

Relationship between Leisure Constraints, Leisure Motivation, and Leisure Satisfaction: A Case Study of Junior Colleges in Southern Taiwan

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Abstract : *This study aimed to investigate the relationships between leisure motivation, leisure constraints, and leisure satisfaction in junior college students participating in leisure activities. The research was conducted at junior colleges in southern Taiwan. A total of 500 questionnaires were distributed, of which 358 were returned. After eliminating ineffective responses, an effective sample of 21 questionnaires was collected, representing an effective recovery rate of 66%. Descriptive statistical analysis, confirmatory factor analysis, and structural equation modeling were conducted for returned questionnaires. The results indicated that among junior college students participating in leisure activities, (1) leisure motivation significantly and negatively affects leisure constraints and (2) leisure constraints significantly affect leisure satisfaction.*

Keywords : *leisure motivation, leisure constraints, leisure satisfaction*

I. Introduction

1.1 Research Motivation and Background

High school and vocational school graduates experience a reduction in academic pressure after entering a junior college. Previously, the benefits that adolescent students gained from leisure activities during their development were overlooked due to the high academic pressure and lack of a leisure environment (Wei & Yang, 2003). Exercise habits formed in adolescence can considerably strengthen one's health and help in the building and maintenance of a healthy lifestyle in one's adulthood (Chang, Yeh, & Chen, 2016). Leisure activities are important and necessary at each developmental phase. Considering that college graduates have to begin planning for the future when they graduate, leisure motivation and participation during college will directly affect the future leisure lifestyles of college graduates (Hsiao & Fang, 2005). Iso-Ahola (1980) previous study indicated that adolescents who participated in leisure activities when they were students enjoyed better physical and mental health than those who did not. Junior college students from different backgrounds were found to have different motivations for participating in leisure activities; leisure motivation was higher in students engaged in regular exercise (more than 3 times per week) and students with higher leisure motivation enjoyed a fuller leisure life (Hung, 2010).

When adolescents are engaged in leisure activities, the triggering of motivations, the development of leisure interests, and the experience and feelings of happiness, as well as their continued commitment to leisure activities, will all affect the normal development of their leisure interests (Wu, 2013). Leisure motivation changes over time as an individual moves through different life phases and also varies from person to person. It can be influenced by the leisure culture stereotypes formed within the social groups that one belongs to. Leisure motivation also has a negative effect on leisure constraints (Chung & Tseng, 2015). Leisure constraints refer to interference factors that affect one's leisure life. They affect the leisure activities and experiences of an individual. Each person encounters individual and environmental constraints when engaging in leisure activities or accumulating leisure experience. These constraints interfere with an individual's leisure participation and experience, and different kinds of leisure constraints influence and change individual leisure behaviors and leisure experiences (Wu, 2012). Under the influence of individual factors, students differ in their motivation to participate in leisure activities. Despite these differences, the cultivation of interests, the formation of leisure habits, and the implementation of such habits in daily life can enhance physical and mental health; furthermore, participants gain the leisure satisfaction that they need, thus fulfilling an important objective of participation in leisure activities (Lin & Yu, 2007).

Wu (2009) study found that leisure constraints, leisure motivation, and leisure satisfaction are significantly and positively correlated; based on its results, the study suggested that schools should guide students in overcoming leisure constraints in order to increase their leisure motivation and leisure satisfaction. Moreover, helping students to strengthen their leisure motivation will also increase their leisure satisfaction. Overall, leisure motivation, leisure constraints, and leisure satisfaction are important, correlated factors that

influence leisure life. In order to explore the influential relationships between leisure motivation, leisure constraints, and leisure satisfaction, this study put together a literature review as follows:

