

Leisure Type, Leisure Satisfaction and Adolescents' Psychological Wellbeing

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This study examined the impact of leisure type on leisure satisfaction, along with its subsequent effects on adolescents' psychological wellbeing, using a longitudinal sample of 3,449 Korean adolescents at two time points (2003 and 2004). The results indicated that the type of leisure activity (measured in 10th grade) had differential effects on students' long-term psychological wellbeing (measured in 11th grade) according to sex. Specifically, for male students, only active leisure (i.e., sports activities) had a positive effect on leisure satisfaction. By contrast, for female students, although active leisure activities exerted positive effects on leisure satisfaction, passive leisure (i.e., sedentary activities) and social leisure (i.e., spending time with friends) had a negative impact on students' leisure satisfaction. For both male and female students, leisure satisfaction had longitudinal effects on their psychological wellbeing, with increasing life satisfaction and decreasing stress.

Keywords: leisure participation, leisure satisfaction, leisure type, adolescents, psychological wellbeing

The importance of leisure participation for overall wellbeing has long been identified in both research and social discussion. Over the past several decades, research has indicated that leisure participation is positively linked to psychological wellbeing as well as physical health (Caldwell, 2005). Generally, leisure activities can be defined as voluntary non-work activities that are engaged in for enjoyment (Hills & Argyle, 1998; Holder, Coleman, & Sehn, 2009).

Tinsley, Bretlett, and Kass (1977) noted that different individuals have different leisure needs. That is, people choose their leisure activities according to their particular needs, which will vary according to the environments and contexts involved. People will also make different leisure choices depending on where they are in their life cycle. As individuals age, they may begin to choose leisure activities that they would not have chosen in their earlier stages of life. Likewise, people may stop enjoying the leisure activities that they have previously enjoyed when they reach an older age (Iso-Ahola, 1980; Raymore, Barber, Essles, & Godbey, 1999).

When children become teenagers, they begin to have the freedom to develop their own leisure activities. At this point, leisure activity becomes particularly important because it helps adolescents to internalise social norms, which in turn will serve as a good resource for them to learn how to socialise in a successful manner (Haggard

& Williams, 1992; Iso-Ahola, 1980). Caldwell and Faulk (2013) propose that the leisure activity of teenagers is different from their regular school activities or work in that it entails some level of freedom, and as such, teenagers are reported to use leisure time in order to develop their peer relations, thus facilitating their social development. In terms of youth development, positive leisure experience during adolescence is also very useful as it helps to form autonomy and self-efficacy of teenagers (Stebbins, 1992). It is also believed to be linked to high academic achievement. Consequently, there has been a great deal of research on the importance of leisure activity as a prerequisite for a healthy and happy life.

Researchers have indicated that participating in leisure activities has significant associations with various physical and psychological conditions (Kim & Choi, 2006; Kim, 2007; Park, 2007a). Kim (2009) indicated that the more adolescents are involved in leisure activities, the more they feel comfortable with leisure activities and are satisfied with their leisure activities. Lee (2005) approached the effects of leisure by considering the relationship between the quality of life and leisure activity, finding a positive influence of leisure on life satisfaction. Many researchers have further suggested that leisure activities are an important factor in stress coping (Iso-Ahola & Park, 1996; Iwasaki, 2001; Iwasaki & Mannell, 2000; Lee & Kim, 2005). Lee and Yi (2006) indicated that physical leisure activity, in

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particular, has a relatively strong positive effect on stress coping behaviors. Kim (2003) studied the effects of leisure on physical and mental wellbeing and discovered that such effects had positive influences on both. Sacker and Cable (2006) found that leisure participation during adolescence predicted one's wellbeing 15 years later, and conveyed that the relationship between leisure and wellbeing is likely to be an enduring one.

Although previous research has indicated a positive association between leisure participation and wellbeing, there is a growing body of evidence to suggest that the picture may be more complex. The concept of leisure may encompass many types of activities, with varying levels of effect on the participants. To fully understand the complexity of the impact that leisure participation has on psychological wellbeing, it is necessary to consider several factors, including both the leisure type and the mediating effect of students' leisure satisfaction on the relationship between leisure participation and students' wellbeing over time.

