

RELATIONSHIP BETWEEN LEISURE INVOLVEMENT AND SUBJECTIVE WELL-BEING: MODERATING EFFECT OF SPOUSAL SUPPORT

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ABSTRACT

The purpose of this study was to examine the relationship between leisure involvement and subjective well-being and clarify the moderating effect of spousal support in this relationship. A total of 254 questionnaires were collected from a sample of players of slow pitch softball. Structural equation modelling was utilised to estimate a model that linked leisure involvement and spousal support to subjective well-being. As expected, the results show that a recreation having greater leisure involvement leads to a high level of subjective well-being. The findings further show that spousal support moderate the effect of leisure involvement on subjective well-being, indicating that greater spousal support is associated with a higher likelihood that leisure involvement will improve subjective well-being.

Key words: Leisure involvement; Spousal support; Subjective well-being; Slow pitch softball.

INTRODUCTION

Taiwan is a small country, but its baseball teams are famous around the world, and baseball has become a symbol of Taiwan's unique culture and unique destiny (Morris, 2004). Since baseball and slow pitch softball are similar games, differing mainly in the size of the field, rules and equipment, slow pitch softball is very popular, and has become one of the most actively pursued leisure activities in Taiwan. Research about participation in this activity is sparse, but it falls into two broad categories. One involves the technical issues around slow pitch softball (Smith *et al.*, 2003; Wu *et al.*, 2011), and the other concerns the recreational experience and behaviour of slow pitch softball players (Cross & Nathan, 2009; Liardia & Carron, 2011). Additionally, whereas several investigations have discussed the leisure involvement in various activities (Kyle *et al.*, 2003; Kyle *et al.*, 2006), a minority have focused on slow pitch softball. Players commonly invest a great deal of money, time and effort into slow pitch softball. Whether all slow pitch softball participants with a high degree of involvement exhibit a high degree of subjective well-being warrants further study.

Leisure is defined as free time in which a self-determined activity or experience is enjoyed. Leisure provides feelings of pleasure, supports a set of beliefs that favour a particular lifestyle and is an expression of ideal living. Leisure may be utilised to achieve a healthy body, a high quality of life and a feeling of subjective well-being (Godbey, 2003). In recent decades, scholars in the fields of psychology, gerontology and leisure studies have been very interested

in subjective well-being (SWB). SWB refers to an individual's assessment of his or her own quality of life (Pavot & Diener, 2004). According to Diener *et al.* (1999), positive affect, negative affect and life satisfaction are the main dimensions of SWB. Individual participation in activities can improve life satisfaction and subjective well-being (Havighurst & Albrecht, 1953; Lemon *et al.*, 1972). Numerous empirical studies have identified a positive correlation between participation in such activities and subjective well-being (Okun *et al.*, 1990; Leventhal *et al.*, 2001).

The literature on well-being reveals a clear link between social support and subjective well-being (Cohen & Wills, 1985; Kessler & McLeod, 1985; Heady & Wearing, 1990; Sarason *et al.*, 1990; Siebert *et al.*, 1999). Several investigations have demonstrated that spousal support, as a form of social support, plays a role in reducing marital pressures (Roskies & Lazarus, 1980), work and non-work conflicts (Holohan & Gilbert, 1979), as well as family conflicts (Kundsin, 1974; Beutell & Greenhaus, 1982; Berkowitz & Perkins, 1984). Family-based social support also increases well-being (Thompson & Heller, 1990).

Most people participate in fleeting, mass and low-yield leisure activities. Such leisure activities fail to provide participants with a meaningful experience and, consequently, participants feel bored. People should be encouraged to participate in leisure activities that result in long-term advantages and to make these activities part of their everyday lives (Stebbins, 1980). Stebbins (1992) recognise that meaningless leisure causes social problems and he advocates 'serious leisure'. Stebbins believes that serious leisure allows participants to engage in fulfilling, meaningful and interesting activities outside the workplace. Restated, when participating in leisure activities, individuals could adopt a serious attitude and immerse themselves deeply in the activity; exhibit a high level of commitment and persistence, and allow the activity to become central to their lives. Hence, serious leisure induces a sense of gratification and a feeling of 'being someone'. Participants in such leisure activities do not simply 'participate': they also make leisure a part of their daily lives and are willing to engage in regular and sustained leisure activities over a long period. The spirit of perseverance allows participants to acquire skills, knowledge and experience by participating in these activities (Stebbins, 1992).

