

The Contribution of Active Leisure Participation to life Satisfaction of the Korean Adults

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The purpose of this study was to investigate the changes in life satisfaction according to the patterns of leisure participation and to analyze the interrelationships among the different components. For an active test group 1,368 subjects (890 in daily sports and 578 in arts and cultural activities) were presented, while 188 subjects (103 in daily sports and 85 in arts-cultural) were selected for posttesting; then for a passive group 232 subjects for pretesting and 114 for posttesting were selected. In view of the characteristics of the field study a non-equivalent control group was assigned to this quasi-experimental design with a treatment of a 3-month active leisure participation program in daily sports and arts and cultural activities.

In this study, sex, age, socioeconomic status, and health were used as controlling dependent variables, while leisure satisfaction and flow experience are also regarded as influencing dependent variables based on the telic theory and autotelic theory; subjects were both pretested and posttested for these variables at three month intervals. The results were assessed using discriminant function analysis, an analysis of covariance, and path analysis by multiple regression. This experiment demonstrated that participation in daily sports and arts-cultural activities heightened life satisfaction by increasing the degree of flow experience and leisure satisfaction through active leisure participation.

INTRODUCTION

There are a variety of factors that influence human happiness and life satisfaction such as sex, age, income, occupation, educational background, marriage, health, family, professional life, leisure, and so on. The previous empirical studies on life satisfaction show, however, that only a few variables can be accounted for directly related to life satisfaction. Those variables frequently cited include family, occupation, and marriage. The activity theory, which is a major paradigm of life satisfaction research conversely stresses that

human happiness and life satisfaction is no more than a by-product that comes out in the process of human activities (Diener, 1984). For instance, mountaineering itself brings a greater happiness than conquering the summit.

The theory advocates that the more active one's life is and the more frequent one participates in activities, the higher one's satisfaction with life is. The theory has been proved by Lemon, Bengston and Peterson (1972), Repoort and Rapoport (1975), Kelly (1983a), Kelly, Steinkamp, Kelly (1987), and other researchers. A number of activity theorists have been emphasizing the importance of the leisure participation because of its contributions to a greater life satisfaction.

More than 700 studies been conducted and reported to determine the variables to life satisfaction, but it was not until 1970 that any research was done to determine the interrelationships between leisure activity and life satisfaction. Such researchers as Palmore (1968), Peppers (1973), and Decarlo (1974) were the initiators who reported on the positive relationship between leisure participation and life satisfaction. Thorson (1977) reported that leisure participation is positively related to life satisfaction ; Bley, et al. (1972) and Graney (1975) came up with the similar conclusions. The early researchers came to a standstill with the level or degree of activity and made no progress with the quality of activity and its relationship with life satisfaction owing to the difficulties involved in conceptualization and meaurement. With an emergence of Csikszentmihalyi's flow experience theory (1975) and Beard and Ragheb's leisure satisaction scale(LSS, 1980), however, objective measurement and evaluation of the quality of leisure activities became possible. And thereafter research on the sociopsychological process between leisure participation and life satifaction was finally launched.

As part of the same efforts, Ragheb and Griffith (1982), Riddick (1985), Kelly, Steinkamp, Kelly (1987), Han (1988), and others have continued their studies and it has been reported that the degree of flow experience and leisure satisfaction obtained from the activities is more closely related to life satisfaction than the quantitative aspects of activities such as the level and variety of leisure participation. Based on Little's personal project theory, which belongs in the behavioral psychological realm, Omodei and Wearing (1990) attempted to combine telic theory with autotelic theory. They observed that the satisfaction and flow experience obtained from daily activities have effects on positive/negative affect toward activities and that these three variables have a significant association with life satisfaction. The results of the study suggest that the degree of satisfaction and flow experience vary

depending on the activity patterns and therefore have different effects on life satisfaction.

