
Articles

Examining the Role of Self-Monitoring and Social Leisure in the Life Quality of Individuals with Spinal Cord Injury

Youngkhill Lee and Bryan P. McCormick

Department of Recreation and Park Administration, Indiana University

The level of social leisure for the high self-monitors with spinal cord injury (SCI) was hypothesized to be related to life quality, while the level of social leisure would not be related to life quality for the low self-monitors with SCI. A total of 206 individuals with SCI who reside in community responded to the questionnaire that measured life quality, self-monitoring, and social leisure participation along with demographics. Three blocks of independent variables were entered sequentially to examine the contribution of the block to explained variance (R^2) in life quality. Particularly, an interaction term was created as a product of self-monitoring and social leisure in order to test the hypothesis. The findings of the study did not reveal a significant change in R^2 suggesting that the relationship of social leisure to life quality was not dependent on one's level of self-monitoring. Instead, there was a significant main effect of social leisure participation on life quality in this sample. Implications for further research and practice are discussed.

KEYWORDS: *Presentation of self, self-monitoring theory, social leisure, spinal cord injury.*

Introduction

Arguably, one of the important changes that have occurred in rehabilitation services over the past two decades has been an expansion of the breadth of valued service outcomes. Spath (1996) indicated that, historically, outcomes "centered on results that most interested clinicians" (p. 4). However, increased consumerism and changes in managerial philosophy have significantly expanded the conceptualization of outcomes to include additional perspectives (McLaughlin & Kaluzny, 1994; Sluyter, 1998). As early as 1990, there were indications in the health care literature that medical outcomes needed to include the service recipient's point of view (c.f., Geigle & Jones, 1990). Ware (1992) stated that "a medical outcome has come to mean the extent to which a change in a patient's functioning or well-being meets the patient's needs or expectations" (p. 3). As a result, quality of life, as an

Address correspondence to: Dr. Youngkhill Lee, Department of Recreation and Park Administration, HPER Building, Room 133, Bloomington, IN 47405-4801, Email: ylee@indiana.edu.

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outcome of rehabilitation services that reflects recipients' point of view, has become an important indicator of rehabilitation services. For example, both of the principal accrediting bodies in health services identify service recipients' perceptions of care as a critical indicator of service quality (CARE, 2004; Joint Commission on Accreditation of Healthcare Organizations, 2004). Thus, understanding what factors and conditions affect life quality following a serious injury such as spinal cord injury (SCI) can provide direction for improving rehabilitation services. Fine (1996) identified that leisure and recreation functioning may play an important component in life quality and rehabilitation. A better understanding of the role and function of leisure in the life quality of people with SCI will provide recreation therapists working in rehabilitation settings an enhanced foundation for practice.

Life Quality and Spinal Cord Injury

Life quality is a broad term that indicates quality experience in daily life which may overlap with similar concepts such as subjective well-being and life satisfaction. Diener (1994) argued that subjective well-being is the most global concept that incorporates the various terms that are noted in the more general study of happiness. He characterized subjective well-being as a global, positive appraisal of one's life. Fuhrer (2000) viewed life satisfaction as a cognitive appraisal of one's life that refers to "the degree to which individuals favorably judge the overall quality of their lives" (p. 484). In a similar vein, Shin and Johnson (1978) defined life satisfaction as a "global assessment of a person's quality of life according to his/her own criteria" (p. 475). Fabian (1990) defined quality of life as "a measure of subjective well-being, an abstract and multifaceted concept which subsumes related, but structurally different concepts such as happiness and life satisfaction" (p. 161). Given the range of individual differences in life quality, it is essential to ask the person for his/her overall evaluation of life. Thus, life quality was conceptualized in this study as a self-assessment of a person's current and future life circumstances.

Within the research on SCI rehabilitation, factors such as health, employment, material comforts, perceived control, social support and social relationships have been examined as impacting quality of life (Clayton & Chubon, 1994; Cushman & Hassett, 1992; Fuhrer, 1996; Fuhrer, Rintala, Hart, Clearman, & Young, 1992; Krause, 1990). While individuals with SCI report that their needs in many of these areas are unmet, they also report that they are generally happy and their quality of life is good (DeVivo & Richards, 1992; Eisenberg & Saltz, 1991; Lundqvist, Siosteen, Blornstrand, Lind, & Sullivan, 1991; Whiteneck et al., 1992). At the same time, a meta analysis indicated that individuals with SCI tend to report lower quality of life than those without disabilities (Dijkers, 1997).