(1) Leisure constraints significantly affect leisure motivation

Wu (2009) in a study on the canonical correlations between leisure constraints, leisure motivation, and leisure satisfaction in college students, it was suggested that an individual's intrinsic and structural leisure constraints will influence his or her intellectual, social, competence-mastery, and stimulus-avoidance motives for engaging in leisure activities. In other words, individual factors such as one's psychological state and personality traits will influence and impose constraints on one's leisure interests and participation, affecting personal reasons for participation in leisure activities, such as those related to intellectual development, the establishment of interpersonal relationships, respect, success, mastery, challenge, and competition purposes, as well as the avoidance of overstimulation. Chang and Chen (2013) in the relationships between leisure motivation, leisure constraints, and leisure benefits in older adults indicated that leisure motives such as success and interaction with others are significantly and negatively correlated with intrinsic leisure constraints, meaning that as these two types of motives become stronger, personal intrinsic constraints will weaken. Huang, Chao and Zhao (2013) in a study on motivation and leisure constraints in participants who played slow-pitch softball in Pingtung County, Taiwan, it was revealed that a significant correlation was present between the two factors.

Drawing upon the study above, Hypothesis 1 was proposed, namely: Leisure motivation significantly affects leisure constraints.

(2) Leisure motivation significantly affects leisure satisfaction

Liang (2017) in the leisure motivation, leisure constraints, and leisure satisfaction in basketball players found that leisure motivation has a significant positive effect on leisure satisfaction. Hsu (2015) in a study on the correlations between leisure exercise motivation, leisure constraints, and leisure satisfaction in financial sector employees revealed the presence of a correlation between leisure constraints and leisure satisfaction. Chen (2016) in a study on the effects of leisure motivation, leisure constraints, leisure coordination strategies, and leisure satisfaction on the re-participation willingness of females of different ages in Changhua County, Taiwan, it was found that stronger leisure constraints are associated with lower leisure satisfaction and vice versa. Wang (2016) in the relationship between leisure motivation, leisure constraints, and leisure satisfaction among YouBike users suggested that leisure motivation had a significant negative effect on leisure constraints. Tsai (2015) in a study investigated the relationship between leisure constraints, leisure satisfaction, and feelings of happiness in community college students. The participants, who were then 2014 spring semester students from NanKuan Community University and Tainan Community University, were surveyed through convenience sampling. The results showed that demographic variables significantly affected leisure constraints, leisure satisfaction, and feelings of happiness in students.

Drawing upon the literature above, Hypothesis 2 was proposed, namely: Leisure motivation significantly affects leisure satisfaction.

According to the literature review, there is a relationship between leisure constraints, leisure motivation, and leisure satisfaction. This study aimed to test the theoretical derivations described above in relation to college students.

1.2 Research Objectives

The main objectives of this study were: 1. to investigate factors influencing leisure motivation in college students; 2. to investigate factors influencing leisure constraints in college students; 3. to investigate factors influencing leisure satisfaction in college students; and 4. to examine the relationships between leisure motivation, leisure constraints, and flow in college students.

1.3 Research Hypotheses

Based on the research objectives and theoretical derivations, the following research framework (Figure 1) and hypotheses were proposed in this study:

- (1) Leisure constraints significantly affects leisure motivation.
- (2) Leisure constraints significantly affect leisure satisfaction.