Qualities such as perseverance, having careers in their endeavours, significant individual effort, durable individual benefits, a unique ethos and strong identification with the activity are implicitly tangible and intangible investment in serious leisure activities (Stebbins, 2007), and are related to the degree of leisure involvement (Kyle & Chick, 2002). The time and effort that are invested in particular leisure activities are related to a set of external behaviours that are consistent with Stone's concept of leisure involvement (Stone, 1984). Moreover, close links between the participant and the activity leads to a consistent pattern of involvement (Zaichkowsky, 1985; Celsi & Olson, 1988). According to research, a continued investment in enjoyable leisure activities generates feelings of excitement, involvement and focus on that activity. Additionally, such activities provide a channel for self-expression and may lead to close links with other individuals in a network in which participants have a particular activity in common (Havitz & Dimanche, 1997; Wiley *et al.*, 2000). Brown *et al.* (1991) identified a positive correlation between participation in various types of leisure activity and well-being. For Argyle (1987), leisure, defined as life outside work, is an important predictor of well-being. The cited investigations have revealed a causal relationship

between leisure involvement and well-being.

Some individuals with a committed leisure involvement invest a great deal of money, time, and effort in their chosen activity. However, since leisure cannot be artificially separated from family life (Kelly & Kelly, 1994), the continued pursuit of leisure goals may reduce the amount of time spent with a spouse or family, as well as the capacity and willingness to meet family responsibilities. Therefore, individuals with high levels of leisure involvement are commonly forced to choose between leisure and family or spouse, detrimentally affecting life satisfaction and emotional stability. Studies have shown that when spouses enjoy the same leisure activities, they tend to be satisfied with married life (Orthner & Mancini, 1990). Failing to do so can cause conflict (Holman & Epperson, 1984; Goff *et al.*, 1997), and marital problems (Stebbins, 1992). Individuals who have the support from a spouse can effectively reduce conflict between leisure involvement and married life (Burke & Weir, 1982), and motivate the participant to continue involvement in his or her favoured activity (Stebbins, 1992).

According to the foregoing discussion, greater involvement in leisure activities should lead to enhanced well-being. However, the following question is raised: When participants have a high degree of leisure involvement that is not supported by their spouses, do they enjoy improved well-being? Restated, does spousal support play a moderating role in the relationship between leisure involvement and well-being? This study focuses on this question. Therefore, the relationship between leisure involvement, spousal support and well-being is examined.

THEORETICAL FRAMEWORK

Relationship between leisure involvement and subjective well-being

Leisure involvement is an indication of the importance of a particular leisure activity for the participant, interested in such activities and the symbolic value attained from it (Havitz & Dimanche, 1997; 1999). Measures of leisure activity participation reflect the frequency of participation and can be used to obtain a more accurate understanding of the nature of participation, the importance attached to leisure activities and the way in which an individual develops an interest in the activity (Wiley *et al.*, 2000).

In the field of leisure and recreation, numerous studies of the relationship between participation in recreational activities and well-being have demonstrated that sustained involvement supports well-being. Regular and sustained participation in physical activity generates and enhances feelings of well-being (Ruuskanen & Ruoppila 1995; Hassmen *et al.*, 2000; Resnick, 2000). Reich and Zautra (1981) found that enduring participation in a particular leisure activity reduces everyday stress and increases psychological well-being. Berger and McInman (1993) also claimed that regular exercise over a long period induces feelings of well-being that reduce anxiety and frustration. Moreover, higher levels of involvement are associated with greater improvements in overall well-being. Rejeski *et al.* (2001) worked with long-term sedentary subjects and found that an increase in their physical activity is positively related to well-being and satisfaction with physical function. A study of college students by Lu and Hu (2005), identified positive correlations between leisure

involvement and both leisure satisfaction and well-being. Finally, the work of Staempfli (2007) with young people also revealed that leisure participation and leisure satisfaction positively affected well-being.