Leisure Type and Wellbeing

There is considerable evidence that leisure participation contributes to adolescents' wellbeing. While a number of studies have revealed that leisure participation contributes positively to adolescents' wellbeing (Csikszentmihalyi & Hunter, 2003; Kang, 2004; Kim, 2003; Onishi et al., 2006; Sacker & Cable, 2006), others have indicated that it has negative associations (Csikszentmihalyi & Hunter, 2003, Shaw & Grant, 2002). One possible explanation for these discrepant findings is the different definitions and measurements of leisure participation applied in these studies. The relationship between leisure and adolescents' wellbeing may depend on the type of activity involved (e.g., physical, sedentary, social). More specifically, the concept of leisure may encompass many types of activities that have varying levels of effect on participants' leisure satisfaction and wellbeing.

Research has tended to focus on how often people engage in physical or non-physical leisure activity and how this influences their overall mental state in terms of satisfaction, self-efficacy, mental wellbeing and stress level. Many researchers have categorised leisure activities and attempted to find out what influence each specific category has on the mental, cognitive and physical development in youth and adolescence. Kleiber, Larson, and Csikszentmihalyi (1986) categorised leisure activity into two groups, the first of which was relaxed leisure (e.g., watching TV) and the second of which was transitional or serious leisure (e.g., sport, games), which has some developmental benefit and demands some effort. In the former set of activities, participants mainly pursue short-term satisfaction. Participation in the latter, however, contributes more strongly to growth because it enables participants to recognise their freedom of choice and self-determination and leads to the development of intrinsic motivation.

Passmore (2003) employed the Leisure Questionnaire (Passmore & French, 2001) in order to divide leisure activities into three types: active (goal-oriented leisure; e.g., sports), social (e.g., meeting friends) and time-out leisure (e.g., watching TV), so as to show the benefits that different leisure activities have in terms of self-efficacy, competence, self-worth and mental health. Hence, they found the crucial role played by goal-oriented and social leisure in enhancing youth mental health.

Researchers have also used alternative criteria and names in order to distinguish between leisure activities. In general, leisure activity can be thought of as being roughly separated into passive and active subtypes. Given that the current article primarily deals with youth (teenagers) who are concerned about building good peer relations, considering the social types of leisure will prove to be extremely valuable. Tiggeman (2001) reported that teenagers spend more time on social leisure activities, such as chatting, visiting friends and eating out, than they do on passive activities, such as watching TV and reading books. Gordon and Caltabianco (1996) noted that despite the popularity of social leisure among adolescents, this did not necessarily lead to satisfaction; discontentment was most obvious among urban youth despite their extensive social leisure participation. Therefore, when considering social leisure, particularly for this age group, we reflect that the peer group involved is important, as well as the fact that social relationships can be developed and strengthened through leisure activities. Such leisure activities may lead to enhancements in self-confidence and relationships, as associated with adolescents' general psychological wellbeing.

In general, previous literature has focused on the effects of physical active leisure participation on physical health outcomes; few studies which consider the role of other types of leisure (i.e., passive and social) and its effects on mental health outcomes have been carried out. In this research, three types of adolescents' leisure activities are investigated: active, passive and social leisure. Active leisure includes those activities that involve physical motion and exercise, either carried out with other people or on one's own. Passive or sedentary leisure involves activities that do not entail physical movement, such as reading, watching TV or listening to music. Meeting friends and club activities are categorised as social leisure activities.

Studies have shown that passive activities have been negatively correlated with wellbeing, whereas active leisure has been positively related with higher levels of wellbeing (Csikszentmihalyi & Hunter, 2003; Holder, Coleman, & Sehn, 2009). For example, using a sample of 828 elementary and secondary school students, Csikszentmihalyi and Hunter (2003) realised that teenagers' happiness varied across different types of leisure activities that were being carried out. Individuals' level of happiness tended to increase when participating in active leisure, such as sports activities, while their happiness decreased when they were reading alone (i.e., passive leisure). Other studies have also

found that physical activity is positively related with children's wellbeing (Parfitt, Pavey, & Rowlands, 2009); however, sedentary behavior was shown to be negatively related to adolescents' wellbeing (Ussher, Owen, Cook, & Whincup, 2007). Using a sample of 57 9- to 10-year-old children, Parfitt and colleagues (2009) discovered that time spent on vigorous physical activity had negative correlations with anxiety and behavioural conduct, but positive correlations with aspects of physical self-worth. Ussher and colleagues (2007) conducted a cross-sectional study with a sample of 2,623 adolescents aged 13 to 16 years. They found that lower levels of self-reported physical activity and higher levels of sedentary behavior (TV/computer/video usage) resulted in significant associations, with the ratings reflecting a lower level of wellbeing on a psychological strengths and difficulties assessment.

