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Post-Settlement Quality of Life Differences Among Adults with Spinal Cord Injuries

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A nationwide survey was conducted to assess quality of life differences in a sample of 55 adults with spinal cord injuries (SCI) who had a life care plan developed in litigation related to their injuries. Spinal cord injuries, or traumatic lesions of the spinal cord resulting in any degree of sensory or motor deficit or paralysis, at all levels were included in this sample. Areas of inquiry included whether or not funding for disability related items and services was received as well as the individual's self reported quality of life following receipt of funding for life care plan items using the WHOQOL-Bref. Quality of life is affected by the person's physical health, psychological state, personal beliefs, social relationships and their relationship to salient features of their environment. Consistent with the World Health Organization's definition of quality of life which encompasses one's perception of their position in life relative to their expectations and standards, the WHOQOL-Bref is a 26-item self report questionnaire that assesses quality of life within one's physical, psychological, social and environmental domains. A multivariate analysis of variance (MANOVA) found a statistically significant quality of life difference between those who did and did not receive funding in the physical domain of quality of life; however, not in the social, psychological and environmental domains. Results highlight the impact that financial resources may have in the quality of life reports for persons with SCI.

Quality of life (QOL) is a broad construct that has been plagued by definitional ambiguity and consensus among researchers (Bellini & Rumrill, 2009; Bishop, 2005; Boswell, Dawson & Henninger, 1998; Dennis, Williams, Giangreco & Cloninger, 1993; Hallin, Sullivan & Kreuter, 2000; Hammell, 2004; Koch, 2000). To measure quality of life, social scientists have attempted to quantify QOL for more than 50 years (Dennis et al., 1993). Although quality of life is a term that has been difficult to define, it is of great importance to individuals in society, both with and without disabilities. In general, subjective quality of life is assessed by individuals comparing what they have against what they perceive they deserve and what they value (Roessler & Rubin, 2006; Bishop, 2005). The World Health Organization (WHO) defines quality of life as an "individuals' perception of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards and concerns" (World Health Organization, 1996, p. 5).

Quality of Life and Disability

The pursuit of quality of life by people with disabilities is a complex and much debated construct in the literature, especially when dealing with persons with disabilities (Bishop, 2005; Dennis et al., 1993; Hammell, 2004, Roessler & Rubin, 2006; Salmons, 2008). Concern regarding client QOL should arguably be our primary rehabilitation outcome criterion for professionals (Roessler & Rubin, 2006; Salmons, 2008). In order to pursue quality of life as an outcome, an understanding of the concept is necessary. Historically, quality of life has been conceptualized in various ways in the lives of individuals with disabilities.

Hammell (2004) notes several problems that have plagued the conceptualization and measurement of quality of life in individuals with disabilities. He notes that myriad of instruments have been utilized to measure QOL. Instruments that have purported to measure the quality of life for individuals with disabilities often discounted the contextual factors unique to the lives of individuals with disabilities (Bellini & Rumrill, 2009; Koch, 2000). Quality of life surveys

whose design was founded in the medical model of disability, often measured the "disease burden", rather than the individual's state (Koch, 2000). There has also been ongoing conceptual ambiguity about the concept of quality of life to include life satisfaction, well-being, and quality of life (Hammell, 2004). As a result, the outcome variables of prior studies may or may not have included these three concepts.

Finally, assessments of quality of life have been based upon the values of the dominant culture, rather than quality of life factors reported directly from the individual with the disability. As late as 1998, there was virtually no literature describing quality of life through responses obtained directly from adults with physical disabilities (Boswell et al., 1998). The result of this has been assumed lower quality of life reports for individuals with disabilities than without disabilities, a phenomenon not observed when subjective measures are employed (Hammell, 2004). However; over the last decade or so, the study of quality of life has advanced in several important ways:

1. Viewing the concept of quality of life from a multidimensional perspective
2. Using methodological pluralism and multivariate research designs to study the contextual nature of the quality of life construct
3. Shifting our evaluation focus to person-referenced outcomes (Schalock, Bonham, & Marchand, 2000).