Existing studies have consistently demonstrated close relationships between social engagement and quality of life of individuals with SCI. A number of researchers have documented that those who are actively involved in

social activities report a higher quality of life or satisfaction with life than those who are inactive (Clayton & Chubon, 1994; Crisp, 1992; Dijkers, 1999; Fuhrer, 1996; Post, DeWitte, van Dijk, & Schrijvers, 1998; Post, van Dijk, van Asbeck, & Schrijvers, 1998; Schulz & Decker, 1985; Westgren & Levi, 1998). Furthermore, the quality and richness of social contacts, such as the number and frequency of contact with friends, is related to higher levels of life quality, life satisfaction, and subjective well-being (Clayton & Chubon, 1994; Crisp, 1992; Schulz & Decker, 1985). Finally, some studies have demonstrated that subjective well-being and life satisfaction of individuals with SCI tend to be more strongly related to community functioning, particularly social interactions, as opposed to injury levels or levels of functional independence (Clayton & Chubon, 1994; Evans, Hendricks, Connis, Haselkorn, Ries, & Mennet, 1994; Fuhrer, 1996; Fuhrer et al., 1992; Siosteen, Lundqvist, Blornstrand, Sullivan, & Sullivan, 1990). Thus, social activity following rehabilitation appears to be an important variable that is associated with life quality of people with SCI. At the same time, the acquisition of a disability has been found to be associated with a reduction in one's social network size and contact (Lyons, Sullivan & Ritvo, 1995).

Leisure and Spinal Cord Injury in Presentation of Self

One of the ways that social activity may contribute to life quality is that social interaction provides opportunities for self-definition. Goffman (1959) asserted that individuals use the social cues that operate in diverse social situations to monitor and adjust their verbal and non-verbal behaviors to convey the "right" impression to other people. Although Goffman termed this phenomenon "impression management," a more recent construct, self-monitoring (Snyder, 1979), offers a theoretical account of individual differences in self-presentation and expressive behavior. Snyder (1987) stated that people who monitor themselves treat social interaction as "dramatic performances designed to gain attention, make impressions, and at times entertain" (p. 178). Given that much leisure experience occurs in a social milieu and that social interaction is one of the key dimensions of leisure participation (Kelly, 1983), self-monitoring may play a role in leisure functioning. Further, leisure is often organized around interpersonal interaction through which a sense of belonging may be established (Scott & Godbey, 1992). Consequently, it is possible for people to use leisure as a medium for self-presentation, since "almost all behaviors and appearances potentially convey information about the self" (Schneider, 1981, p. 26).

Kelly (1983) theorized that people engage in leisure as a means to actualize their freedom and present themselves. He further stated that "there is something about the activity [leisure] that provides the 'right' context for the working out of identities" (p. 97). Mannell and Kleiber (1997) also indicated that people participate in leisure not only to play but also to try out the kind of person he/she might want to be. Mannell and Kleiber further noted that people constantly monitor themselves and create certain images

of themselves in response to their own behaviors as well as other people's reactions to them.

Schlenker (1984) discussed the significance of creating situations that serve to affirm a desired identity. He proposed that people are motivated to construct and maintain positive aspects of self or identity, which results in engaging in activities that allow them to affirm or validate "desired identity images." An important aspect of this theoretical position is that individuals present those images that are positive and actively seek ways to validate those positive identity images. Haggard and Williams (1992) tested this theoretical position in a leisure context and found that individuals attempt to affirm leisure identities, and that presentation of specific leisure identities often becomes an important motivator for leisure participation. They further reported "through leisure activities we are able to construct situations that provide us with information that we are who we believe ourselves to be, and provide others with information that will allow them to understand us more accurately" (p. 3).

However, the perceived inability to create the desired social presentation of self has been identified as a constraining factor to leisure participation (McCormick, 1991). The particular challenges faced by people with SCI are that their disability is both socially apparent, and presents certain limitations to social access. From in-depth interviews with individuals with various types of chronic illnesses, including SCI, Charmaz (1983) reported that individuals with chronic illness experience a heightened self-awareness. She further pointed out that people with chronic illness "become not only particularly sensitive to the intentions and meanings of others toward themselves, but moreover, they begin to read the statements and actions of others in new, and self-discrediting ways" (p. 191). That is, they tend to interpret their images in the eyes of others. Fontana and Smith (1989) provided additional evidence that individuals with chronic disabilities construct and maintain their presentation of self in accordance to the actions of others.