Pointing out that it was not clear whether the leisure activities related to life satisfaction were a general or specific pattern, Riddick (1985) argued that the relationship between the leisure activity pattern and life satisfaction be more specifically defined. Ragheb, Griffith (1982) and Kelly, Steinkamp, Kelly (1987) presented the results of their study that the relationship between leisure satisfaction and life satisfaction varies according to the pattern of leisure activity.

The purpose of this study was to analyze the changes in life satisfaction that must be reflected by the different patterns of leisure participation. Two different groups were chosen. For the active leisure group the subjects were selected from those people who participated in the 3-month daily sports and arts and cultural program administered by the governmental and private organizations. For the passive leisure group the subjects were chosen from those who did not participate in any such activities.

The active leisure group was tested before and after participation and the changes in life satisfaction were measured and compared. A similar comparison was made between the active and passive groups. The research was focused on determining how active leisure participation affects life satisfaction and what is the underlying relationship between leisure participation and life satisfaction by analyzing the changes in leisure satisfaction and flow experience stemming from leisure participation.

METHODS

1. Plan for the Study

In order to examine whether the variables-leisure satisfaction, flow experience and life satisfaction-would change after 3-month leisure participation, the pre and post testings were conducted and a control group was utilized for comparison. This study used a non-equivalent control group method according to the quasi-experimental design. Because, in this field study, it was judged inappropriate to select participants or non-participants in leisure activities for the test or control group randomly and it was also considered as impossible to match the subjects by the related variables completely.

2. Subjects

For the active leisure group residents from 2 Gu (municipal districts) of Seoul and a group of members registered in a private recreation center were randomly selected. A total of 1,600 people who participated in daily sports classes at the Gu office and in leisure activity classes at the private center. The program consisted of 7 different types of sports: health exercise, tennis, gate ball, swordsmanship, aerobic exercise, Taekwondo and yoga. In the arts and cultural category courses were offered in calligraphy, flower arrangement, Western painting, Oriental painting, instrumental music, vocal music, ceramics, crafts and other cultural activities.

The posttesting of the daily sports group showed that 88.5% of the participants failed to continue their programs and for the arts and cultural group the dropout rate reached 85.3%; 103 and 85 subjects completed their courses respectively with a total of 188 subjects. In the passive group, 114 subjects, 50.9% of the pretested participants, completed their posttesting and the number of all subjects who remained to take the posttesting was 302.

3. Measurement

To measure the variables the following methods were used. If the measurement was adopted and translated, the joint research team analyzed it to decide its relevance. The 33 items on the translated questionnaire were assigned to 488 subjects-15 per a question-as a means of standardization for criterion validity and reliability (relevancy among the question items)

(1) Leisure Satisfaction Scale

A Korean version of the Leisure Satisfaction Scale by Ragheb and Beard (1980) was adopted; the 51 items were reduced to 24, which were subdivided into 6 categories-psychological, educational, social, relaxational, physiological and environmental; 4 questions were given in each unit, totalling 24 question items. The Korean version of the LSS showed a relatively lower reliability at .68-.82 in comparison with .86-.92 on the original LSS. The reliability of the entire measurement is also lower at .911 compared to at .96 of the LSS. However, the results indicated that the Korean version was a reliable measurement tool.

(2) Flow experience

In the flow experience theory (Csikszentmihalyi, 1975), the congruity of conduct, harmony with activities, indulgence of the mind, and the loss of a sense of time were selected as 4 factors of the flow experience. Questionnaire including 4 questions was originally developed by Csikszentmihalyi (1975)

and used by Omodel and Wearing (1990). A Korean version of the 4 questions was used in this study. Its reliability coefficient was comparatively high with Cronbach's alpha at .770.

(3) Life Satisfaction

Life satisfaction was measured by the satisfaction with life scale developed in 5 questions by Diener, Emmonson, Larson (1985). Won (1989) used his own Korean translation of the 5 questions. In Won's translation of the Satisfaction with Life Scale, the measurement is .68-.79, which is almost equal to SWLS's .61-.84 (Diener, et al., 1985). It also shows a high reliability coefficient .849.