Disability Centrality Model

Bishop (2005) proposes what he calls the disability centrality model. In this model, Devins' illness intrusiveness approach is extended to conceptualize how quality of life varies following onset of illness or injury. Quality of life is defined as the subjective sense of overall well-being that results from an individual's evaluation of satisfaction with an aggregate of personally or clinically important domains (Bishop, 2005). Among the most consistently identified domains are physical health, psychological or emotional health, social support, employment or other productive activity, and economic or material well-being. Within the disability centrality model, an initial reduction in overall quality of life follows the onset of disability or illness. However, because overall QOL is disproportionately influenced by satisfaction in more important domains, the overall reduction in QOL is dependent upon the degree to which the domains most valued by the individual are affected (Bishop, 2005).

Quality of Life and Spinal Cord Injury

As the life expectancy for individuals with spinal cord injuries has continued to increase, quality of life issues for those living with SCI have become increasingly important (Barker, Kendall, Amsters, Perhouse, Haines, & Kuipers, 2009; Boswell, Dawson, & Heininger, 1998; Dijkers, 1999; Hammell, 2004; Kemp & Krause, 1999; Krause & Reed, 2009; Salmons, 2008; Wood-Dauphinee, Exner, & SCI Consensus Group, 2002). To better understand the construct of quality of life for individuals with SCI, Boswell et al. (1998) conducted a qualitative study to examine the meaning of QOL as defined by adults with paraplegia and quadriplegia. Participants defined quality of life as satisfaction with life, or how closely one comes to meeting life goals. Participants described the onset of disability as an instrument of change in quality of life perceptions, particularly in attitudinal changes. They described the three most important domains in quality of life to be attitude toward life, work opportunities, and level of resources. They described resources as the foundation for quality of life as it enabled them to participate in other activities that enhanced life satisfaction (Boswell et al., 1998).

Previous quantitative studies of post SCI quality of life have shown positive correlations between quality of life/life satisfaction and self-assessed health, perceived social support, social functioning/integration, mobility, accessibility (home health care), preferred living situation, adequate income, perceptions of having control over one's life, marital status, satisfaction with relationships, community access/participation, and satisfaction with occupational engagement and/or employment (Boswell, Dawson, & Heininger, 1998; Chase, Cornille, & English, 2000; Dijkers, 1999; Hammell, 2004; Kemp & Krause, 1999; Krause & Reed, 2009; Kreuter, Siösteen, Erkholm, & Brown, 2005; Lucke, Coccia, Goode, & Lucke, 2004; Lundquist, Sullivan, Blomstrang, Lind, & Sullivan, 1997; Mortenson, Noreau, & Miller, 2010). Quality of life has been reported to be negatively correlated with rehospitalizations/perceptions of poor health, pain, spasticity, inadequate income, reduced life opportunities, reduced social interaction, loneliness and boredom, unemployment or dissatisfaction with occupation, reduced mobility, residence in a nursing home, and perceptions of having reduced control over one's life (Hammell, 2004).

Quality of life has been conceived of either positively (high life satisfaction) or negatively (distress and depression) (Kemp & Krause, 1999). A meta-analysis of 18 studies examining life satisfaction in individuals with SCI reported that 10 of 12 revealed higher life satisfaction in the non-disabled group, with two showing no difference (Kemp & Krause, 1999). Regarding a negative quality of life, suicide was found to be five times higher among individuals with SCI, presumably reflecting a depressed quality of life (Kemp & Krause, 1999). Depression and life satisfaction both appeared to be related to ability to engage in life activities (i.e., community activities and social participation), but not to educational level (Kemp & Krause, 1999). Individuals with disabilities in these studies reported levels of life satisfaction that were often be-

low that of their non-disabled counterparts. The authors suggest that the longer one lives with SCI, the more satisfied they become with life, but that social support appeared to be a more important determinant of life satisfaction than duration of disability (Kemp & Krause, 1999).

Hammell (2004) found in a study of 91 individuals with SCI lesions at C4 or above, 92% of the participants reported to be glad to be alive. In addition, 83% of those who were ventilator assisted rated their quality of life as excellent or good, as did 72% of the respirator independent group. As such, level of injury was not a significant factor in this study; however, an individual's activity level (e.g., socialization) was significantly correlated with both QOL and self-esteem.