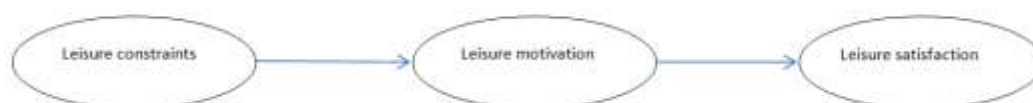


Figure 1 Research construction of this study

1.4 Explanation of Terms

(1) Leisure Constraints

Leisure constraints refer to the various reasons for an individual's failure to successfully participate in leisure activities (Jackson, 1983). Crawford and Godbey (1987) study suggested that leisure constraints are factors that limit or hold people back from pursuing leisure interests). Wu (2012) in a study on the correlations between leisure attitudes, leisure constraints, and leisure interests divided leisure constraint factors into intrapersonal, interpersonal, and structural constraints. Lee, Liu, Zeng and Huang (2015) in a study on leisure constraints, leisure interest, and enduring involvement, leisure constraints were defined as factors that influence an individual's subjective perception of disinterest or inability to continue participating in leisure activities. The leisure constraint scale was divided into three constructs, including 'intrapersonal constraints' (i.e., constraints on leisure participation caused by psychological factors), 'interpersonal constraints' (i.e., constraints related to interpersonal interaction relationships), and 'structural constraints' (i.e., constraints related to personal desires and needs). Huang, Chao and Zhao (2013) according to a study on leisure motivation and leisure constraints in slow-pitch softball players, leisure constraints refer to factors that hinder or limit participation in leisure activities during the leisure activities; the study divided the leisure constraint scale into three constructs, which were intrapersonal constraints, interpersonal constraints, and structural constraints. Lin, Shan and Chuang (2016) in a study on the relationships between leisure motivation, leisure involvement, and leisure constraints in female divers divided the leisure constraint scale into three factors, which were 'personal conditions,' 'personal perceptions,' and 'structural factors.' Referring to the literature above, this study defined leisure constraints as the intrapersonal, interpersonal, and structural factors that affect participation in leisure activities among college students.

(2) Leisure Motivation

Crandall (1980) study indicated that leisure motivation is an intrinsic process, through which an individual's needs related to leisure objectives will lead to his or her engagement and enduring involvement in leisure activities and the alignment of these activities toward specific goals, in addition to allowing the individual to satisfy her or his recreational demands through leisure activities. Tsai and Kuo (2016) study defined leisure motivation as the intrinsic process that promotes active and enduring engagement in activities aimed at happiness and health, and directs these activities toward certain objectives pertaining to intellectual, social, competence-mastery, and stimulus-avoidance constructs. In Wu's (2009) study on the correlations between leisure constraints, leisure motivation, and leisure satisfaction, the leisure motivation scale included 'intellectual motive,' 'society motive,' 'competence-mastery motive,' and 'stimulus-avoidance motive' constructs. Wu (2015) in a study on the relationships between leisure motivation, leisure participation, and feelings of happiness in college students in Pingtung, Taiwan, leisure motivation was made up of four constructs, which were the 'intellectual,' 'social,' 'psychological,' and 'stress alleviation' constructs. Chien and Chuang (2012) in a study on leisure motivation, participatory behavior, and leisure constraints in residents living in outlying islands identified body-mind relaxation, personal abilities, and self-actualization as leisure motivation factors. Lin and Huang (2014) in an empirical study on the motivation of Pingtung college students to browse exercise websites divided leisure motivation into personal, society, and recreational constructs. Referring to the literature above, this study defined leisure motivation as the 'intellectual,' 'society,' 'psychological,' and 'stress alleviation' motives for participation in leisure activities among college students.

(3) Leisure Satisfaction

Beard and Ragheb (1983) study defined leisure satisfaction as the positive feelings experienced by an individual during leisure activities, that is, the degree of an individual's satisfaction with his or her leisure experience and environment; the observed variables included the intellectual, social, competence-mastery, and stimulus-avoidance constructs. Bobby (1995) previous study defined leisure satisfaction as positive feelings perceived by an individual during leisure activities. Liang (2017) defined leisure satisfaction as positive perceptions and feelings caused by and experienced by an individual during leisure activities, that is, the degree of an individual's satisfaction with his or her current leisure experience and environment; leisure satisfaction was divided into four constructs, namely, job satisfaction, social satisfaction, psychological satisfaction, and achievement satisfaction. Huang and Lin (2011) defined leisure satisfaction as positive perceptions and feelings caused by and experienced by an individual during leisure activities, that is, the degree of an individual's satisfaction with his or her current leisure experience and environment; the satisfaction of needs for all constructs was suggested to increase overall leisure satisfaction. Leisure satisfaction included educational, psychological, relaxation, aesthetic, job, and social factors. Chiu, Chen and Chiu (2010) in a study on the relationship between leisure attitudes, leisure satisfaction, and academic pressure in college students, measurement indicators included psychological, educational, social, relaxation, physical, and aesthetic factors. Referring to the literature above, this study defined leisure satisfaction as the degree of satisfaction perceived by

college students with respect to physical, psychological, social, relaxation, and educational factors during participation in leisure activities.