(4) Statistical analysis

In order to investigate how the controlling background variables affect the changes in life satisfaction, a discriminant function analysis was made. In order to analyze the changes in leisure satisfaction, flow experience and life satisfaction influenced by leisure patterns, an analysis of covariance among the group was performed. In addition, a series of path analyses were performed in order to determine the relationships among leisure satisfaction, flow experience and life satisfaction.

RESULTS

1. The Relationship between Background Variables and Life Satisfaction

The background variables in this study were sex, age, socioeconomic status and health. In order to investigate how the variables affect life satisfaction a discriminant function analysis was made. All subjects of both active and passive group were classified into upper, middle, and lower groups according to the degree of change in satisfaction and frequency distribution after obtaining the score for life satisfaction.

As shown in Table 1, the discriminant function was obtained by the direct method in which the background variables were treated simultaneously.

The 2 discriminant function obtained are not significant ($X^2=12.319$, $p=.136$; $X^2=0.222$, $p=.974$). The background variables involved did not show any significance. Sex and health of the variables showed a rather high discriminant function coefficient, but were not significant. The hit ratio, which showed 36.61%, also did not show any significant difference from the maximum chance criterion (33.33%).

Table 1. Discriminant function coefficients of demographic variables

Coefficient Variables	Function 1		Function 2	
	Unstandardized Coefficient	Standardized Coefficient	Unstandardized Coefficient	Standardized Coefficient
Sex	.959	.472	-.743	-.366
Age	-.889	-.796	.426	.381
SES	-.839	-.232	.570	-.157
Health	.846	.562	1.213	.807
(Constant)	1.426		= 3.350	
Eigenvalue		.070		.001
Cannonical Correlation		.256		.035
Wilks' Lambda		.933		.999
Chi-square		12.319(p=.136)		.222(p=.974)

These results were brought by repeated use of the sampling without discrimination in the analysis sampling from the test sampling. It was judged that no special control is necessary in the next analyses since the variables required in control did not produce any significant changes. And it was suggested to limit the judgement and interpretation to the matter of process and method of analysis.

2. Changes in Leisure Satisfaction by Leisure Patterns

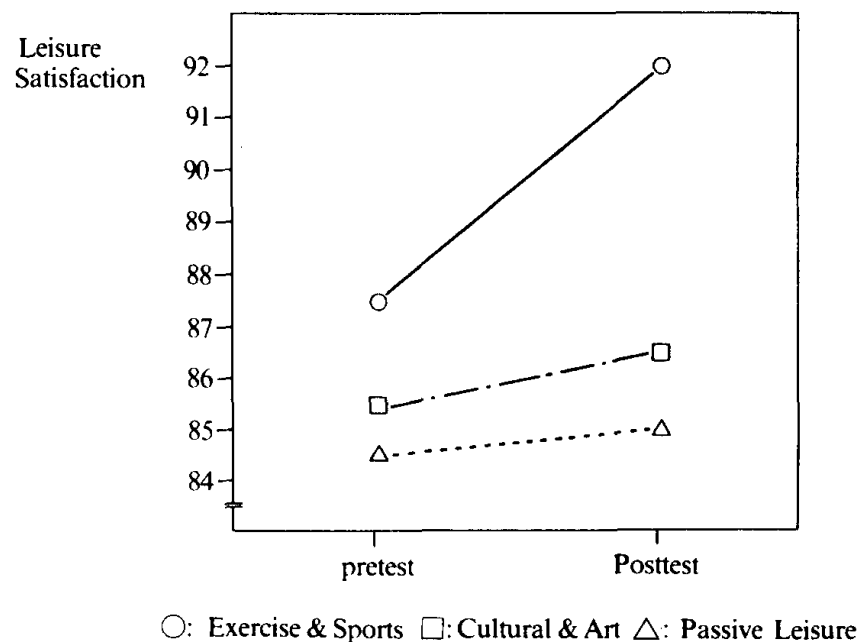


Figure 1. Leisure satisfaction levels at pretest and posttest for the three groups