Perhaps the first aspect of quality of life that is addressed following SCI is the physical domain of QOL. The goals of acute treatment and subsequent rehabilitation are to improve function, often referred to as health-related quality of life (HRQOL) (Jain, Sullivan, Kazis, Tun, & Garshick, 2007). Many studies have examined the role of health in quality of life (Chase, Cornille, & English, 2000; Jain et al., 2007; Kemp & Krause, 1999). Functional outcome is one of the primary aspects of determining quality of life in individuals with SCI (Wood-Dauphinee et al., 2002). In an investigation of the health-related quality of life estimates of 356 individuals with spinal cord injuries, factors including age, employment status, lesion level and completeness of injury and mobility were significantly associated with HRQOL, with 13.4 to 44% of variance in HRQOL explained (Jain et al., 2007). The authors found that older participants reported lower HRQOL than did younger individuals and higher HRQOL were related to the ability to get around independently. Based upon the proportion of variance explained by the factors, the authors conclude that there are additional factors that must contribute to HRQOL (Jain et al., 2007).

Chase, Cornille and English (2000) conducted a review of life satisfaction in 158 individuals with spinal cord injuries and found that life satisfaction was significantly related to perceived control, communication skills, satisfaction with personal assistance, marital status, and handicap. Life satisfaction was defined as a psychological state associated with psychological well being (Chase et al., 2000). Perceived control and marital status were the strongest predictors of life satisfaction, while no significant group differences were found based upon level of lesion (Chase et al., 2000).

In their 2005 study of quality of life in individuals with spinal cord injuries, Kreuter et al. found factors related to QOL to include physical, psychological and emotional function, ability to work, ability to perform leisure activities and relations to other people and society. In this study, lower levels of SCI lesion (lesser functionally limiting) and higher levels of education correlated significantly with the persons' perceived QOL. Other variables including age, age at injury, completeness of lesion, occupation, and marital status, were not significantly correlated with global QOL (Kreuter et al., 2005).

Barker et al. (2009) conducted an Australian study of 270 individuals who sustained SCI to compare their quality of life reports to their able-bodied peers utilizing the WHOQOL-Bref. They found that QOL reports were significantly lower for people with SCI compared to the general population, irrespective of age or time since injury. However, they note that lower quality of life reports were primarily associated with secondary impairments, activity limitations and participation restrictions but not with neurological level, age, or time since injury. The most important predictor of QOL was secondary impairments (e.g., pain, energy), with more than 32% of the unique variance in QOL accounted for by this one predictor. Participation restrictions (e.g., transportation) ranked as the second most important predictor (Barker et al, 2009).

Role of Resources or Finances in SCI Quality of Life

Previous quality of life studies have identified resources of financial well-being as a determinant of quality of life. Hammel (2004) found the availability of resources (including attendant care, transportation and adequate income) to be at the foundation of QOL. Krause (2002) concluded that individuals who prevail in litigation typically have resources available to meet their healthcare needs. In contrast, he noted that individuals with SCI who had Medicaid or Medicare as a primary paying source had a 1.47 to 2.31 times greater likelihood of mortality than individuals who had other types of coverage. Individuals with SCI whose income was less than $25,000 per year had a 4.5 times greater odds of mortality compared with individuals whose net family income exceeded $75,000 per year. He concluded that income is a major factor in predicting post SCI life expectancy.

In a similar study by Krause, Kemp and Coker (2000) on the relationship between aging, gender, ethnicity, socioeconomic status and depression among 1,391 persons surveyed with SCI, income was found to be the most powerful predictor of depressive symptoms. Individuals earning less than $15,000 per year were 2.84 times more likely to report clinically significant symptoms and 5.31 times more likely to report probable major depression than those earning $75,000 or more per year. Depression symptoms were found to correlate positively with age and age at injury onset, with the highest levels of depressive symptoms found in those with the least and most years since injury. Individuals with SCI who belonged to an ethnic minority were also found to be at greater risk for depression;

particularly women, but this was in part due to education and income (Krause et al., 2000).

Miller et al. (2008) also examined correlations between QOL factors (measured by the WHOQOL-Bref) and demographic variables. They found that household income improved physical, social and environmental domains of quality of life. Additionally, education was positively associated with the four domains included in the WHOQOL-Bref. Conversely, Salmons (2008) examined the impact of financial settlement on quality of life for twenty-one individuals with SCI for whom a life care plan was developed. He examined the relationship between demographic variables including age, gender, marital status, ethnicity, educational level, work status and date of injury, financial settlement and quality of life. Correlational analysis showed no significant relationships between the demographic variables or financial settlement and participant quality of life reports.