II. Methods

2.1 Participants

The participants in this study were students from junior colleges in southern Taiwan who participated in leisure activities during their free time. The convenience sampling method was employed to conduct the questionnaire survey. Participants included third to fifth year students from five-year junior colleges, and full-time and night-class students from two-year junior colleges. 500 questionnaires were distributed. The research was conducted from February 1 to March 31, 2017. 326 questionnaires were returned. After eliminating ineffective responses, an effective sample of 302 questionnaires was collected, representing an effective recovery rate of 60.4%. Among the effective responses, 186 came from female students and 116 came from male students.

2.2 Research Tools

- (1) The leisure constraint scale in this study was based on the studies cited above as (Jackson, 1983), (Crawford & Godbey, 1987), (Wu, 2012), (Huang, Chao, & Zhao, 2013), and (Lin, Shan, & Chuang, 2016) and included 8 items in three constructs, namely, 'Personal factors,' 'Interpersonal factors,' and 'Structural factors.' The five-point Likert scale was used.
- (2) The leisure motivation scale in this study was based on the studies cited above as (Crandall, 1980), (Wu, 2009), (Fan, Chien, & Chuang, 2012), (Lin & Huang, 2014), (Wu, 2015), and (Tsai & kuo, 2016) and included 10 items in four constructs, namely, 'Intellectual,' 'Society,' 'Psychological,' and 'Stress alleviation.' The five-point Likert scale was used.
- (3) The leisure satisfaction scale in this study was based on studies the studies cited above as (Beard & Ragheb, 1983), (Bobby, 1995), (Chiu, Chen, & Chiu, 2010), (Huang & Lin, 2011), and (Liang, 2017) and included 14 items in four constructs, namely, the 'Job and psychological,' 'Social,' 'Relaxation,' and 'Educational' constructs. The five-point Likert scale was used.

2.3 Data Processing

The statistical analysis tool used in this study for data analysis was SPSS 20.0. Basic data analysis was conducted for the questionnaire data. LISREL 8.7 was used to analyze and test the research hypotheses proposed in this study.

III. Results

3.1 Reliability and Validity Analysis

Huang and Lin (2011) suggested that the reliability coefficient R² of observed variables must be 0.20 or higher. In this study, the R² of 11 observed variables ranged between 0.29 and 0.90, thus meeting the requirement. Hair, Anderson, Tatham and Black (1998) suggested that the construct reliability indicator must be 0.5 or higher. In this study, the construct reliability values of three latent variables were 0.87, 0.89, and 0.85, respectively (Table 1), thus meeting the requirement. Convergent validity can be determined based on the average variance extracted (AVE) of latent variables and the factor loadings (λ) of the observed variables of latent variables. As shown in Table 1, the AVE values of latent variables were 0.69, 0.67, and 0.60, which were all greater than 0.5. The amount of observed variables affecting latent variables was greater than that for measurement errors. The factor loadings (λ) of the observed variables of latent variables in this study ranged between 0.54 and 0.95 (Table 2), which was higher than the threshold value of 0.45 proposed by Bentler and Wu (1993). This indicated that all observed variables could respond to latent variables.

Table 1. Reliability and Validity of observed variables.

Dimensions	Standardized coefficient	R ²	Construct reliability	extracted Institutional pressure
leisure constraint			0.87	0.69
Personal factors (LC1)	0.67	0.45		
Structural factors (LC2)	0.90	0.81		
Interpersonal factors (LC3)	0.89	0.80		
leisure motivation			0.89	0.67
Intellectual(LM1)	0.68	0.46		
Social(LM2)	0.93	0.86		
Psychological(LM3)	0.90	0.81		
Stress alleviation(LM4)	0.75	0.56		
leisure satisfaction			0.85	0.60
Job and psychological(LS1)	0.63	0.40		