Presenting oneself in a public situation may be especially challenging for individuals who have visible disabilities such as SCI. Strenta and Kleck (1984) noted that visible physical disability was a severe deterrent to the formation of friendship. Goffman (1963) also wrote of "abominations of the body," among which he included visible disabilities. Due to their visible physical differences and use of wheelchairs, individuals with SCI often experience difficulties presenting themselves to the public and have an increased sensitivity to social cues (Trieschmann, 1988). Therefore, interpersonal difficulties, largely attributed to being stigmatized by people without disabilities, may prevent individuals with SCI from participating optimally in social activities (Cogswell, 1984). Furthermore, individuals with SCI experience disrupted normal rules of reciprocity and mutual support in social interaction (Charmaz, 1991; Kleiber, Brock, Lee, Dattilo, & Caldwell, 1995). As a result, self-presentation may become a very challenging task for people with SCI.

Theory of Self-Monitoring

The above discussion of the importance of social interaction and presentation of self assumes a rather invariant approach. In other words, the assumption is that social situations are equally important to the identity of all persons. However, the theory of self-monitoring (SM) posits that there are differences in the extent to which people monitor the public appearances they present (Snyder, 1987). To date, a large body of research on SM has accumulated and has provided important insights into individual differences in how individuals present themselves in social contexts (c.f., Gangestad & Snyder, 2000). SM theory concerns differences in the extent to which people cultivate as well as project social images and public appearances. In this regard, the central premise of the theory is concerned with individuals' "active construction of public selves to achieve social ends" (Gangestad & Snyder, p. 546). Gangestad and Snyder claimed that people differ meaningfully in the extent to which they can and do engage in expressive control.

Persons high in SM are adept at identifying and adjusting social and interpersonal behavior (Gerstein, Ginter, & Graziano, 1985). They may be described as assuming a pragmatic orientation in their interactions with others, often modifying their behaviors and self-expressions to fit the social situations in which they find themselves; hence, Snyder (1987) characterized them to be "social chameleons" (p. 22). High self-monitors (SMs) are portrayed as having the skill to selectively communicate or conceal emotional states according to their apparent situational appropriateness. High SMs are sensitive to group norms and the behaviors of others. They are more accurate in diagnosing situational cues and more flexible in adapting their behaviors to these cues (Snyder, 1987). They also have pragmatic self-concepts containing an extensive repertoire of roles, activities, and social selves that can be selectively displayed according to what is to be achieved in each situation. Snyder stated that "high self-monitors often sketch their self-portraits in terms of the roles they play" (p. 48). They may choose to blend with the group or decide to emerge within the group as a compassionate, task-oriented person who should be elected group leader (Anderson, 1990). Thus, social contexts and the roles available in those contexts, appear central to the identity of high SMs.

Persons low in SM, in contrast, are relatively unmotivated by the demands of social situations. Low SMs have a "unified, consistent sense of self-expressed in consistent fashion from circumstance to circumstance" (Snyder, 1995, p. 39). These individuals are far more concerned with maintaining congruence between their personal values and beliefs and their behaviors (Eichenhofer, Gerstein, Valutis, & Jankowski, 1987; Snyder, 1987). Thus, low SMs regard themselves to be "rather principled beings" (Snyder & Kendzierski, 1982) whose behaviors flow from internal characteristics. Low SMs are more likely to define themselves according to identifying characteristics within themselves such as emotions, thoughts, and ideas (Snyder, 1987).

They are more likely to choose social situations consistent with privately held attitudes (Snyder & Kendzierski, 1982), and endorse feedback consistent with their self-image (Jones, Brenner, & Knight, 1990). An important study by Ajzen, Timko, and White (1982) found that attitudes and behaviors were significantly correlated for low SMs but not for high SMs. Snyder (1987) described low SMs as having principled self-concepts unified around core attitudes or values. Behavioral displays are consistent with dispositions regardless of group norms or the possibility of appearing inappropriate or boorish in some circumstances. Snyder (1987) stated that low self-monitors' sense of self "seems to be an enduring and a continuing 'me for all times and places' that does not vary from role to role and from situation to situation" (p. 50).