Researchers have also been interested in the role of leisure in the stress-coping processes of a wide range of age groups. Iwasaki, Mannell, Smale, and Butcher (2005) found that the type of leisure activity was relevant in predicting the immediate adaptive outcomes (coping effectiveness, coping satisfaction, and stress reduction) with a sample of 132 workers aged 24 to 61 (mean = 39). They found that relaxing leisure (e.g., watching TV, listening to music) was found to be the strongest positive predictor of coping with stress, while social leisure (e.g., spending time with friends) and cultural leisure (e.g., going to concerts, museum) significantly predicted greater mental or physical health; however, physically active leisure had no significant effect. Ponde and Santana (2000) reported that participation in any type of leisure activity was a protective factor for 552 adult women workers' mental health. In Ponde and Santana's study, leisure activities had a positive impact on reducing the anxiety and depression among women at risk (i.e., those with low job satisfaction and low socio-economic status). Lee and Yi (2006) examined the relationships among the types of leisure activities and stress coping behaviors of 424 Korean university students. They found that participation in physical and social leisure activities had a positive influence on the stress coping behavior. Similarly, Park (2007b) investigated the relationship among social sports activity, leisure attitude and stress coping behavior utilising a sample of 240 adults. He found that the longer was the period of social sports activity, the higher were the participants' levels of confidence in controlling their activities both physically and mentally. These in turn were found to help produce participants' problem-focused coping, wishful thinking and social support coping.

Previous studies have focused on the negative psychological aspects (e.g., anxiety, depression) of wellbeing and their relationship to leisure activity. Parfitt, Pavey, and Rowlands (2009) investigated the positive aspects of self-worth together with the negative wellbeing measures; however, their sample size was small and thus, generalisability is problematic. Most studies on stress-coping and leisure are based on adults; yet the information derived

from these studies is nevertheless useful in providing a foundation for exploring this relationship in other age groups. Further empirical research is necessary in order to determine whether implications from previous studies are applicable to the adolescent population. In addition, consideration of both the direct and indirect effects of leisure participation will help parents and educators to better understand the process through which leisure influences students' psychological wellbeing. For example, leisure may contribute to psychological wellbeing by enhancing happiness and autonomy as well as by providing a means of relaxation (Holder, Coleman, & Sehn, 2009; Joudrey & Wallace, 2009).

Mediating Effects

Although researchers have consistently reported the positive effects of leisure participation on wellbeing, the process through which leisure participation influences adolescents' psychological wellbeing is not well understood. That is, in addition to the direct effect on wellbeing, it is plausible that the impact of leisure participation might exert indirect effect as well. In previous literature, we have found several mediating processes. Passmore (2003) examined how leisure participation influenced mental health outcomes in a sample of Australian adolescents. She found that leisure influences adolescents to gain social, behavioural, athletic and scholastic competencies, which in turn boost mental health. In another study, Passmore and French (2000) found significant relations between leisure and mental health via mediators (self-efficacy, competence, and self-worth) from a total sample of 850 adolescents (aged 12 to 18 years). Specifically, they reported that active and social leisure had significant and positive impacts on adolescents' mental health. However, they demonstrated that passive leisure had a negative impact on mental health.

Theoretical Framework

Previous research indicated that leisure satisfaction will vary according to the leisure activity involved. In addition, adolescents' accumulated experience from leisure activities is expected to have both a direct and indirect influence on their long-term mental health through leisure satisfaction. The broaden-and-build theory (Fredrickson, 2001) explains the evolved function of positive emotions and their current and long-term effects not only in terms of enhancing wellbeing, but also in coping with negative life events. In our study, we can see that the positive emotions gained from leisure activities help adolescents to create long-term resources, such as psychological resilience, which leads to their greater experience of long-term psychological wellbeing through increasing life satisfaction and decreasing stress.

Therefore, this study aims to understand how adolescents' experience of leisure satisfaction from various leisure activity types influences their mental health over

time, as measured through the wellbeing perception and the decrease in stress. Specifically, this study intends to investigate the relationship between types of leisure activities and the positive and negative factors of adolescents' psychological wellbeing by using a longitudinal research design and a nationally representative Korean adolescent sample. The results will provide insights to help researchers identify the types of leisure activities that continue to influence and improve students' wellbeing. Based on previous studies, we hypothesised that all three types of leisure activities will have significant effects on outcomes, both directly and indirectly, via a mediator (leisure satisfaction).