Social Justice in Quality of Life

A foundational ethical principal within rehabilitation counseling is the notion of justice. Justice implies that resources and services are disbursed fairly without regard to status or privilege (Bellini & Rumrill, 2009). However, unequal access to resources is often seen among people with disabilities. Individuals with disabilities are disproportionately represented in those living under the poverty line in the United States (Erickson & Lee, 2008), residing in more sparsely populated areas (Waldrop & Stern, 2003), and having lower levels of education (Erickson & Lee, 2008). Interfacing these characteristics with a healthcare system that is increasingly specialized, complex, and centered in metropolitan areas presents multiple access barriers for individuals with disabilities. Additionally, inequity within the legal system has been noted on the basis of race, gender and socioeconomic status of the plaintiff who sustains injury and seeks legal remedies (Chamallas, 2005).

Individuals who are involved in a litigation process may be awarded damages as a result of injury sustained in an accident. Like those documented in criminal legal proceedings, there have also been documented inequities in the distribution of jury awards or settlement figures (Chamallas, 2005; Rose & Vidmar, 2002). Chamallas (2005) found that racial and gender bias in computing damages is often based on emotional and unbalanced decisions. The result may be individuals from poor or working class backgrounds, women and racial minorities receiving less of a settlement than white males or individuals from upper-class groups (Chamallas).

Method

Participants

Participants were recruited through practicing life care planners throughout the United States, as well as through the solicitation from the Foundation for Life Care Planning Research. Requests for life care planner participation was also made through the International Association of Rehabilitation Professional listserv, the 2010 Life Care Planning Summit, the Life Care Planner Forum listserv, the Certified Life Care Planner listserv, the International Academy of Life Care Planners listserv and through individual email and telephone contact with life care planners through the International Association of Rehabilitation Professionals directory as well as through advertisement in the *Journal of Life Care Planning*. The International Commission on Healthcare Certification announced the study on their listserv and offered 10 CLCP CEUs for all life care planners who participated. Life care planners who provided participant contact information were entered into a drawing for a free life care planning conference registration fee ($400).

Approximately 614 life care planners were contacted individually by email and/or phone from October 2010 until March 1, 2011. Of 614 life care planners contacted, 15 chose to refer participants, referring a total of 372 possible participants. Approximately 238 of 372 possible participants could not be located. Potential participants were contacted by telephone, email, or mail, depending upon the method of contact information provided by the life care planner. Of the potential participants who could be located, 11 declined participation and 23 were deceased, leaving a sample of 55 adult participates. These individuals had sustained spinal cord injuries, engaged in litigation, and in the course of litigation had a life care plan developed.

Instruments

This study included two primary sources of data: (a) information obtained from a life care plan survey including demographics, settlement, and pre-post life care plan purchases; and (b) the individual's self report of quality of life utilizing the World Health Organization Quality of Life-Bref (WHOQOL-Bref). As there is no commonly used survey to collect life care plan data, a life care plan survey was developed to collect demographic as well as life care plan specific information.

Life Care Plan Survey. In order to collect demographic information as well as funding information, the researcher developed a life care plan survey. Due to the large number of variables in each life care plan, several variables were selected for measurement, as recommended by Kendall and Deutsch (2002). Six life

care planning experts reviewed the survey to provide suggestions for improvement and strengthen content validity. The finalized life care plan survey that was used in this study was a 37-item questionnaire with both fixed and open-ended questions consisting of six sections including demographics, physical health, pre-life care plan assistance, life care plan involvement, settlement/ funding details and post-life care plan assistance.

World Health Organization Quality of Life-Bref. To assess the quality of life construct, the WHOQOL-Bref inventory was used. The WHOQOL-Bref is a self-administered instrument comprised of twenty-six items that measure four broad QOL domains: physical health (7 items), psychological health (6 items), social relationships (3 items), and environment (7 items) (Murphy, Herrman, Hawthorne, Pinzone, & Evert, 2000). The two remaining questions are general QOL questions addressing how one rates and whether one is satisfied with his/her QOL. Responses are on a 5 point Likert scale with different response sections (very poor=1 to very good=5; very dissatisfied=1 to very satisfied=5; not at all=1 to an extreme amount=5). The domains measure various aspects of the individual's life, mostly avoiding the focus on the medical model or health related quality of life found in other instruments. The WHOQOL-Bref has strong psychometric properties and has been validated for use with individuals with spinal cord injuries (Miller et al., 2008).