In addition, people with high SM maintain flexibility and make little emotional investment in relationships. Snyder (1987) noted that high SMs conceive friendship in terms of activities engaged in with others. That is, they are attracted to strangers who share their pastime preferences (Jamieson, Lydon, & Zanna, 1987). High SMs also tend to choose an activity partner based on their own expertise in a particular activity (Snyder, 1987). High SMs, for example, like to have one friend for tennis, another friend for basketball, and yet another friend for chess. Friends are chosen based on how closely their skills match activity domains. As one high SM tennis player observed, "When I want to play tennis, I select a partner who can challenge me" (quoted in Snyder, 1987, p. 65). High SMs choose activity partners who facilitate the construction of their own situationally appropriate appearances (Snyder, Grangestad, & Simpson, 1983).

Low SMs organize their social world differently from high SMs. They are attracted to strangers who share their attitudes (Jamieson et al., 1987). They are more likely to engage in long-term dating relationships with a single partner (Snyder & Simpson, 1984) and tend to occupy relatively homogeneous social worlds (Grangestad & Snyder, 2000). They prefer to belong to a clique within which the individual can express a characteristic disposition (Snyder, 1987). Snyder (1987) noted that low SMs conceive of friendship in terms of affection for others. Low SMs tend to choose activity partners based on their general like-ability, instead of on the basis of their expertise like high SMs. They like to be with the same friends across activity domains (Snyder et al., 1983). As one low self-monitor commented about her choice of an activity partner, "Jan's my best friend. Besides, she's the most fun to be around, whatever the activity" (quoted in Snyder, 1987, p. 65).

High SMs are better able to adjust their self-presentation to produce desired audience responses (Snyder, 1987). In choosing romantic relationships, for example, high SMs prefer their partners with an attractive physical appearance (Snyder et al., 1983), a characteristic that enhances their own status and images in the eyes of others. High SMs use consumer products to manage their impression. High SMs value consumer products for their strategic value in cultivating social images and public appearances, reacting positively, for instance, to advertising appeals that associate products with status

(e.g., DeBono & Packer, 1991; DeBono & Rubin, 1995; DeBono & Snyder, 1989). Further, high SMs are most effectively persuaded by appeals to how particular action or attitude may be the right ingredient in a social image (Gangestad & Snyder, 2000; Lavine & Snyder, 1996).

Low SMs seem not only unwilling but also unable to carry off appearances (Gangestad & Snyder, 2000). They live as if put-on images are falsehoods, as if only those public displays true to the privately experienced self are principled (Gangestad & Snyder, 2000). Low SMs judge consumer products in terms of the quality of the products instead of concerning public appearance, choosing products that they can trust to perform their intended functions well (DeBono & Packer, 1991; DeBono & Rubin, 1995; DeBono & Snyder, 1989). They have a tendency to be persuaded by appeals to how the action or attitude reflects their true underlying values (Gangestad & Snyder, 2000; Lavine & Snyder, 1996). That is, low SMs exhibit less situationally sensitive responses.

Self-Monitoring and Leisure

Having a pragmatic self-conception, high SMs define their identities in terms of specific social situations and corresponding roles, "me for this situation" (Snyder, 1987, p. 48). Low SMs tend to have a more principled conception of self that defines identity in terms of inner characteristics and personal attributes. Their sense of self derives from an enduring, continuing "me for all times and places" (Snyder, 1987, p. 49). Hoyle and Sowards (1993) noted that high SMs are "more attuned to self-aspects that are overt and rooted in social experiences, whereas low-self-monitoring persons are more attuned to self-aspects that are covert and rooted in private experience" (p. 288). High SMs often draw their own identity in terms of specific social situations and the roles they play (Snyder, 1987). High SMs consider "externally located identity characteristics particularly important and internally located identity features less important to their personal identities" (Snyder, 1987, p. 48).

In leisure, high SMs may be more able and motivated than low SMs to seek out and use the personal resources (e.g., expressive control, the ability to accurately perceive social cues) to present desired identity images to different social groups and draw rewards from it. That is, the specific form of impression management skills practiced by high SMs in leisure situations may enable them to cultivate desired identities that result positive outcomes. On the other hand, due to their high desire to present themselves to others, theoretically, the lack of such opportunities may negatively influence their life quality. Burkhardt (1994) reported that network links in the social environment influenced high SMs more than low SMs. Hence, high SMs are more likely to attend to, and be influenced by individuals with whom they interact.

Pollock, Whitbred, and Contractor (2000) reported that SM moderated the relationship between the social environment and job satisfaction. In

other words, while virtually all individuals are influenced by their social environment, high SMs and those who pay high attention to social information "are influenced to an even greater degree than those individuals who are low self-monitors" (p. 324). On the other hand, due to possessing an internally located identity as well as enduring self-conception, low SMs may be less influenced by lack of social opportunity.