The result of the analysis of covariance showed significant difference in the pretest leisure satisfaction ($F=71.999$, $p=.000$) between the active group and the passive group. Even after the control and adjustments, a significant difference ($F=6.882$, $p=.009$) existed. The group which participated in daily sports and arts and cultural activities revealed much higher leisure satisfaction than the passive leisure group before and after participation. The daily sports group and the arts and cultural group showed a significant difference in the pretest leisure satisfaction ($F=49.513$, $p=.000$). They also showed a significant difference in the posttest after the control and adjustment ($F=6.814$, $p=.010$). That is, the daily sports group showed more significant satisfaction both in the pre and post tests than did the arts and cultural group.

3. Changes in Flow Experience by Leisure Patteren

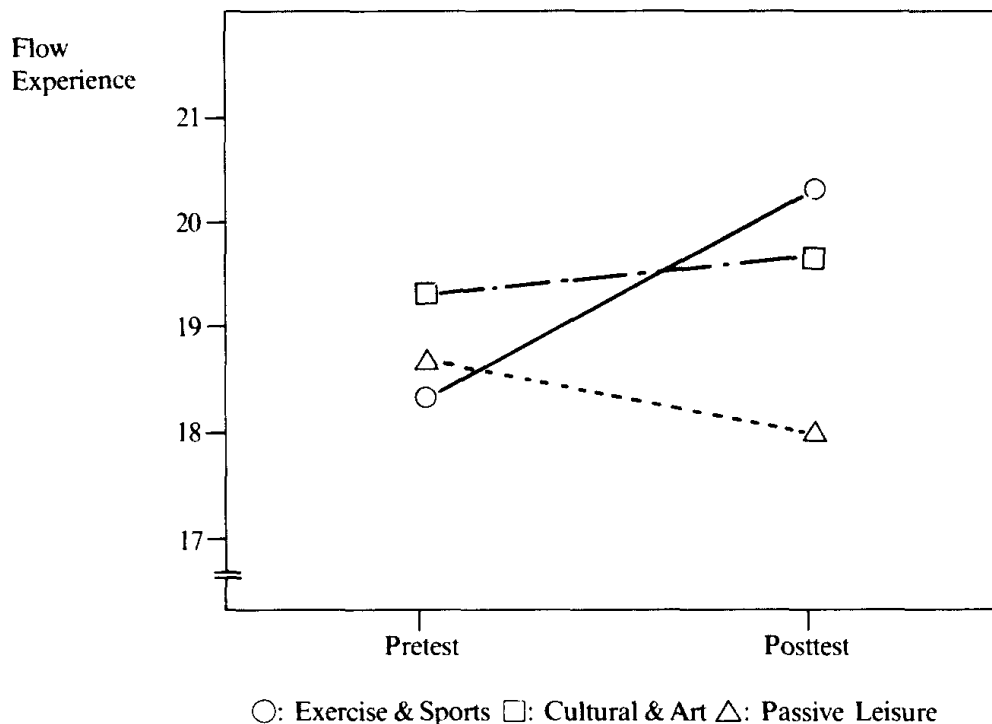


Figure 2. Flow experience at pretest and posttest for the three group

The analysis of covariance showed a significant difference in the pretest flow experience ($F=38.479$, $p=.000$) between the active group and passive group. Even after the control and adjustment, a significant difference ($F=14.922$, $p=.000$) was also found. The group which participated in daily sports and arts and cultural activities showed a high degree of flow experience before participation and an even higher after participation. On the other hand, there was a significant difference in the flow experience between the daily sports group and the arts and cultural group ($F=34.245$, $p=.000$), but after the control and adjustments no difference was found between the groups ($F=2.455$, $p=.119$). That is, the arts and cultural group showed a greater degree of flow experience before participation than the daily sports group; however, no significance was found between the groups after participation.