Moderating effect of spousal support

Literature reviewed on well-being indicates a relationship between social support and subjective well-being. For example, social support is significantly associated with well-being and the absence of psychological distress (Kessler & McLeod, 1985); social support enhances psychological well-being (Cohen & Wills, 1985; Heady & Wearing, 1990; Sarason *et al.*, 1990); a positive correlation exists between social support and life satisfaction, and social support is a better predictor of well-being than financial income (Siebert *et al.*, 1999).

Social support is divided into work-related and non-work-related categories. Spousal support is a form of non-work-related social support and plays an important role in reducing work and non-work conflict (Holohan & Gilbert, 1979). Furthermore, social support from the family is effective in enhancing well-being (Thompson & Heller, 1990). Munroe and Steiner (1986) found that social support is associated with a reduced occurrence of depressive symptoms. Parasuraman *et al.* (1992) demonstrated that social support buffers (moderates) the relationship between various sources of stress and overall well-being. Finally, Suchet and Barling (1986) revealed that spousal support moderates the negative effects of conflict. All of the above indicate that spousal support clearly plays a moderating role in mental health and well-being.

In the literature on leisure and recreation, people with a high level of leisure involvement are assumed to make certain trade-offs that depend partially on the support of their participation from their family or spouse. When individuals with a high level of leisure involvement invest considerable time and effort in an activity, they necessarily reduce the amount of time they spend with their spouse or family. Hence, in a sense, leisure cannot be artificially separated from family life (Kelly & Kelly, 1994). Orthner and Mancini (1990) demonstrated that when husband and wife shared their leisure time, they tend to exhibit greater satisfaction with their leisure activities, whereas not sharing leisure time has a negative effect on marital satisfaction. Holman and Epperson (1984) and Orthner and Mancini (1990), point out that when husband and wife do not accept the other's leisure interests, conflict between leisure and family life arises. Additionally, a high degree of leisure involvement causes misunderstanding and alienation from friends and spouse (and family members) who may not understand the reasons for engaging in the activity (Stebbins, 1992). After studying numerous participants in serious leisure, Stebbins (1992) asserts that such participation could, in some cases, cause marriage break down. In addition, Goff *et al.* (1997) found that spousal support for running-related activities reduced family conflict. Conversely, family conflict increases when the spouse does not support the activities of a runner. Barrell *et al.* (1989) interviewed runners and their spouses and found that in some cases, running was the source of strained relationships between family members. On the other hand, research on intra-family interaction has shown that support for a spouse reduces conflict in the family (Burke & Weir, 1982). Stebbins (1992) also noted that such support is expressed in various forms of encouragement, which motivate participants to continue the activity.

In summary, spousal support is commonly found to buffer stress by strengthening physical and mental health, while spousal support also plays a moderating role in marital relationships, everyday life and conflicts. Instead of focusing on the effect of the pursuit of serious leisure on the family, Goff *et al.* (1997) examined the well-being of individuals with high levels of leisure involvement that was moderated by spousal support. Therefore, for participants with a high level of leisure involvement, spousal support can be reasonably predicted to moderate their subjective assessment of well-being.

RESEARCH HYPOTHESES

Based on the above-mentioned literature review, this study proposes that individuals with higher sustained involvement in a particular activity exhibit greater perseverance and develop a social support network with other enthusiasts. These individuals are expected to enjoy greater life satisfaction and positive emotions. Accordingly, leisure involvement is reasonably predicted to have a direct and positive effect on well-being. The following hypotheses are proposed:

For slow pitch softball participants, a higher level of leisure involvement results in greater subjective well-being (H1).