The Hypothesis

Taken together, it would seem that high SMs are more likely to derive identity information from social leisure situations, whereas low SMs are likely to derive identity information from internal standards regardless of the social or solitary nature of the environment. From this theoretical statement, it could be argued that participation in social leisure opportunities would have a greater impact on the life quality among high SMs than among low SMs. Conversely, the inability to access social leisure would theoretically have a more negative impact on high SMs as it would deprive them of opportunities to play roles that contribute to their identity. In addition, if such a relationship can be verified, it would provide the possibility for identifying a "risk factor" in rehabilitation. Therefore, the purpose of this study was to examine if the relationship of social leisure to life quality was dependent on the level of SM among people with SCI. Specifically, it was hypothesized that SM moderates the relationship of social leisure to life quality.

Methods

Sampling

The sample was drawn from the outpatient mailing list of the Shepherd Center in Atlanta, Georgia. The computer program that contained the outpatient mailing list initially selected those individuals who have been discharged from the agency more than 6 months. From this pool, a random number of 500 were selected by computer. A packet containing a cover letter explaining the nature of the study, a consent form, research questionnaires, and a self-addressed, stamped envelope was sent to the 500 individuals from the mailing list. To ensure confidentiality, the mailing labels were affixed to envelopes by staff at the rehabilitation hospital. The cover letter informed potential respondents that participation in the study was voluntary. To protect anonymity, respondents were not asked to identify themselves by name on the questionnaires.

While 117 individuals returned their responses by the designated date (one-month from the distribution day), a second mailing occurred right after the designated deadline, asking for a response. The same packet of questionnaires was sent to all respondents along with a cover letter encouraging their cooperation. The cover letter encouraged those who had not responded previously, to do so at their earliest convenience. The letter also instructed those who responded earlier to discard the questionnaire. This second mailing procedure generated 114 additional responses. The use of

bulk mail eliminated 7 forwarded or returned packets with incorrect addresses. Among 231 responses, 25 were eliminated because large parts of the questionnaire were left blank. Considering the (a) returned questionnaires, (b) questionnaires with unusual responses, and (c) non-respondents, this study achieved a 41% response rate ($206/500 = .412$).

The present study was approved by the human subject review board of the rehabilitation hospital, and the principal investigator's previous academic institution. All potential respondents were informed of the nature and the purpose of the study; the cover letter emphasized that participation in the study was strictly voluntary.

Demographic Characteristics of the Sample

The final sample consisted of 206 respondents, with a mean age of 40.6 years (range = 19-75, $SD = 13.3$). A majority was male (72.3%) and white (82%). Approximately 42% of the individuals were single and 37% were married. Almost 38% of the sample was unemployed, 20% were employed full time, 11% were students, and 18% were housewives. Slightly over 50% of the sample had less than 12 years of education, and another 26% of the sample had at least four years of college education, or more. Approximately 47% of the sample had an annual income below \$10,000, and almost 25% earned more than \$30,000 a year. The average length of time since their injury was 9.3 years (range = 1-48 years, $SD = 7.63$). Just less than half (47%) had paraplegia, and 53% had quadriplegia.

Instrumentation

Self-monitoring. Snyder's (1987) 18-item Self-Monitoring Scale was used, which has demonstrated acceptable levels of validity and reliability (see Gangestad & Snyder, 1985; Snyder, 1979, 1987; Snyder & Gangestad, 1986, for further information on psychometric properties). This scale assesses (a) the level of social appropriateness, (b) the degree of using social comparison information, (c) the degree to which individuals control and modify their presentation of self to others, and (d) the extent to which presentation of self is tailored to fit the social situation. While the original instrument used a yes and no response pattern, this study employed a Likert scale using a 1 to 5 interval response pattern (i.e., 1 = "strongly disagree" to 5 = "strongly agree"), as recommended by Briggs and Cheek (1986). A high score indicates a high degree of SM. Sample questions include: "At parties and social gatherings, I do not attempt to do or say things that others will like"; "I guess I put on a show to impress or entertain others"; "In a group of people I am rarely the center of attention." Cronbach's alpha for the Self-Monitoring Scale in this study was .76. The SM scale generates a total score by creating an average score of the 18 items.