4. Changes in Life Satisfaction by Leisure Patterns

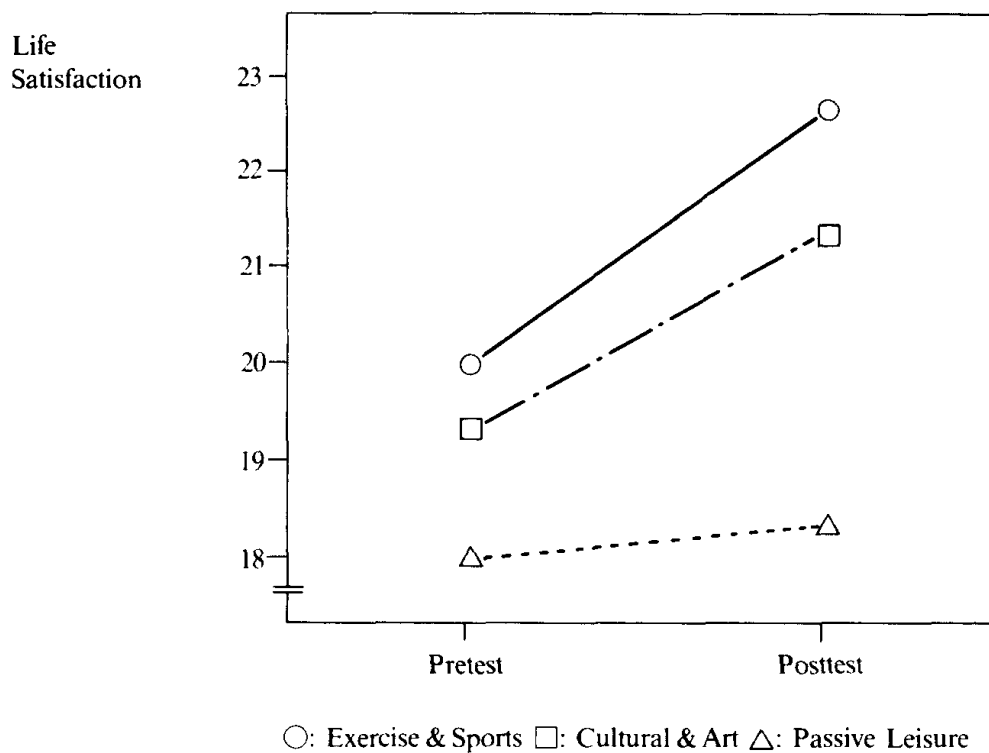


Figure 3. Life satisfaction levels at pretest and posttest for the three groups

According to the analysis of covariance, it seemed that a significant difference in the pretest life satisfaction between the active and passive groups existed ($F=88.925$, $p=.000$). In the posttest after the control and adjustments, a significant difference was found between the groups ($F=29.778$, $p=.000$). That is, the group which participated in daily sports and arts and cultural activities showed a higher pretest level of life satisfaction than the passive group and it also showed a higher posttest level of life satisfaction.

On the other hand, the two groups showed a significant difference in the pretest for life satisfaction ($F=91.725$, $p=.000$), but no significant difference in the posttest after the control and adjustments ($F=1.345$, $p=.248$). That is, there was a significant difference in the pretest level of life satisfaction between the groups, but no difference in that for the posttest.

5. Relationship among Leisure Satisfaction Flow Experience and Life Satisfaction

In order to investigate how leisure satisfaction and flow experience affect life satisfaction, a multiple regression analysis was performed mainly on the related variables and the results are presented in Table 2.

Table 2. Regression coefficients of leisure satisfaction and flow experience for life satisfaction in the posttest

Step	Variables	b	β	MR	R^2	R^2 Change	F
1	Leisure Satisfaction	.163	.327 *	.428	.183	.183	40.625 *
2	Flow Experience	.379	.273 *	.498	.248	.065	29.706 *
	(Constant)	1.784					

* $p=.000$

As shown in Table 2, leisure satisfaction variables, which are more predictable on life satisfaction, are entered at the 1st step and flow experience variables, which are less predictable, are entered at the 2nd step. The influences of these two independent variables are $\beta=.327$ ($p=.000$) and $\beta=.273$ ($p=.000$) respectively. They are found to be significantly related to life satisfaction. Independent predictability of leisure satisfaction and flow experience of life satisfaction was 11.6% and 8.8% ($R^2=.183$ and $R^2=.065$), and these independent variables accounted for 24.8% of the entire variance ($R^2=.248$). The path analysis made on the results of regression equations is shown in Figure 4.

