals age 50 and older. Every state in the United States has this annual event. Research has demonstrated that participating in athletic events that are meaningful to older adults provides both personal and social benefits (e.g., Smith & Storandt, 1997). Cardenas, Wilson, and Henderson (2009) also discovered that Senior Games participants generally indicate that enjoyment is an important aspect of participation, and those experiences could facilitate better health. In their study, older adults' involvement in Senior Games was not a "once in a life time" event, and preparation for the competition seemed to be important in older adults' lives. If the preparation processes require significant effort and skills, and if the activity is important enough that the older adults could identify themselves as senior athletes, the participants would be typified as serious leisure participants. Through such participation, it is likely that older adults will experience perceived competence and enhanced self-image, and they might be able to maintain healthy life styles. Consistent with the premise of serious leisure (Stebbins, 1992), it is expected that their serious involvement and commitment to the activity are related to satisfaction in life. Building on Stebbins' model, Brown et al. (2008) examined older shag dancers and established the link between serious leisure and successful aging.

While research has found a positive association between dispositional optimism and subjective well-being among older adults (Mroczek et al., 1993; Scheier & Carver, 1987), previous studies have not examined the relationship of serious leisure, dispositional optimism, and subjective well-being among older adults. In addition, a majority of serious leisure studies have been conducted under the qualitative paradigm; thus, Stebbins (2001) suggested a quantitative approach to increase understanding of serious leisure. This study used a quantitative approach to investigate life satisfaction of Senior

Games participants using personality characteristics, serious leisure, and perceived health along with some demographic factors. Therefore, this study sought to explore factors that explain life satisfaction of Senior Games participants.

METHOD

Respondents

One hundred ninety three older adults from two annual events, the 2005 Michigan State Senior Games, and the 2005 New York State Senior Games, participated in the survey. Adults aged 50 and over were recruited at the event sites in the summer of 2005. The investigators were present at both events, and they administered the questionnaires in person. The investigators approached the subjects and asked them to complete questionnaires on a voluntary basis. Participants were recruited in various places such as the track, the basketball court, the swimming pool, and a sport bar where they played billiards. Participants took approximately 15 minutes to complete the questionnaire, which was returned immediately to the investigators. To protect anonymity, participants were not asked to identify themselves by name on the questionnaire. To ensure a high return and a usable rate, the questionnaires were collected on-site and checked for completeness. A total of 193 questionnaires were complete and used in data analysis.

Instrumentation

Dependent Variable (Life Satisfaction)

Diener, Emmons, Larson, and Griffin's (1985) Satisfaction With Life Scale (SWLS) was used to measure global life satisfaction. This scale has been extensively used and has proven to be applicable to adult age groups (Hamarat et al., 2001; Pavot & Diener, 2004, 2008). SWLS is a five-item scale that measures perceived life satisfaction. Sample questions include "In most ways my life is close to my ideals," and "I am satisfied with my life." The SWLS is rated on 7-point Likert scales (1 = strongly disagree and 7 = strongly agree), and the responses were summed to produce a total score. Higher scores indicate greater satisfaction with life. Internal consistency of SWLS items is .80 (Reistetter, Spencer, Trujillo, & Abreu, 2005). Cronbach's alpha in this study was .85.

Predictor Variables

A number of variables were employed to predict life satisfaction. Serious leisure was measured using behavior consistency and affective attachment. As described by Goff, Fick, and Oppliger (1997), behavior consistency is "consistent focused behavior over time which implies rejection of alternative behaviors" (p. 51). Two items were adapted from Goff et al.'s study, "To miss a day's exercise is extremely frustrating," and "I would arrange or change my schedule to meet the need to play a sport as a senior athlete." Three items used in Goff et al.'s (1997) study were adapted to measure affective attachment. Since their study was concerned with runners, and this study consisted of senior athletes, minimal wording changes were made to incorporate older adults in the questions. Affective attachment was assessed by responses to the questions "I am very personally involved in Senior Games," "Most of my interests are centered on Senior Games," and "The most important things that happen to me involve playing in the Senior Games." Options for responses were formatted using a five-point Likert scale. Cronbach's alpha for the affective attachment and behavior consistency in this study was .72 and .68 respectively.

Dispositional optimism was measured using The Life Orientation Test (LOT; Scheier & Carver, 1987). The LOT has acceptable levels of validity and reliability. The items inquire about respondents' generalized expectations of positive and negative outcomes. It is a four-point Likert scale, and sample items include "I always look on the bright side of things," and "I hardly ever expect things to go my way." This scale is composed of four optimism items, four pessimism items, and four filling items. Pessimism items are reverse scored and summed with other optimism items. The four filling items were not used in the analysis. These items were measured using a 5-point Likert scale. Cronbach's alpha for the dispositional optimism in this study was .82.