Life quality. While there is definitional ambiguity surrounding the construct of quality of life (QOL), most authors have advocated for the incorporation of subjective measures of the concept (c.f., Fabian 1991). Gill and

Feinsten (1994) echoed this approach by emphasizing the importance of "personal perception" of QOL. This study takes the subjective approach to assessing life quality of people with SCI. Therefore, life quality was assessed from two items that focused on subjective ratings of life quality using the following questions: (a) How would you classify your general outlook on life? with response options offered on a 5-point Likert scale: 1 = "Very negative" to 5 = "Very positive"; and (b) In general, how do you feel about your life since injury? with response options also based on a 5-point Likert scale: 1 = "Very dissatisfied" to 5 = "Very satisfied". In this study, the Cronbach alpha of the two-item measure was .85. An overall score was created by averaging the two items, thus scores could range from one to five.

Social leisure participation was measured by summing responses to two items: "How frequently do you participate in the following categories of activities: (a) socializing with friends, and (b) going out for fun and relaxation. Response categories used for the measure were "Never," "Seldom," "Occasionally," and "Frequently" and coded one to four, respectively. Cronbach's alpha for this measure was .74. A higher score indicates more frequent participation in social leisure. Total score on social leisure participation was created as the average of the two items, thus scores could range from one to four.

Data Analysis

Data were analyzed using the SPSS program (Power Macintosh program version 6.1). Descriptive statistics (e.g., means, percentile, standard deviations) were used to examine the demographic characteristics of the sample. Cronbach's alpha tests were conducted to explore the reliability of the measures (i.e., SM, Social Leisure). Zero order correlation coefficients were calculated to examine the relationships between SM and social leisure, and among all demographic variables. A blocked multiple regression analysis was used to examine the association of study variables on life quality. Specifically, three blocks of independent variables were entered sequentially to examine the contribution of each block to explained variance (R^2) in life quality. The first block consisted of all demographic characteristics (gender, age, length of injury, severity of injury). The second block consisted of the study variables of SM and social leisure. The final block consisted of the statistical interaction of SM with social leisure. An interaction term was created as a product of SM and social leisure in order to test the hypothesis that the relationship of social leisure to life quality is moderated by level of SM. Aiken and West (1991) warned that statistical interactions, created as a product of two independent variables, can create problems of multicollinearity as the interaction term tends to be highly correlated to the variables used to create it. One method they offered to control for such problems is create "centered" variables in which the original variable is transformed into a deviation score from the variable mean. These deviation scores are then used in creation of the interaction term. The procedure outlined above was used in this study

to minimize multicollinearity. Specifically, each of the two independent variables of SM and social leisure were transformed by deducting the respective means from the original score. The centered variables were then used in subsequent analysis aside from descriptive statistics.

Results

Descriptive statistics (see Table 1) indicated that group means for self monitoring, frequency of social leisure participation and life quality were all in the positive end of their respective scales. Thus, on average, the group reported at least "occasional" participation in social leisure and was generally satisfied with their life quality. Examination of zero-order correlation coefficients (Table 2) indicated a number of statistically significant relationships. First, none of the socio-demographic characteristics of the sample were significantly related to the quality of life. One socio-demographic variable that is worth notation is that of level of injury. In this sample, life quality was unrelated to whether one had an injury resulting in paraplegia or quadriplegia. Although it could be hypothesized that those with quadriplegia would likely experience greater challenges in everyday life, and thus potentially a

TABLE 1
Descriptive Statistics for Study Variables

Variable	<i>n</i>	Mean	<i>sd</i>
Self Monitoring	205	2.78	0.53
Social Leisure	202	3.09	0.76
Life Quality	205	3.62	1.02

TABLE 2
Zero-order Correlation Coefficients

Variable	1	2	3	4	5	6	7	8
1. Age	1.00	-.06	-.14 ^a	.18*	-.33**	-.26**	-.07	-.11
2. Gender ^a		1.00	.10 ^b	-.15*	.10	.10	.01	.06
3. Injury Group ^a			1.00	-.05	.02	.07	.01	-.01
4. Length of Injury				1.00	.05	.08	-.08	.13
5. Self-monitoring ^c					1.00	.37**	-.12	.27**
6. Social Leisure ^c						1.00	-.29**	.57**
7. Interaction Term ^d							1.00	-.13
8. Life Quality								1.00

Note. ^aDenotes point-biserial correlation coefficient; ^bDenotes phi coefficient; ^cCentered variables; ^dInteraction of centered variables of self monitoring and social leisure; Gender coded 1 = male 2 = female; Injury Group coded 1 = quadriplegia 2 = paraplegia; **p* < .05; ***p* < .01

lower life quality, such was not the case in this sample. However, two socio-demographic variables co-varied significantly with other independent variables. Specifically, age was found to be significantly associated with length of injury, SM, and social leisure. Although the association of age to length of injury is not surprising, it was interesting to note that older respondents were more likely to report lower levels of SM and social leisure. In addition, gender was found to be significantly associated with length of injury indicating that males tended to report a longer time since injury than females in this sample. In addition, both SM and social leisure were significantly and positively related to the quality of life as well as to one another. Thus, at the zero-order level, people reporting higher SM also tended to report greater frequency of social leisure activity. As well, those reporting higher levels of SM and those reporting higher frequency of social leisure also reported more satisfaction with their life quality.