Sample physical domain content includes feeling pain that interferes with activities, medical treatment needed, having enough energy everyday, sleep, capacity to work, and ability to get around satisfactorily. The social domain questions pertain to satisfaction with relationships, sex life, and support from friends. Psychosocial domain content questions include how much one enjoys life, finds life meaningful, is able to concentrate, bodily appearance acceptance, and if one experiences negative feelings such as depression and anxiety. Finally, the environmental domain includes questions dealing with satisfaction in living conditions, health services, transportation, and monetary needs being met. The full 26 question survey is copyrighted by the WHO, but may be downloaded for viewing only at http://www.who.int/substance_abuse/research_tools/en/english_whoqol.pdf.

Results

Demographics

Respondents in this research were primarily male (n=33, 60%) and 40% (n=22) were female. The majority (n=47, 85%) were White/Caucasian, with 7% (n=4) African American, 5% (n=3) Hispanic, and 2% (n=1) Asian. The average age at injury in this sample was 30.6 (*SD*=14.26). Respondents resided in 18 states throughout the U.S., with over 92% (n=39) residing in non-rural geographic locations and 7% (n=7) residing in rural locations. The most frequent cause of injury in the sample was motor vehicle accident, followed by on the job injury and sports related injury. Regarding pre-injury employment status, 49 respondents (92.45%) were employed or were a student at time of injury, while four (7.54%) were not working or in school. Following the spinal cord injury, 17 respondents (36.17%) were employed or a student at the time of survey completion, while 30 (63.83%) described themselves as unemployed or disabled from employment. Pre-injury, 15 respondents reported having less than a high school diploma, 14 earned a high school diploma, 14 had some college or vocational/ technical school, four were college graduates and eight had completed post-graduate work or a graduate degree. Regarding post-injury education, five respondents (9.62%) reported having less than a high school degree, eight (15.38%) earned a high school diploma, 23 (44.23%) had some college or vocational / technical training, five (9.62%) earned a college degree, and 11 (21.15%) had completed post-graduate work or a graduate degree. Regarding level of spinal cord lesion, seven respondents (13.2%) reported a C2-C4 lesion, 26 (49.1%) reported a C5-T1 injury, 17 (32.1%) reported T2-T12 injury and three (5.7%) reported a L1-L5 level of injury.

Funding Information

Regarding settlement information, 44 respondents (84.62%) in this sample received a court award or settlement while eight respondents (17.39%) did not. Year of settlement ranged from 1990 to 2011, with a mean number of years since settlement of 8.53 (*SD* = 5.94). Twenty-six respondents (63.41%) received their settlement or legal award as a lump sum, while 13 (31.71%) received it as a structured financial tool and two (4.35%) received their settlement as a Medicare set aside. Amount of settlements ranged from $30,000 to 4.5 million dollars, with an average settlement/ award reported of $1,653,000 (*SD* = 1,500,808). Of those who received settlements, 24 respondents (54.55%) did not believe that their settlement was enough to take care of their needs for the balance of their life expectancy, whereas 11 respondents (25%) did. Twelve respondents (27.27%) indicated that they were not sure.

Quality of Life Differences

A one-way MANOVA was conducted to determine the effect of settlement on the four domains of quality of life. The independent variable, receipt of funding, included two levels: those who received funding or settlement (34 respondents) and those who did not (6 respondents). The dependent variables included the

physical, social, psychological and environmental domains of quality of life. Significant differences were found among the groups on the dependent measure, Wilks' λ =.75, F (4,35) = 2.92, p=.03. Analyses of variances (ANOVA) on the dependent variables were conducted as follow up tests to the MANOVA. The ANOVA for physical QOL was significant, F(1,39)=6.26, p=.02. The follow-up ANOVAs for social QOL, psychological QOL and environmental QOL were not significant. Mean QOL domain scores for those who did and did not receive settlement are shown in Table 1.

Discussion

Historically, rehabilitation practice and service delivery has focused on improving the health related quality of life for individuals with spinal cord injuries. The life care plan, in addition to addressing medically related goods and services, often addresses quality of life issues, long-term needs of the individual and their family as well as non-medical disability-related needs including transportation and architectural renovations (Weed & Field, 1994). However, what life care planners are generally not able or reluctant to address in their life care plans are hedonic damages (e.g., pool or spa) or items that bring pleasure and perhaps increase QOL for individuals. Many plaintiff attorneys are unwilling to chance alienating a jury by providing such items, no matter how relevant.