The spousal support received by slow pitch softball participants moderates the relationship between leisure involvement and subjective well-being. Accordingly, when slow pitch softball participants enjoy a high degree of spousal support, the positive relationship between leisure involvement and well-being is stronger than for slow pitch softball participants who get only a low level of spousal support. (H2)

METHOD

Sample

This study involved married slow pitch softball team members in Southern Taiwan and participants in slow pitch softball activities that are organised by government agencies and organisations. The research subjects are all long-term amateur participants and invest substantial money, time and effort in slow pitch softball-related activities. Of the 254 respondents who returned questionnaires, 85.8% were young adults who were between 21 and 40 years old; 40.9% were educated at university level, and 77.9% participated in slow pitch softball between 2 and 3 times a month. Their most common field of work was manufacturing (26.8%), followed by occupations in the service sector (23.6%).

Measurement instrument

Leisure involvement

In this study, leisure involvement is defined in terms of the degree of excitement generated by, engagement in and focus on slow pitch softball activities. Therefore, the level of leisure involvement in slow pitch softball is measured in the 3 dimensions proposed by McIntyre and Pigram (1992). A total of 12 items, comprising 5 items related to attraction, 4 related to

self-expression, and 3 related to centrality-to-lifestyle, were considered. All items were measured using a 7-point Likert scale, ranging from 'strongly disagree' (1) to 'strongly agree' (7).

Subjective well-being

In this study, the scale for subjective well-being consists of 3 components: life satisfaction; positive affect; and negative affect. The life satisfaction scale is adapted from the *Satisfaction with Life Scale* (SWLS) of Diener *et al.* (1985), and involves 5 items. To measure positive affect and negative affect, the 8 affect terms identified by Diener and Emmons (1985) were used. These comprised 4 positive affect terms and 4 negative affect terms. Respondents were asked to respond based on their emotions over the preceding 3 months. All items were scored using a 7-point Likert scale, ranging from 'strongly disagree' (1) to 'strongly agree' (7).

Spousal support

Spousal support measures the effectiveness of the support that a participant receives from his or her spouse. The spousal support scale used in this study was adapted from scales proposed by Burke and Weir (1982), Fernandez (1986), Goff *et al.* (1990) and Goff *et al.* (1997). The scale involves the following 4 items: "I feel that my spouse approves of my leisure activity"; "My spouse has a positive view of the investment I make in my leisure activity"; "My spouse shows an interest in and discusses my leisure activity"; and "My spouse is an important source of moral support for my continued participation in my leisure activity". All items were measured using a 7-point Likert scale, ranging from 'strongly disagree' (1) to 'strongly agree' (7).

RESULTS

Reliability and validity testing

Structural equation modelling (SEM) was adopted to validate the scales and structural relationships among exogenous and latent concepts. A 2-stage analysis was conducted (Hair *et al.*, 1998). Confirmatory factor analyses (CFA) were firstly analysed for their measurement model. The fit of the measurement model was estimated using the maximum likelihood estimation procedure in the AMOS 6.0 statistical package. The CFA were performed separately for exogenous and latent factors. Composite reliability (CR) and average variance extracted (AVE) were calculated to evaluate reliability.

Before the path analysis was conducted, the reliability and validity of the scales that included more than a single indicator were evaluated. First, the internal consistency of the indicators (items) that measured the constructs was examined by using composite reliability tests. Analytical results (Table 1) show that the composite reliabilities for the 3 dimensions of leisure involvement (0.85, 0.88, and 0.76), Life satisfaction (Ls) (0.87), Positive affect (Pa) (0.83), Negative affect (Na) (0.82), and spousal support (0.81), all exceed the recommended value of 0.7. Therefore, the reliability of the scale was deemed acceptable (Bagozzi & Yi, 1988).