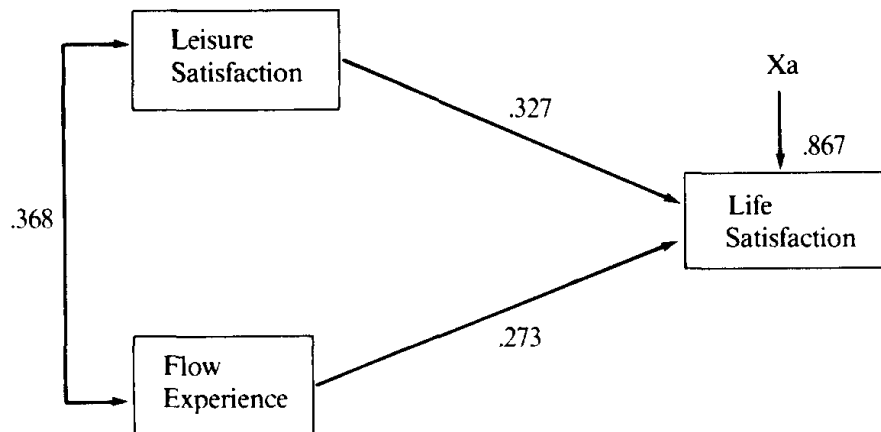


Figure 4. Path-diagram of life satisfaction at posttest ($N=302$, $R^2=.248$)

DISCUSSION

Activity theory can be regarded as a major paradigm of life satisfaction research. What the theory supports is that active life or participation in activities has a positive relationship with life satisfaction. "Activity" here is defined as engagement in regular and patterned action with others other than routine maintenance (Lemon, Bengtson, and Peterson, 1972). Kelly, Steinkamp, and Kelly (1987) argued that the concept of activity had been explained to encompass a variety of actions and interactions including leisure in addition to family and organizational involvement. Diener (1984) also stressed that the concept of activity can be applied to a variety of activities including organizational involvement, social contacts, hobbies, and physical actions. Viewed in this context, it is natural that an emphasis should be placed on leisure activities such as daily sports and arts and cultural activities although the activities associated with life satisfaction are varied. This study clearly demonstrated that the active participants in leisure activities had higher a pretest level of life satisfaction than the passive group and their posttest life satisfaction level also increased. And this results give strong support to the "Activity Theory."

Palmore (1968), Pepper (1973) and Decarlo (1974) are among those who reported a significant corelationship between leisure activity and life satisfaction. Riddick (1987a) in particular reported that leisure activity had an immediate effect on life satisfaction and counted as predictable variable ($R^2=.23$), and the results of this study supports Riddick's contention. Most of the earlier researches were conducted following the cross-sectional research

method, but in this study the quasi-experimental design was applied and some actual results were obtained from the subjects' actual participation in leisure activities for a set period of time. By presenting empirical proof that the subject experienced a higher level of life satisfaction by participating in leisure activities, this study determined a positive relationship between leisure activity and life satisfaction.

The fact that the participants in daily sports and arts and cultural activities had a higher level of leisure satisfaction and flow experience can be understood to indicate that these two variables are fundamental parameters in the change of life satisfaction. The group of active leisure participants in daily sports showed significantly higher leisure satisfaction than the participants in arts and cultural activities. Daily sports were found to contribute more to the increase in life satisfaction than any other types of leisure activities ; they prominently increased flow experience even if not significantly. Daily sports are one of the most important factors in leisure satisfaction including physiological, social and psychological factors and they are closely associated with flow experience as well.

Based upon the findings of the study and literature review of previous research, it was concluded that daily sports participation heightened life satisfaction through the increase of leisure satisfaction and flow experience.

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