This study nevertheless empirically demonstrated the importance of having resources available to purchase disability-related items. While previous spinal cord injury studies linked availability of resources to post-SCI life expectancy (Krause, 2002) and quality of life reports (Boswell et al., 1998; Hammel, 2004; Miller et al., 2008), the only previously published study in the life care planning literature that examined the effect of life care plan funding on QOL found no statistically significant impact, perhaps due to a sample size of 21 participants (Salmons, 2008). In the present study, statistically significant differences in quality of life for those who did and did not receive funding for life care plan items and services in the physical QOL domain were found. Although none of the other three domains were statistically significant, the psychological and environmental QOL domains approached significance for the group who received funding versus no funding/settlement.

Regarding the physical domain, those who received a settlement or jury verdict, scored better on items pertaining to being able to get around well (e.g., transportation), satisfaction with their ability to perform activities of daily living, satisfaction with their capacity to work, and satisfaction with their energy level. Bishop (2005a) noted key elements needing to be considered for QOL assessment are an individual's physical and mental health, employment or a satisfying avocational activity, and financial security. The physical domain in this study appears to have captured several of these factors for the funding group.

Interestingly, the social quality of life domain mean score was higher for the no funding group than the funding group. Responses to the sex life question were consistently low, with 30 of 47 respondents rating their satisfaction with their sex life as 1 (very dissatisfied) or 2 (dissatisfied) while only five respondents reported being very satisfied with their sex life. For individuals without disabilities, satisfaction with sex may be confounded by injury-related physical problems that interfere with sexual function. The sex life question for this population may also be impacted by the social, psychological, and physical domains of quality of life. Nosek (in press) notes that for women with physical disabilities, ability to enjoy sex was negatively impacted by stress, low income, low self-esteem, unemployment, low energy, and potential pain and abuse.

Another explanation to the social domain finding stems from Bishop's disability centrality model (Bishop 2005a, 2005. In the current study, with or without funding for disability related purchases, one's satisfaction with social support was very similar. Bishop's disability centrality model argues that quality of life reports depend upon the importance of the domain to the individual. Within this area, personal relationships may simply be more important than fi-

Table 1

Domain Score Means and Standard Deviations by Settlement

	No Settlement		Settlement	
	Mean	*SD*	*Mean*	*SD*
Physical	18.00	7.48	24.94	5.57
Psychological	18.80	7.66	22.94	4.57
Social	10.40	4.67	9.97	3.19
Environmental	28.40	6.88	30.29	6.32

nancial resources or access to goods and services for the individuals in the no funding group. Essentially, money may not have a strong relationship with being satisfied with one's personal relationships or support from friends.

Limitations

Due to the unique set of factors associated with spinal cord injuries, quality of life differences for participants with SCI may not be generalizable to other disabilities including those with traumatic brain injury, amputation, or developmental disabilities. Additionally, information collected in this study was primarily collected by mail, telephone and internet surveying and different results may be generated by in-person interviews. Bellini and Rumrill (2009) note that self report methods of data collection can introduce error as study participants must rely on their memory to reconstruct experiences. An additional limitation is the small sample size, despite the present study having the largest sample size of previous related studies. Unfortunately, life care planner practitioners were not very willing to provide former client caseload contact information, leaving adults from only 2% of the life care planner caseloads. Professional ethics of engaging and/or contributing research should be reiterated at conferences. Finally, there were limitations in the instruments used in this study. Although the WHOQOL-Bref has been tested with individuals with spinal cord injuries, the social domain remained particularly problematic for this sample.

Summary

As individuals with disabilities are disproportionately represented in those living under the poverty line in the United States (Erickson & Lee, 2008), access to resources to pay for disability related goods and services are critical to those with disabilities. This study demonstrated that a group of adults with SCI reported a more satisfied physical quality of life when they were provided the necessary funds to purchase disability related goods and services.

Future research could explore QOL with other disability groups who have or have not received funding through a court settlement or jury verdict. In addition, surveying life care planner practitioners regarding their willingness to engage in or contribute to research studies would be enlightening. Specifically, only 2% of life care planners participated in this study while several life care planning practitioners verbalized skepticism about measuring life care plan implementation rates and the relevance thereof. A reiteration of professional ethical code sections addressing research participation by practitioners as well as a discussion about the need for evidence-based outcome studies in this field may be prudent.

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