Method

Data Source

This study investigates the longitudinal relationship between leisure participation and student's psychological wellbeing using data drawn from the base year (2003) and the first (2004) follow-up surveys of the Korea Youth Panel Survey (KYPS). The KYPS was designed by the National Center for Educational Statistics (NCES) in order to provide trend data regarding the critical transitions experienced by young people as they progress from middle school to high school and subsequently embark on their careers. The base-year study used a two-stage stratified probability design in order to select a national sample of schools with 10th grade students. In the first stage, the sample of schools was stratified based on school type (public and private) and school location (urban, suburban and rural). In the second stage, within each school, a sample of about thirty 10th-graders was randomly selected. Students were asked to complete questionnaires regarding their schoolwork, relationships, family, attitudes and behaviors. Data were collected by students, as well as one parent or guardian, two teachers and one school principal per each participating student.

Follow-ups were conducted 1 year later, when most respondents were in the 11th grade. For follow-up data collection, students were selected in two stages. The original student sample was first subsampled and then freshened with students who had not participated in the previous survey. Through this freshening process, students were randomly selected from participating schools and added to the sample in order to enable an analysis of a nationally representative sample of students. The KYPS was selected for the current study because it represents a more current perspective of student life experiences and their psychological status in the sample group.

Current Sample

The base year sample in 2003 included 3,449 students who formed the core sample of students for the longitudinal analysis. In 2004, 3,188 of the original students participated in a second follow-up survey when most students were 11th graders. This group is known as the F1 panel.

Other students who were surveyed in 2004 in order to freshen the sample as well as to allow cross-sectional analyses in Grades 10 and 11 are not part of the longitudinal panel. A F1 longitudinal panel of 3,188 students was used in this study, comprised of 1,594 (50%) females and 1,594 (50%) males (mean age: 13.78 years, *SD*: .41 years).

As in most longitudinal data, some subjects were unavailable during one or more data collection periods. Pairwise/listwise deletion and substitution with a sample estimate (e.g., mean, median) are often used for handling the missing data. However, these common methods tend to produce incorrect estimates (Schafer, 1997). In order to obtain unbiased estimates of the parameters of interest, despite the incompleteness of the data, this study employed full information maximum likelihood (FIML) estimation for the current analyses. FIML is not an imputation method; it analyses incomplete data without imputation. Therefore, we chose the FIML method since it is highly recommended for structural equation modeling (SEM) analysis using incomplete data (Arbuckle, 1999).

Variables

The variables selected for this study included items relating to leisure participation behaviors, leisure satisfaction and wellbeing measures. Specifically, leisure participation and leisure satisfaction variables were selected from Time 1 (2003) and wellbeing measures (i.e., life satisfaction and stress) were selected from both Time 1 (2003) and Time 2 (2004). Life satisfaction and stress variables from Time 1 were used as covariates in the structural modelling.

We categorised leisure participation into three types — active, passive and social — based on the answers to the survey question 'What kind of leisure activity do you most often take part in when you have available leisure time?' For this, there were 73 kinds of leisure activities from which the participants could make their selection. Active leisure participation involved sports activities such as baseball, soccer, tennis, swimming, volleyball. Passive leisure was related to sedentary activities, such as watching television, playing video games, listening to music, and reading. Social leisure activities comprised such things as visiting family or friends at their homes, talking with friends on the phone, going out to dinner with friends, and so on.

Leisure satisfaction. was measured with one item. Students were asked to respond to the statement 'I am satisfied with the role that leisure plays in my life' on a scale of 1–5 (*strongly disagree* to *strongly agree*).

Life satisfaction. was measured with three items: 'I am satisfied with my life', 'My life is going well', and 'I have a good life'. Students were asked to respond to these statements on a scale of 1–5 (*strongly disagree* to *strongly agree*). The mean score across the three items was used as the measure of life satisfaction. The reliability coefficients using Cronbach's alphas for *Life satisfaction* were .73 and .75 for Time 1 and Time 2, respectively.

Stress. was measured using four items on a scale of 1–5 (*strongly disagree* to *strongly agree*) regarding students' stress as related to school issues. Specifically, items captured the extent to which students felt stressed with regard to their school grades, tests, homework and studying. The mean score of the four items was used. For this dimension, the reliability coefficients using Cronbach's alphas were .78 and .75 for Time 1 and Time 2, respectively.

Statistical Analysis

We used structural equation modelling (SEM) in order to assess the hypothesised structural relationships among the latent variables. SEM was selected because it represents an appropriate analytic method of dealing with the issue of specifying the directionality among variables of interest and generating flexibility with which to test the hypothesised relationships. Specifically, the hypothesised model was tested against the alternative mediational model for determining the model of best fit.