TABLE 1: RESULTS OF CFA

Dim	Variable	M	SD	SK	KU	SFL	SMC	EV	CR	AVE
Leisure Involvement	<i>Attraction</i>	4.72							0.85	0.53
	Att1	4.74	1.30	-0.14	-0.51	0.70* ^b	0.49	0.86*		
	Att2	4.75	1.34	-0.16	-0.62	0.72*	0.51	0.88*		
	Att3	4.68	1.41	-0.19	-0.66	0.79*	0.63	0.74*		
	Att4	4.75	1.36	-0.24	-0.73	0.71*	0.50	0.92*		
	Att5	4.66	1.39	-0.23	-0.50	0.72*	0.52	0.93*		
	<i>Self-expression</i>	4.64							0.88	0.65
	Se1	4.71	1.15	-0.11	-0.09	0.93*	0.87	0.17*		
	Se2	4.52	1.07	0.05	-0.05	0.73*	0.53	0.53*		
	Se3	4.43	1.08	-0.31	0.09	0.71*	0.51	0.58*		
	<i>Central-to-lifestyle</i>	4.76							0.76	0.51
	Ce1	4.80	1.23	-0.09	-0.50	0.68*	0.46	0.81*		
	Ce2	4.77	1.42	-0.39	-0.27	0.71*	0.51	1.00*		
	Ce3	4.70	1.32	-0.30	-0.50	0.76*	0.58	0.73*		
	Subjective well-being	<i>Life satisfaction</i>	5.15							0.87
Ls1		5.11	1.31	-0.46	-0.35	0.81*	0.65	0.59*		
Ls2		5.19	1.24	-0.27	-0.64	0.77*	0.59	0.64*		
Ls3		5.20	1.16	-0.52	-0.15	0.76*	0.57	0.57*		
Ls4		5.12	1.24	-0.30	-0.40	0.77*	0.60	0.61*		
Ls5		5.11	1.36	-0.54	-0.10	0.68*	0.46	0.99*		
<i>Positive affect</i>		5.19							0.83	0.54
Pa1		5.16	1.23	-0.47	-0.18	0.78*	0.61	0.59*		
Pa2		5.20	1.37	-0.52	-0.50	0.70*	0.49	0.95*		
Pa3		5.14	1.21	-0.34	-0.28	0.76*	0.58	0.62*		
Pa4		5.27	1.25	-0.41	-0.55	0.70*	0.49	0.79*		
<i>Negative affect</i>		5.20							0.82	0.54
Na1		5.19	1.25	-0.42	-0.46	0.77*	0.59	0.65*		
Na2	5.10	1.31	-0.42	-0.03	0.73*	0.53	0.81*			
Na3	5.25	1.24	-0.47	-0.18	0.67*	0.45	0.85*			
Na4	5.20	1.34	-0.60	0.04	0.76*	0.58	0.75*			
Spousal support	<i>Spousal support</i>	3.57							0.81	0.53
	Sp1	3.57	1.49	0.97	0.16	0.67*	0.45	0.82*		
	Sp2	3.80	1.52	0.71	-0.56	0.82*	0.67	0.76*		
	Sp3	3.51	1.42	0.80	-0.01	0.76*	0.58	0.92*		
	Sp4	3.40	1.28	1.23	1.34	0.63*	0.40	1.04*		

Dim= Dimension; M= Mean; SD= Standard Deviation; SK= Skew; KU= Kurtosis;
 SFL= Standardised factor loadings; SMC= Squared multiple correlation; EV= Error variance;
 CR= Composite reliability; AVE= Average variance extracted * Significance level set at $\alpha=0.05$

Convergent validity was assessed by determining whether all factor loadings were significant (Bagozzi & Yi, 1988). Analytical results (Table 1) indicate that all factor loadings significantly differed from zero, as evidenced by their consistently high t-values. Additionally, the AVE values (0.51-0.65), which obviously exceeded 0.5 for each dimension, also supported convergent validity (Fornell & Larcker, 1981). Hence, the measurement model results provided evidence of convergent validity for the constructs.

The discriminant validity of the scale was examined, as suggested by Fornell and Larcker (1981). The square root of the AVE of each constructs should exceed the correlation coefficient between any pair of constructs. Analytical results (Table 2) show that the square root of the AVE of each construct was in the range 0.72-0.80. Accordingly, the AVEs of all of the constructs exceeded the correlation coefficient between any pair of constructs (0.01-0.45). These analytical results supported the discriminant validity of all constructs.