social(LS2)	0.54	0.29	
Relaxation(LS3)	0.89	0.79	
Educational(LS4)	0.95	0.90	

Table 2. Estimation of model parameters

Parameter	Unstandardized parameter estimate	Standard error	t-value	Standardized parameter estimate
λ_1	1.00	-----	-----	0.67
λ_2	1.42	0.16	9.07	0.90
λ_3	1.71	0.19	9.07	0.89
λ_4	1.00	-----	-----	0.68
λ_5	1.32	0.13	9.94	0.93
λ_6	1.33	0.14	9.77	0.90
λ_7	1.08	0.13	8.37	0.75
λ_8	1.00	-----	-----	0.63
λ_9	0.80	0.14	5.94	0.54
λ_{10}	1.22	0.14	8.77	0.89
λ_{11}	1.51	0.17	9.04	0.95
γ_1	0.42	0.10	4.27	0.42
β_1	0.82	0.13	6.33	0.77

3.2 Overall Model Evaluation

According to the suggestion of Hwang (2014) regarding structural equation modeling, the overall model should at least include three types of indicators to enable adequate evaluation. Among the evaluation indicators of the overall model used in this study, the goodness-of-fit index (GFI) was 0.95 and greater than 0.90, indicating that the model could be accepted. RMR was 0.031 and smaller than 0.05, indicating that the model could be accepted. RMSEA was 0.063 and fell in the 0.05-0.08 range, indicating a fair fit for the model. With regard to relative goodness-of-fit indices, NNFI was 0.94 and greater than 0.98, indicating that the model was acceptable. CFI was 0.99 and greater than 0.90, indicating that the model was acceptable. The parsimonious normed fit index (PNFI) and parsimonious goodness-of-fit index (PGFI) were equal to 0.5, indicating that the model was satisfactory. The chi-square/degrees of freedom ratio was 1.71 and smaller than 3, indicating that the model could be accepted (Table 3).

Table 3. Tests for overall model fit.

Indices		Critical regions	Results
Absolute fit index			
	Goodness of Fit Index(GFI)	>0.9	0.95
	Root Mean Square Residual(RMR)	<0.05	0.031
	Root Mean Square Error of Approximation(RMSEA)	<0.05	0.069
Approximation			
	Non-Normed Fit Index(NNFI)	>0.9	0.98
	Comparative Fit Index(CFI)	>0.9	0.99
Parsimonious Fit index			
	Parsimony Normed Fit Index(PNFI)	>0.5	0.5
	Parsimony Goodness of Fit Index(PGFI)	>0.5	0.5
	Normed Chi-Square(Normed chi-square)	1<NC<3	1.71

Figure 2 shows the empirical results derived in this study. The parameter estimation results were as follows: (1) With regard to the effect of leisure constraints on leisure motivation, the completely standardized coefficient was 0.42 (t=4.27, p<.05), reaching significance. Thus, Hypothesis 1 was supported and the relationship was confirmed. (2) With regard to the effect of leisure motivation on leisure satisfaction, the completely standardized coefficient was 0.77 (t=6.33, p<.05), reaching significance. Thus, Hypothesis 2 was supported and the relationship was confirmed. Both hypotheses proposed in this study were confirmed, meaning that the empirical results matched the expected results.

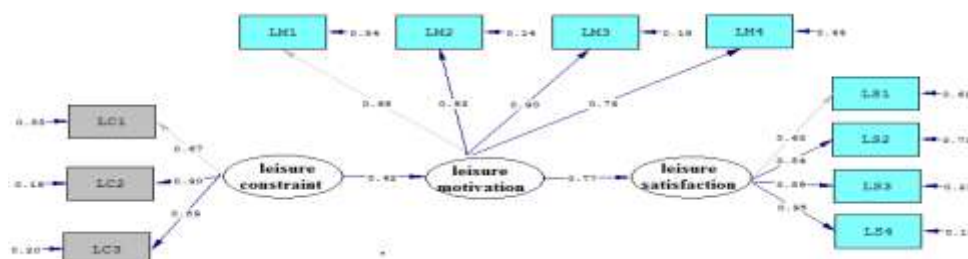


Figure 2. the standardized path of the present study

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