We assessed the model fit based on several criteria. As the chi-square fit index is highly sensitive to sample size, we assessed the data model fit using the combinational rule recommended by Hu and Bentler (1999): comparative fit index (CFI; Bentler, 1990), non-normed fit index (NNFI; Bentler & Bonett, 1980) and root-mean-square error of approximation (RMSEA; Steiger & Lind, 1980). We chose these fit indices because these indexes they take into account the model complexity, which is an important property for comparing several alternative models with different degrees of complexity. Values lower than .08 for the RMSEA and values close to .95 for the NNFI and CFI were taken as indicatives of a good-fitting model. All analyses were conducted using AMOS (Arbuckle, 1999).

For single item measure used in the current study (i.e., leisure satisfaction), a pre-specified residual variance was added in order to take the measurement error of this variable into account. To account for the measurement error of a single item indicator, we attempted to constitute an acceptable measure of reliability. Therefore, we reviewed the reliability of similar, multiple-item measures (range .75 to .86) in the literature (Chi & Cho, 2012; Choi, Yoon, & Lee, 2012; Kim, Kim, & Gwon, 2012; Ko, Kim, & Park, 2012) and incorporated these into our modelling procedures. For this procedure, an alpha-level of .80 was chosen, as this would represent a satisfactory level for a scale with a sufficient number of variables and magnitude of covariances.

Results

Descriptive Statistics

A total of 3,188 participants provided adequate data for analysis. The preliminary results from *t* tests indicated that there were no differences in the overall time spent in leisure activities between boys and girls. Per weekday, boys spent 4.74 hours and girls spent 4.82 hours on leisure participation. Both groups spent more time in leisure par-

Table 1

Leisure Participation By Gender Group

	Male		Female	
	Frequency	%	Frequency	%
Active leisure participation				
Dancing	6	.3	5	.3
Baseball	3	.2		
Soccer	54	3.1	2	.1
Basketball	28	1.6	1	.1
Tennis	1	.1	1	.1
Skating	6	.4	3	.2
Bicycle	5	.3		
TaeKwonDo	3	.2		
Boxing	1	.1		
Swimming	1	.1		
Gym workout	2	.1		
Mountain climbing	.	.	25	1.4
Golf	1	.1	2	.1
Fencing	.	.	1	.1
Skiing	1	.1	1	.1
Badminton	3	.2		
Passive leisure participation				
TV watching	262	15.2	573	33.2
Radio listening	5	.3	10	.6
Newspaper reading	1	.1	3	.2
DVD watching	36	2.1	37	2.1
Listening music	28	1.6	62	3.6
Computer game	273	15.8	76	4.4
Online game	614	35.6	67	3.9
Internet surfing	20	1.2	80	4.6
Cartoon watching	43	2.5	33	1.9
Reading books	29	1.7	46	2.7
Sleeping	59	3.4	125	7.3
Relaxing	24	1.4	40	2.3
Social leisure participation				
Internet chatting	24	1.4	91	5.3
Chatting	4	.2	18	1.0
Phone call chatting	10	.6	38	2.2
Club activity	8	.5	63	3.7
Meeting friends	5	.3	9	.5

ticipation during the weekends (boys = 8.50 hours and girls = 8.30 hours).

A substantial portion of Korean adolescents were involved in passive leisure (73.85%) (see Table 1). The active and social leisure involvement rates were 4.7% and 7.85%, respectively. Adolescents who were involved in leisure activities (i.e., religious attendance, travelling) other than the current study's particular interests of three leisure types (i.e., active, passive, social) were 13.6%. The chi-square analysis was used to compare the sex differences across these leisure involvement rates, with significant differences found for all leisure types. Male students had higher involvement rates than their female counterparts in both active leisure, 73.40% versus 26.59%; $\chi^2(1, 3449) = 40.93$; $p < .01$, and passive leisure, 54.77% versus 45.22%; $\chi^2(1, 3449) = 26.69$; $p < .01$. However, female students had a higher involvement rate than males in social leisure activities, 80.89% versus 19.10%; $\chi^2(1, 3449) = 134.47$; $p < .01$. The results from the correlation analyses are shown in Table 2, which indicates that there were sex differences in the intercorrelations among variables. These analyses provide preliminary support to the potential moderating role

Table 2
Correlations Between Leisure Participation, Leisure Satisfaction and Psychological Wellbeing