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TABLE 2: CORRELATION COEFFICIENTS BETWEEN CONSTRUCTS

Construct	Correlation coefficient						
	A	B	C	D	E	F	G
A. Attraction	0.73^a						
B. Self-expression	0.38*	0.80					
C. Central-to-lifestyle	0.44*	0.37*	0.72				
D. Life satisfaction	0.17*	0.18*	0.11	0.76			
E. Positive affect	0.19*	0.18*	0.25*	0.40*	0.74		
F. Negative affect	0.22*	0.24*	0.14*	0.45*	0.38*	0.73	
G. Spousal support	-0.31*	-0.15*	-0.13*	0.01	0.02	0.04	0.72

Diagonal elements (bold)= Square root of average variance extracted (AVE) between the constructs and their measures. Off-diagonal elements are correlations between constructs. Significance= *p<0.001

In summary, the scale was developed satisfactorily, as revealed by reliability in the sense of internal consistency and the convergent and discriminant validities of the constructs.

Analysis of data

The hypotheses proposed in this study were tested by applying structural equation model using AMOS 6.0. Maximum likelihood estimation was conducted with the covariance matrix as the input matrix. Analytical results (Figure 1) indicate a Chi-square value of 10.423 (degree of freedom = 8) with a non-significant p-value of 0.237. Root Mean Square Residual (RMR) and Root Mean Square Error of Approximation (RMSEA) were 0.036, 0.035. Goodness of Fit Index (GFI) and Adjusted Goodness of Fit Index (AGFI) were 0.986 and 0.964. Comparative Fit Index (CFI) and Non Normal Fit Index (NNFI) were 0.990 and 0.982. Statistical results verify that the hypothesised model fitted the data sufficiently well to enable path analysis to be carried out for testing the hypotheses.

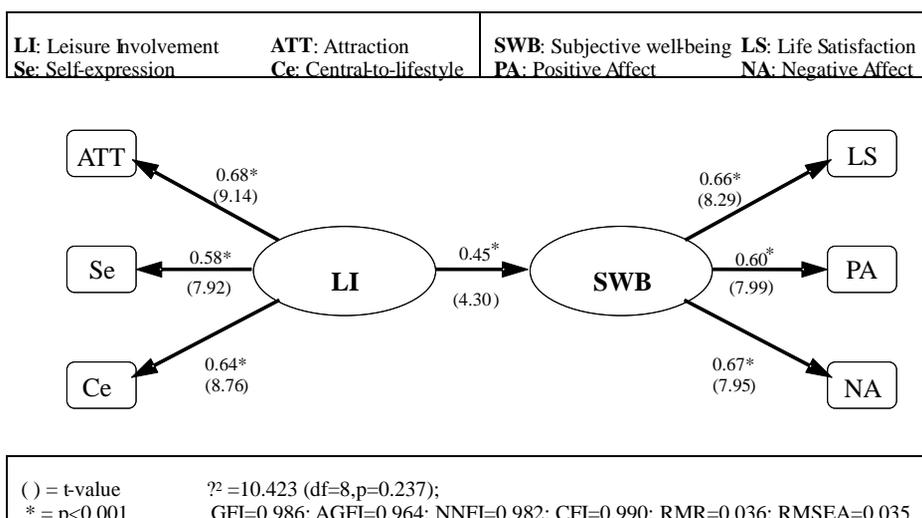


FIGURE 1: PATH DIAGRAM OF RESEARCH MODEL

Path analysis results support Hypothesis 1, indicating that leisure involvement had a significant impact on subjective well-being (standardised coefficient = 0.448, $t = 4.301$). The ways in which leisure involvement affects life satisfaction, positive affect and negative affect (reversed score) were also evaluated. The results further reveal that leisure involvement significantly affects life satisfaction (standardised coefficient = 0.259, $t = 3.002$), positive affect (standardised coefficient = 0.361, $t = 3.888$), and negative affect (standardised coefficient = 0.330, $t = 3.656$).