Finally, the blocked regression analysis was conducted to examine the multivariate relationships among independent variables and life quality. Specifically, it was hypothesized that frequency of social leisure activity would interact with SM in their relationship with life quality. It can be seen in Table

TABLE 3
Hierarchical Regression Analysis of Life Quality (n = 172)

Variable	b	SE b	β
Step 1			
Age	-.01	.01	-.12
Gender	.35	.34	.08
Injury Group	-.01	.30	-.01
Length of injury	.04	.02	.12
Step 2			
Age	.01	.01	.01
Gender	.03	.14	.01
Injury Group	-.11	.12	-.03
Length of injury	.01	.01	.04
Self monitoring	.01	.13	.06
Social leisure	.67	.09	.54**
Step 3			
Age	.01	.01	.02
Gender	.01	.14	.01
Injury Group	-.11	.12	-.03
Length of injury	.01	.01	.04
Self monitoring	.10	.13	.06
Social leisure	.70	.09	.55**
Interaction ^a	.09	.13	.04

Note. ^aInteraction of self monitoring and social leisure; Step 1 $R^2\Delta = .03$, ns; step 2 $R^2\Delta = .30$ $p < .001$; step 3 $R^2\Delta = .01$, ns; ** $p < .01$

3 that the first block, including only socio-demographic variables, did not explain a significant portion of the variance in life quality. This appears to be consistent with the findings from zero-order correlation coefficients. The second block, which included the SM and social leisure variables, indicated that the inclusion of these two variables resulted in a significant change in R^2 (.30, $p < .001$). In addition, although SM was significantly related to life quality at the univariate level, it was not a significant multivariate predictor of life quality. Only frequency of social leisure activity was a significant predictor of life quality in the second block. Finally, the third block included all previous variables as well as the social leisure by SM interaction term. The inclusion of the interaction term did not result in a significant change in R^2 (.01). Thus, although there was a main effect of social leisure in predicting life quality, there was not a significant interaction of social leisure with self monitoring.

Discussion

The purpose of this study was to examine if the psychological construct of SM moderated the relationship of social leisure and life quality in people with spinal cord injuries. Considering the idea that leisure provides people with an opportunity to manage their impression in social situations, the present study hypothesized that the social leisure would play a more central role in determining life quality for high SMs with SCI, while the level of social leisure would play a much less important role in the life quality of the low SMs with SCI. The finding that the statistical interaction between SM and social leisure did not reveal a significant change in R^2 suggested that our hypothesis should be rejected. That is, the relationship of social leisure to life quality was not dependent on one's level of SM.

Although the authors had hypothesized that among high SMs, who view social situations as providing opportunities to play roles and present and define themselves, participation in social leisure would have a greater impact on ratings of life quality than in low SMs, this was not the case. The lack of support for a significant interaction of social leisure and SM would indicate that the original conceptualization of the SM theory and its relationship to participation in social leisure should be re-examined. Although the present study examined participation in social leisure, the hypothesis was based on the assumption that social leisure provided opportunities to access a variety of social roles. Thus, social leisure participation was an indirect indicator of social role. However, it may very well be the fact that participation in social leisure for low SMs revolved around participation in social activities with a few consistent friends, whereas participation in social leisure for high SMs revolved around participation in social activities with a diverse group of friends and acquaintances. This pattern is consistent with previous conceptualizations of SM (Snyder, 1987) in which social leisure has been conceptualized as affording opportunities for both high and low self-monitors to

pursue goals relevant to their self-monitoring orientations. Thus, using social leisure participation as indicative of the variety of social roles available, may not have been an adequate operationalization of the hypothesis.

Although the principal hypothesis of this study was not supported, the findings based on zero-order correlation analysis revealed that self-monitoring was significantly and positively associated with social leisure. That is, high SMs tend to report higher levels of participation in social leisure than low SMs. The findings of this study are consistent with existing evidence that high SMs seek higher levels of social interactions, compared to low SMs (Gangestad & Snyder, 2000; Snyder, 1987).