Variable name	1	2	3	4	5	6	7	8
1. Active leisure	—	-.36*	-.17*	.09*	.06*	.04	-.06*	.01
2. Passive leisure	-.83*	—	-.90*	-.04*	.03	-.02	-.01	-.01
3. Social leisure	-.06*	.51*	—	-.01	.03	-.03	-.03	.02
4. Leisure satisfaction	.05*	-.03	-.03	—	.24*	.34*	-.39*	-.10*
5. Life satisfaction T1	.03	.02	.05	.36*	—	.46*	-.33*	-.15*
6. Life satisfaction T2	.02	-.03	-.01	.20*	.36*	—	-.23*	-.20*
7. Stress T1	-.02	-.02	-.01	-.16*	-.24*	-.20*	—	.27*
8. Stress T2	-.02	-.01	.05*	-.14*	-.14*	-.19*	.26*	—

Note: * $p < .01$. The top half of the table shows the correlation matrix for female students and the bottom half shows such matrix for male students.

of sex in understanding the relationship between leisure participation and wellbeing.

Structural Analyses

To assess the plausibility of the hypothesis that the relationship between the three types of leisure participation (i.e., active, passive, social) and student wellbeing is mediated by students' leisure satisfaction, we tested two mediation models. The hypothesised model represented a partial mediation model in which there are direct paths of leisure participation to student wellbeing as well as indirect paths via leisure satisfaction. The competing model reflecting full mediation was specified with indirect paths from leisure participation to student wellbeing via leisure satisfaction. The results indicated that for both sexes, the full mediation model (for males, $\chi^2_{(17)} = 98.99$; CFI = .981; NNFI = .960; RMSEA = .053 and for females, $\chi^2_{(17)} = 179.30$; CFI = .934; NNFI = .960; RMSEA = .074) was a better fit in terms of the three fit indices with the sample data compared to the partial mediation model (for males, $\chi^2_{(11)} = 93.89$; CFI = .981; NNFI = .937; RMSEA = .066

and for females, $\chi^2_{(11)} = 172.74$; CFI = .934; NNFI = .932; RMSEA = .092). As the full mediation model was nested within the partial mediational model, a chi-square difference test was also performed. A comparison of the full mediation model with the partial mediation model yielded a difference in the chi-square values of 5.1 and 6.56 for males and females, respectively. These $\Delta\chi^2_{(df=6)}$ values were smaller than the significant critical value of 12.59 at $p < .05$; therefore, we can conclude that the chi-square difference tests supported the full mediation model for both male and females. In addition, for both sexes, none of the direct paths from leisure participation to wellbeing was significant in the partial mediation model.

Contrary to our hypothesis, the full mediation model represented the model of best fit for the relationships between leisure and wellbeing in Korean adolescent students. Thus, we chose the full mediation model as the final theoretical model. The fit of the final model was deemed acceptable in terms of the three fit indices. The standardised parameter estimates for this model are presented in Figure 1.

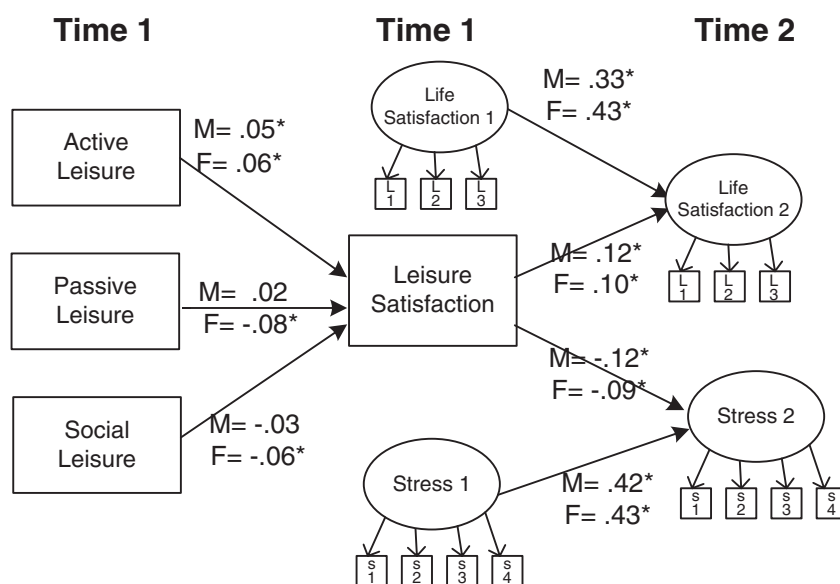


Figure 1

Final structural model with standardised solution. Note: * $p < .01$; coefficients for male and female are provided, respectively; error terms are omitted for simplicity.