Test for moderating effect of spousal support

Grouping

The moderating effect of spousal support was examined by dividing respondents into groups of high and low spousal support, based on their responses on the spousal support scale. A K-means cluster analysis was performed for grouping because it allows researchers to specify

the number of clusters (Hair *et al.*, 1998). Specifically, the high spousal support group comprised 84 respondents and the low spousal support group comprised 170 respondents. An independent sample t-test was conducted to confirm the effectiveness of the grouping, and to test whether the mean spousal support differed significantly between the two groups. The t-test reached significance, given p-value of 0.00 and t-value of 25.818. Analytical results revealed favourable K-means grouping. Hence, the groups that scored high and low for spousal support differed significantly.

Test for structural invariance

Tests of the invariance of the regression weight for specific paths were conducted. The regression weights of paths (LI→SWB/LS/PA/NA) in the tested models were constrained to equality across groups. Furthermore, all paths in the baseline models could be freely estimated. Next, tests for Chi-square differences between the baseline models and the constrained models were performed to ensure path-coefficient equality (Yoo, 2002). Table 3 summarises the results of the invariance tests for the specific paths. As expected, significant Chi-square differences were identified across groups, revealing that spousal support significantly moderated the paths: LI→SWB/LS/PA/NA.

TABLE 3: TEST FOR STRUCTURAL INVARIANCE

IV	DV	Models	χ^2	df	$\Delta\chi^2$
LI	SWB	Baseline	16.615	26	7.288*
		Constrained ($\gamma_{li-swb}^{high} = \gamma_{li-swb}^{low}$)	23.903	27	
	LS	Baseline	57.146	26	10.638*
		Constrained ($\gamma_{li-ls}^{high} = \gamma_{li-ls}^{low}$)	67.784	27	
	PA	Baseline	30.085	26	8.419*
		Constrained ($\gamma_{li-pa}^{high} = \gamma_{li-pa}^{low}$)	38.504	27	
	NA	Baseline	45.417	26	6.033*
		Constrained ($\gamma_{li-pa}^{high} = \gamma_{li-pa}^{low}$)	51.450	27	

IV= Independent Variable; DV= Dependent Variable; LI= Leisure Involvement; * p< 0.05
 SWB= Subjective Well-being; LS= Life Satisfaction; PA= Positive Affect; NA= Negative Affect
 DF= Degrees of Freedom

Table 4 demonstrates that the path coefficients of the high-spousal support group exceeded those of the low-spousal support group. Hence, spousal support is inferred to moderate the relationships between leisure involvement and subjective well-being, life satisfaction, positive affect or negative affect.

TABLE 4: PATH COEFFICIENT FOR LOW AND HIGH GROUP

Paths	Standardised Estimates	
	Low Spousal support group	High Spousal support group
LI→SWB (γ_{li-swb})	0.509*	0.762*
LI→LS (γ_{li-ls})	0.298*	0.565*
LI→PA (γ_{li-pa})	0.385*	0.618*
LI→NA (γ_{li-na})	0.356*	0.606*

LI= Leisure Involvement; SWB= Subjective well-being; LS= Life Satisfaction * $p < 0.05$
 PA: positive affect; NA: negative affect

DISCUSSION

The literature on the relationship between participation in recreational activities and well-being emphasises involvement (Ruuskanen & Ruoppila, 1995; Hassmen *et al.*, 2000; Resnick, 2000; Lu & Hu, 2005), and the social support that arises from leisure companionship (Wethington & Kessler, 1986; Coleman & Iso-Ahola, 1993; Iwasaki & Mannell, 2000). Stebbins (1992) state that serious leisure is characterised by sustained involvement and friendship as the basis of social support. This study also verified that the level of leisure involvement among slow pitch softball participants had a positive effect on well-being. Stebbins (1992) stress that leisure does not involve spending time on relaxing in meaningless activities, but instead involves systematic, goal-orientated participation in an enjoyable activity over a sustained period. When engaged in slow pitch softball, players with a higher level of leisure involvement are better able to overcome difficulties and achieve breakthroughs in the face of challenges, and strive to achieve greater knowledge, skill, and ability. They also find value from the activity to gain sustained benefits from their participation. The well-being that slow pitch softball players derive from their sport is evident in life satisfaction, positive affect and decrease of negative affect. Additionally, interaction with other participants places recreation and leisure at the centre of their lives and is an important source of happiness.