In addition to the association of SM to social leisure, it was also found that SM was significantly and positively associated with life quality ($r = .27$, $p < .01$) in this sample when bivariate relationships were examined. Interestingly enough, there is no supposition in the SM theory that would indicate an association between SM and life quality. SM purportedly addresses how people manage their behaviors and environments in social situations. There is no hypothesis within the theory that the style with which one negotiates social situations is better or worse, in terms of life quality or satisfaction, than any other style. Although this study did find such a relationship, there is a distinct possibility that the significant association was a function involving the covariation of SM with social leisure participation. As can be seen in the multivariate analysis (Table 3, block 2), the association of SM to life quality was no longer significant in the presence of the social leisure variable.

The final finding that should be given attention was that the single variable significantly predicting life quality in the multivariate analysis was frequency of social leisure involvement ($\beta = .55$, $p < .01$). Considering the fact that many individuals with SCI have limited opportunities for social interaction (e.g., Charmaz, 1991; Lyons et al., 1995), one's opportunity to engage frequently in social leisure may be important in and of itself. Some researchers (Fossati, 1990; Krause & Crewe, 1987) reported that the level of social activity in the community is a significant factor in predicting quality of life of individuals with SCI. The findings of this study also support this relationship. In addition, Lee, Dattilo, Kleiber, and Caldwell (1996) reported that individuals with SCI have an important need to seek and establish a sense of continuity in recreation participation. It may be that individuals with SCI value a sense of continuity in social relationships as they frequently engage in recreation activities.

It is interesting to note that life quality was not associated with demographic variables such as age, gender, length of injury and injury groups (i.e., paraplegia and quadriplegia) in either bivariate or multivariate analyses. One might simply assume that the longer one has had to adapt to one's injury, or the greater the degree of impairment of body function may be related to level of life quality. However, the length of injury and belonging to a less impaired injury group (i.e., paraplegia) did not appear to be associated with life quality for the individuals with SCI in this study.

In addition, several methodological issues must be considered when interpreting the results of this study. First, some variables were operationalized using two items not originally intended for that purpose. While a conceptual or theoretical rationale has been presented, and internal consistency reliability data for measures with more than one item substantiated, other psychometric properties are unknown. Second, due to this study's sample size, one should exercise caution in generalizing its results. As with any solicited, voluntary study, the sample may represent those individuals with SCI who are more active and positive in their lives and may not have captured the true variation in the population of people with SCI. Third, due to absence of comparison group in this study, it is uncertain whether the findings are specific and unique to SCI population.

The results of this study have implications for future research. Despite the significant amount of research addressing personality in the social sciences, limited research effort has been exerted to examine the relationship between personality and leisure behavior. An individual's personality plays an important role in experiencing leisure (Mannell & Kleiber, 1997). In this regard, this study provides further support for Krause's (1997) plea for more research utilizing personality variables. This study demonstrated that the theoretical construct of SM is an important personality variable that is associated with leisure participation. Future investigations may further extend the implications of the SM construct to leisure research and therapeutic recreation practice. Further empirical attention is needed to test the hypotheses of this study to individuals without disabilities. It is also recommended to use full scales to measure life quality as well as social leisure engagement.

Finally, there are potential implications for this research to practice. The significant association of social leisure to life quality indicates that leisure functioning is an important component in the lives of people with SCI following rehabilitation, as has been consistent with previous research. Existing studies (Hutchinson, Loy, Kleiber, & Dattilo, 2003; Iwasaki, 2002; Loy, Dattilo, & Kleiber, 2003), for example, demonstrated significance of enjoyable activities including social engagement as an important coping resource. This implies that one of the foci of rehabilitation programs should be on negotiating barriers to leisure participation, particularly in a social situation.

At the same time, although the study hypothesis that SM interacted with social leisure was not supported, SM theory may still be implicated in SCI rehabilitation. SM theory purports that individuals view and use social situations for different purposes and through using different strategies. The implication of this theory for rehabilitation is that although social leisure may be important for all rehabilitation clients, the patterns through which they engage in social activities would likely vary. As a result, the goals of interventions such as leisure education should take this into consideration. For example, rehabilitation goals for low SMs might target developing strategies to negotiate barriers to maintaining existing social leisure relationships, whereas goals for high SMs might target development of strategies to negotiate barriers to accessing new social leisure relationships.

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