For males, it was indicated that active leisure ($\beta = .05$) had a positive indirect effect on wellbeing through the leisure satisfaction mediator. For females, active leisure activities ($\beta = .06$) also had positive indirect effects on wellbeing through leisure satisfaction. However, passive ($\beta = -.08$) and social leisure ($\beta = -.06$) had negative effects on wellbeing. For both sexes, leisure satisfaction significantly improved students' later life satisfaction ($\beta = .12$ and $.13$, for males and females, respectively), whereas it significantly decreased students' stress ($\beta = -.12$ and $-.09$, for males and females, respectively). Thus, we can conclude that for both sexes, leisure satisfaction serves as a meaningful mediator between leisure participation and psychological wellbeing.

Discussion

This study forms an attempt to understand the relationship between Korean adolescents' leisure participation and their long-term psychological wellbeing. The study recognises the need to understand that the varying types of leisure activities and their possible differing effects on wellbeing create a complex set of interactions that could include both the direct and indirect effects through a mediating factor. Therefore, we hypothesised that leisure activities, as separated into three categories, would positively influence later student wellbeing and that this relationship would have direct and indirect effects via a mediator.

Contrary to our research hypothesis, the current findings revealed that participation in the three types of leisure did not directly affect adolescents' later psychological wellbeing. Rather, the final model confirmed a causal path, through a mediator, from leisure participation to leisure satisfaction to later wellbeing. However, the type of leisure activity had differential effects on students' psychological wellbeing by sex. Specifically, the results indicated that for male students, participating in active leisure (i.e., sports activities) had a positive effect on student leisure satisfaction. However, for female students, active leisure activities were linked to more leisure satisfaction, whereas passive leisure (i.e., sedentary activities) and social leisure had a negative impact. For both male and female students, leisure satisfaction had longitudinal effects on psychological wellbeing as it increased life satisfaction and decreased stress. Although the magnitude of the parameters from leisure participation to leisure satisfaction was small ($.05$ to $.08$), this is nevertheless a meaningful result, one which can be supported by the broaden-and-build theory (Fredrickson, 2001). This theory describes that the function of positive emotions broaden an individual's mindsets, which in turn build that individual's personal resources including physical, social, intellectual and psychological resources. Moreover, broadened mindsets function as reserves that can be drawn later to improve the odds of successful coping.

Our study findings serve as empirical evidence supporting the broaden-and-build theory and help to draw

out implications the theory holds for optimising wellbeing. In our study, we can see that the positive emotions gained from leisure activity help adolescents to create long-term resources, such as psychological resilience, which allow them to experience long-term life satisfaction.

Individuals who join active leisure activities experience larger inner rewards compared to those who join other types of activities (Laverie & Arnett, 2000). The current study findings also portrayed that active leisure has a notably positive effect for both female and male students. The reason for this may be that individual identity is more clearly present in active leisure compared to either passive or social leisure (Burke, 1991; Coatsworth et al., 2005; Oh, Sohn, Shin, & Oh, 2012). For example, when adolescent boys engage in sports activities, such as a soccer game, they tend to feel that activity reflects their inner character. When playing a soccer game, boys can identify themselves with the values that a soccer game pursues. That is, they feel that the spirit of fair play and masculinity clearly fit with their inner values.

Passive leisure participation was negatively related to leisure satisfaction for females, while it had no significant effect on leisure satisfaction for males. This result is likely to reflect the deep-rooted sexual bias that exists in the Korean society toward women not taking on a significant role in sports and active leisure. This may explain why women are more likely to engage in passive or social leisure that may have little to do with their real interests, rather than engaging in active leisure.

Female students find social leisure to be less beneficial than do their male counterparts. Fisher (2001) noted that social leisure can become an unpleasant experience for young people who can end up spending excess money in commercialised venues and who often report bad memories of such leisure associated with a large crowd and excessive noise. Insufficient leisure venues in Korea may lead young individuals to develop the same aversion to social leisure, as poor infrastructure, together with problems related to budgeting and time, make it more difficult to create meaningful social leisure environments for the Korean youth.

The existing literature on leisure and health reports that leisure has a preventive effect in its capacity to develop adolescents' ability to cope with negative life events. That is, leisure is restorative and beneficial, and helps people move toward health, both physically and psychologically. Our findings are thus consistent with other findings with regard to the stress-coping-leisure relationship, indicating the differential role of leisure as dependent on context. This result can be explained through considering various social and psychological resources. The social support and self-efficacy gained from leisure satisfaction can play important roles in the development of stress coping strategies, and have also been related to the overall wellbeing and stress resistance (Hobfoll, 1989, 2002).