This study also found that spousal support moderates the positive relationship between leisure involvement and subjective well-being, meaning that when slow pitch softball participants receive stronger spousal support, the positive relationship between leisure involvement and subjective well-being is stronger. If participants with a high level of leisure involvement are considered through the concepts of 'payment' and 'benefit' as in social exchange theory, the process of sustained involvement can be regarded as the 'payment', while the sustained gains for the individual can be regarded as 'benefits'. The 'payments' made by participants with a high level of leisure involvement often cause family-leisure conflict (Goff *et al.*, 1997). However, Goff *et al.* (1997) also found that spousal support moderated family-leisure conflicts that arise from high levels of leisure involvement. Moreover, various studies have demonstrated that participants with a high level of leisure involvement derive clear benefits from sustained participation in leisure activities (Russell, 1987; Bouchard *et al.*, 1994;

Courneya & Hellsten, 1998; Gordon *et al.*, 2000). Accordingly, in making a sustained investment in a leisure activity, slow pitch softball players must constantly weigh the 'payments' and 'benefits' that are associated with their activity. A greater investment in the activity generates more benefits for the participant, but at the cost of potential family-leisure conflict. Spousal support is essential.

CONCLUSIONS

This study draws two main conclusions. First, the degree of leisure involvement by slow pitch softball participants positively affects subjective well-being. Restated, when slow pitch softball participants have higher leisure involvement, they score more highly in subjective well-being, life satisfaction, positive affect and negative affect (reversed score). This finding confirms the results of previous studies of the effect of leisure involvement on subjective well-being in the recreational activities (Ruuskanen & Ruoppila, 1995; Hassmen *et al.*, 2000; Resnick, 2000; Lu & Hu, 2005). Second, spousal support moderated the relationship between leisure involvement and subjective well-being, meaning that when slow pitch softball participants received more spousal support, the positive relationship between leisure involvement and subjective well-being is stronger. Whereas Goff *et al.* (1997) focused on the effect of the pursuit of serious leisure on the family this study reveals that spousal support within the family moderated the subjective well-being of individuals with high levels of leisure involvement. For participants in slow pitch softball, gaining spousal support for their participation in the activity by effective communication can provide an incremental improvement in subjective well-being.

LIMITATIONS AND FUTURE DIRECTIONS

Although this study elucidates the role played by spousal support in the relationship between leisure involvement and subjective well-being among slow pitch softball participants in Southern Taiwan, and the results have both favourable reliability and validity, it has several limitations.

- (1) This study utilised a random sampling method to identify married slow pitch softball participants. Hence, the applicability of the survey results is necessarily limited.
- (2) The study surveyed slow pitch softball participants, and its findings may not be generalisable to participants in other recreational activities. Follow-up investigations could survey participants in other recreational activities to extend the validity of the model.
- (3) Only slow pitch softball participants in Southern Taiwan were surveyed. Those from other regions were excluded. Follow-up studies may extend the survey to participants in other regions to establish the geographical applicability of the research model.
- (4) The study did not control for other influencing factors, such as individual factors (including socio-economic background, motivation, and personal characteristics), or factors related to the venue for participation. Future studies could consider these factors as control variables.
- (5) Cross-sectional data were utilised to evaluate the moderating effect of spousal support.

However, Veiel (1987) showed that cross-sectional data frequently produced spurious interaction effects. Therefore, future research could consider adopting a longitudinal study design, measuring research variables at various times to establish the interaction of variables over time.

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