Health perception was assessed by two items: "How would you rate your own health at present?" and "What do you think of your own health condition compared to that of other men/women of your age?" Using a five-point Likert scale, respondents were asked to answer from "bad" (1) to "excellent (5)." A high score indicated a better perception of health. Social-psychological research has shown that subjective health is a valid indicator of wellness (Guinn, 1995). Cronbach's alpha for the perceived health in this study was .78. In addition to demographic questions, participants were asked to indicate the number of years they have participated in the Senior Games.

The survey instrument also asked participants to provide demographic information (i.e., age, gender, employment status). Additionally, to examine the extent to which the participants were involved in Senior Games, respondents were asked to report the number of years they have participated in Senior Games and the number of hours per week spent training for the Senior Games.

RESULTS

The study sample was composed of 119 males (61.7%) and 74 females (38.3%); 37.8% of the participants were in their 50s, 29% were in their 60s, and 33.2% were in their 70s and older. Most (87.6%) of the participants had a college education; 56% of the participants were retired, and the 91.7% of the participants were Caucasian. With regard to health perception, 90.7% of the participants rated their own health as either “excellent” or “good.” Similarly, 92.8% of the participants indicated that their own health condition was “excellent” or “good” compared to their age cohorts (Table 1). The overall mean SWLS score for the sample was 5.64 ($SD = 1.00$), which shows that older adults in this study generally agreed that they were satisfied with their lives. On average, the respondents have participated in Senior Games for 6.7 years, and they trained 8.9 hours a week for Senior Games (Table 2)

Pearson correlations coefficients (Table 3) showed that there were a number of statistically significant relationships among variables. Age was significantly related to one of the serious leisure characteristics: affective attachment. Although serious leisure and other demographic variables did not indicate significant relationships with life satisfaction, optimism and perceived health were found to be significantly associated with life satisfaction. Affective attachment had a significant relationship with behavioral consistency ($r = .20, p < .01$); dispositional optimism ($r = .16, p < .05$); age ($r = .28, p < .01$); and number of years participated in Senior Games ($r = .28, p < .01$). Behavior consistency had a nonsignificant relationship with other variables. Finally, age had a positive relationship with the number of years participated ($r = .47, p < .01$) and a negative relation with perceived health ($r = -.14, p < .05$). Since the correlation coefficients among the independent predictor variables ranged from $-.14$ to $.47$ in magnitude, problems related to multicollinearity were not an issue with coefficients of this magnitude (Tabachnick & Fidell, 2001).

To examine the associations among life satisfaction and other predictor variables (i.e., behavior consistency, affective attachment,

Table 1. Frequencies of participant characteristics

Characteristics	<i>n</i>	%
Age		
50–59	73	37.8
60–69	56	29.0
70–79	49	25.4
80–89	11	5.7
90–99	4	2.1
Gender		
Male	119	61.7
Female	74	38.3
Race		
Caucasian	177	91.7
African American	10	5.2
Asian	2	1.0
Hispanic	1	0.5
Education		
High school	34	12.4
College	83	48.2
Graduate school	76	39.4
Employment		
Retired	108	56.0
Other	85	44.0
Marital status		
Married/Partnered	139	72.0
Other (single/divorced/widowed)	54	28.0

Table 2. Descriptive statistics of the variables related to the Senior Games involvement

Variables	%	<i>M</i>	<i>SD</i>
Number of years participated in Senior Games		6.70	6.30
1–5	56.5		
6–10	21.8		
11–15	10.4		
16+	14.4		
Number of hours per week spent training for Senior Games		8.87	6.00
1–7	55.4		
8–14	36.8		
15+	7.8		

Note. *M* = Mean; *SD* = Standard deviation.

Table 3. Zero-order correlation coefficients

Variables	Mean	SD	1	2	3	4	5	6	7
1. Affective attachment	3.40	0.84	1.00	0.20**	0.85	-0.09	0.16*	0.28**	0.28**
2. Behav. consistency	3.66	0.85		1.00	0.13	0.28	0.01	0.03	0.04
3. Life satisfaction	5.64	1.00			1.00	0.21**	0.32**	0.02	0.00
4. Perceived health	4.43	0.59				1.00	0.04	-0.14*	-0.12
5. Optimism	4.01	0.72					1.00	0.00	0.01
6. Age ^a	-	-						1.00	0.47**
7. Years of Senior Games	6.70	6.30							1.00

^aAge was measured in ranges. Mean and *SD* are not available. * $p < .05$; ** $p < .01$.

dispositional optimism, age, number of years participated, and perceived health), regression analysis was run. Life satisfaction was predicted from two factors (Table 4). Results suggested that dispositional optimism ($\beta = .308$, $p < .001$) and perceived health ($\beta = .185$, $p < .05$) were significant predictors of life satisfaction. Overall, this model explained 15% of the variance in life satisfaction score. Affective attachment, behavior consistency, age, and number of years participated were not significant predictors of life satisfaction.