Consistent throughout past research and the findings of this study is the importance of leisure participation and

the benefits it may provide for students. Perhaps engaging in leisure activities is one of the ways in which students attempt to make their experiences richer and more holistic. Beyond the requirements of school and other non-voluntary responsibilities, participating in various leisure activities could also be an outlet for students to explore additional experiences that can help them to manage their daily lives.

In Korea, interpersonal, intrapersonal and structural constraints all create a wider gap between the type of leisure people hope for and the actual reality of their leisure possibilities (Ko, 2008). To demonstrate this point, the 2010 National Poll (Ministry of Culture, Sports and Tourism, 2010) on leisure activity showed that 59.6% of people watched TV in their leisure time, but only 11.1% said that they watched TV because they wanted to do so. As the gap widens between ideal leisure activity and its actualisation, the potential benefits of leisure activity will be increasingly lost (Jun & Kyle, 2011; Neulinger, 1974; Shamir, 1992). Korean youth, who are in fierce competition for college admission, demonstrated the widest gap between their desired leisure activities and those in which they actually participate compared to other age groups. According to the 2010 poll, teens also had the least leisure time across all age groups and showed the lowest level of satisfaction toward their leisure activity. This group is likely to have financial, time and structural constraints that prevent them from joining the leisure activity of their choice, thereby leading them to choose leisure activities that do not fully take into account their intrinsic motivation.

This study has indicated the importance of leisure participation on improving the psychological wellbeing of Korean adolescents. Findings from this study have important implications for education and social policy. These results suggest that teenagers feel happy and satisfied when they express their potential vitality while engaged in active leisure. Due to academic demands or rules for school conduct, students often find that in their academic setting, there is little chance to express oneself, engage in various activities, or have little time to interact freely with their peers. Therefore, knowing the relevance of leisure participation on students' wellbeing is beneficial. Understanding the conditions that affect adolescents' happiness and stress-coping is a prerequisite for parents and educators, which will help improve their children's wellbeing. Young Koreans rarely make decisions about their leisure activity in a way that indicates strong self-determination. The large gap between their ideal and actual leisure activity reveals that this problem can be no longer left to the individuals to resolve, but also requires intervention at a wider social level. The society should systematically assist adolescents to appreciate leisure, to be aware of the role of the self in leisure, to be self-determined in leisure, to interact socially during leisure, to use resources facilitating leisure and to finally make decisions about leisure (Dattilo, 2008).

Study Limitations and Future Directions

This study has several limitations. In this study, we categorised students' leisure activity based on what they identified as being their major leisure activity. However, even if a person chose a major leisure activity such as playing soccer, that person is likely to have also spent time on other leisure activities. Thus, an overlap in leisure activities is a strong possibility. Given that the possible interdependency of leisure activity types could have weakened the accuracy of the study results, the findings in this study should be interpreted with caution. In a future study, detailed information about leisure activities, such as time spent on these activities and their frequency and extent, could provide a richer account of the impact of leisure on psychological wellbeing. In terms of causal interpretation, we used two time points using a longitudinal dataset; thus, we can cautiously argue for the validity of the causal path in our final model. However, if future research was to use more time points, there could be stronger empirical support for the causal influence of leisure on later psychological wellbeing.

In further study, a comparison of Western countries and Eastern countries in terms of the relationship between leisure and wellbeing could also be worth exploring. Future researchers should examine other relevant variables so as to increase the knowledge of how cross-cultural differences affect adolescents' leisure activities and, in turn, their mental health. Researchers must understand the viewpoints of various cultures regarding the importance of leisure, which can lead to differences in aspects of leisure competence and motivation.

Conclusion

Using a longitudinal analysis with a nationally representative data, this study revealed that middle school students' greater participation in active leisure was associated with an increase in their leisure satisfaction, which significantly affected their later life satisfaction and stress management. Although leisure has been called the fourth developmental context together with the family, the school and the peer group (Caldwell, 2005), it has not received an adequate level of attention from either educators or parents in the Korean society. Considering that leisure has enduring effects on children's wellbeing, the current findings have important implications for parents on how to provide effective support for their children in this age group. The study also provides guidance for parents and educators on finding suitable leisure activities and recognising that leisure participation is a useful tool in improving students' long-term psychological wellbeing.

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