DISCUSSION

The results of this study show that one of the indicators of serious leisure (affective attachment) positively correlated with optimism (.16, $p < .05$); age (.28, $p < .01$); and the number of years participated (.28, $p < .01$). Since optimism characterizes a rather stable individual difference trait that promotes psychological well-being, the finding of the relationship between affective attachment and optimism is a

Table 4. Regression analysis model of life satisfaction

Variables	Standardized		
	beta	<i>t</i> value	<i>p</i>
Affective attachment	.029	0.385	.701
Behavioral consistency	.070	0.969	.334
Perceived health	.185	2.557	.011
Optimism	.308	4.473	<.001
Age	.039	0.501	.617
Years of Senior Games	-.011	-0.143	.886

Note. $R^2 = .15$, $p < .001$.

significant contribution. Serious leisure, as measured by affective attachment and behavioral consistency, was not significantly related to life satisfaction. Despite this, the finding of a positive relationship between affective attachment and optimism calls for further investigation of the quality of serious leisure (e.g., unique ethos, durable benefits) and other indicators of well-being (e.g., mental health, vitality, positive affect).

Another important contribution of this study to the understanding of older adults' leisure experience in general is the finding of a positive relationship between affective attachment and age. This result was unexpected because in general, exercise adherence would decrease as people age (Bausell, 1986; Kovar, Fitti, & Chyba, 1992). It was interesting to discover that older adults in this study—who are assumed to be involved in serious leisure—showed a contrary outcome. In a study of older adults who participated in the Australian Masters Games, Dionigi (2002) found that participation in competitive sport was so meaningful to older adults that it was described as “expression of authentic self” and reinforcement of “their established identity” (p. 14). While Dionigi's study did not specifically look into the direct relationship between age and serious leisure, it may be interpreted that competitive sport participation could reinforce identification with the chosen pursuit among older adults, which is one of the qualities of serious leisure. In this regard, the findings from the present study may add to the existing body of knowledge of serious leisure in that involvement or attachment to serious leisure would increase as people get older.

Staudinger, Fleeson, and Baltes (1999) discussed that the relationship between age and life satisfaction can be minimal or insignificant. In fact, the effect of age might be observable among the very old individuals who are 80 and older. However, Staudinger et al. suggest that a different phenomenon is found when examining the relationship between age and health perception. Negative relationships were observed in many studies, and the present study supports the negative impact of age on health perception. Although the serious leisure participants in this study were maintaining an active life style, they might have also experienced an increase in age-related morbidity and functional impairment.

The findings based on regression analysis revealed that dispositional optimism ($\beta = .308$, $p < .001$) and perceived health ($\beta = .185$, $p < .001$) were significant predictors of life satisfaction. Our finding is closely in line with existing evidence that older adults possessing an optimistic outlook is associated with improved life satisfaction

(Isaacowitz, 2005; Robinson-Whelen, Kim, MacCallum, & Kiecolt-Glaser, 1997).

While previous studies showed the relationship between well-being and serious leisure (e.g., Siegenthaler & O'dell, 2003), this association was not confirmed in this study. This unprecedented finding suggests that affective attachment and behavioral consistency may not fully capture serious leisure experience. This warrants future studies that include other qualities of serious leisure (e.g., career development, personal and social benefits), which were not examined in the present study, to further articulate older adults and serious leisure experiences.

Several issues should be considered when interpreting the results of the study. First, this study did not use a full scale or other instruments designed to measure perceived health and serious leisure. Perhaps, using measurement instruments that represent the variables better will increase confidence when explaining perceived health and serious leisure. It could be argued that the use of measurement instruments that represent the variables better would increase confidence when explaining serious leisure. Future study could implement Gould, Moore, McGuire, and Stebbins' (2008) recently developed Serious Leisure Inventory and Measure (SLIM). This study was based on a convenience sampling and the sample size was relatively small. Additionally, the majority of the participants in this study were Caucasian (91.7%), and many of them had a high education level. One should be cautious in generalizing the results. Additional studies may expand the geographic coverage in data collection because Senior Games participants in other states may have different opinions and different levels of involvement in serious leisure. Perhaps, comparison with participants from other states will provide important benchmarks to facilitate the understanding of the findings.

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