INTJORASS (2024) 8(1) 117-125 RESEARCH ARTICLE

DOI: <u>10.46463/ ijrss.1504810</u>

e-ISSN: 2618-5717 https://dergipark.org.tr/en/pub/ijrss intjorass@gmail.com



Year : 2024 Volume: 8 Issue : 1 Pages :117-125

The Relationship Between Leisure Attitude and Happiness: The Mediation Effect of Recreational Flow Experience

Cihan Ayhan¹ Ersin Eskiler²

¹Sakarya University of Applied Sciences, Faculty of Sport Sciences, Sakarya-Turkey, <u>https://orcid.org/0000-0002-7633-</u> <u>1389</u>, <u>cihanayhan@subu.edu.tr</u>

²Sakarya University of Applied Sciences, Faculty of Sport Sciences, Sakarya -Turkey, <u>https://orcid.org/0000-0001-7617-</u> 2958, <u>eeskiler@subu.edu.tr</u>

Corresponding Author: <u>cihanayhan@subu.edu.tr</u>

Please cite this paper as follows: Ayhan, C. & Eskiler, E. (2024). The Relationship Between Leisure and Happiness: The Mediation Effect of Recreational Flow Experience. *International Journal of Recreation and Sport Science*, 8(1),117-125.DOI: https://doi.org/10.46463/ijrss.1504810

Article History

ABSTRACT

Received: 28.06.2024 Accepted: 23.12.2024 Available online: 27.12.2024



With technological advancements reducing workload, individuals have increasingly sought to spend their leisure time more efficiently and meaningfully. This trend has fostered a growing positive attitude toward recreational activities. Individuals who approach recreational events with a positive mindset are more likely to experience a state of flow during these activities. The flow experience contributes to individuals' physical, mental, and social well-being by generating positive outcomes. In this context, the study examined the relationship between leisure attitude and happiness among participants in nature sports, with flow experience identified as a mediating variable in this relationship. The research was conducted using a correlational survey model, involving 246 voluntary participants aged 18–74 (Mean_{age} = 31.15 ± 11.93) selected through the purposive sampling method. Data analysis was performed using SPSS software with Pearson correlation analysis to examine the relationships between variables, and regression analysis based on the Bootstrap method through the PROCESS macro. Hayes' (2013) PROCESS Macro Model 4 was used to assess the mediating effect. The findings revealed a statistically significant relationship. This result indicated that individuals' attitudes toward leisure activities significantly influence their happiness and the flow experience enhances this effect.

Keywords: Leisure attitude, Recreational flow experience, Happiness

INTRODUCTION

Pursuing happiness is one of the fundamental purposes of life. Defined as a positive emotional state (Kitayama, Markus, & Kurokawa, 2000), happiness is a state of mind characterized by joy and contentment, reflecting individuals' life satisfaction and subjective well-being (Lathia et al., 2017). Happiness has not only become a widely recognized indicator of societal well-being (Diener & Seligman, 2004) but is also reported in the relevant literature to be associated with individuals who exhibit higher productivity and creativity, demonstrate greater prosocial behavior, enjoy better health, live longer lives, and maintain stronger relationships (Jalali & Heidari, 2016; Myers & Diener, 2018; Oswald et al., 2015). While the determinants of happiness vary, it is generally accepted that happiness is triggered by positive mental and emotional states (WHO, 2011). Through leisure activities, individuals can find positive meaning by experiencing uplifting moments and discovering valuable insights (Folkman & Moskowitz, 2000; Fredrickson, 2002; Kleiber et al., 2002). The ability to find positive meaning contributes to overcoming depressive moods and improving well-being, enabling individuals to achieve positive emotional regulation through leisure activities (Keltner & Bonanno, 1997). In this context, the positive emotions experienced by individuals who continuously participate in leisure activities with a positive attitude, in line with the benefits they perceive, demonstrate a positive relationship between recreation and happiness. In the literature,



leisure activities have been considered an important factor in overall happiness (Hills & Argyle, 1998; Liu & Da, 2019; Newman et al., 2014). In this context, the idea that leisure activities contribute to happiness has garnered significant attention in international studies (Liu & Yu, 2015; Stebbins & Liu, 2012). Additionally, various studies have reported a positive relationship between recreation and happiness (Liang et al., 2013; Lin et al., 2020; Matsumoto et al., 2018; Tsaur, Lin, & Cheng, 2015; Wang & Wong, 2011). Although there is empirical support for a positive relationship between attitudes toward leisure activities and happiness, it has been overlooked that additional factors may play a role in enhancing happiness during or after the activity. In this context, within the framework of flow theory, recreational flow experience can be considered one of these factors.

This study aimed to support the relationship between existing leisure attitudes and happiness in outdoor sports and to define flow experience as a mediating variable. Leisure attitude is defined as the positive or negative tendencies that shape individuals' perceptions, emotions, and behaviors toward leisure activities (Freire & Teixeira, 2018). Leisure attitude consists of three components: the cognitive component, which includes knowledge and beliefs related to happiness, life satisfaction, and subjective well-being; the affective component, which addresses individuals' feelings toward activities; and the behavioral component, which covers how much money is spent on activities and how frequently individuals participate in them (Choi & Yoo, 2017; Ragheb & Beard, 1982; Teixeira & Freire, 2013). In this context, it is stated that leisure attitude is a significant predictor of happiness (Matsumoto, 2018). Based on these explanations, the following hypothesis was formulated:

H1: Leisure attitude affects happiness.

Recreational flow experience is defined as a positive experience during leisure activities in which participants undergo an optimal experience related to the balance between challenge and skill, characterized by intense focus, filtering out thoughts and environmental factors, and providing feelings of happiness and enjoyment (Ayhan, 2023). In other words, a recreational flow experience occurs when an individual becomes deeply engaged in an activity, and their personal skills match the challenges presented. Recreational flow experience allows individuals to relax mentally, forgetting their anxieties and immersing themselves in a temporary and subjective experience filled with pleasurable and positive emotions. At the end of the activity, individuals gain positive feelings and experiences, which contribute to the development of positive

attitudes (Csikszentmihalyi, 1975). In this case, individuals developing a positive attitude toward leisure activities is an important indicator of experiencing recreational flow. In this context, the following hypothesis was proposed:

H2: Leisure attitude affects the recreational flow experience.

Csikszentmihalyi (1975) suggests that there is a significant relationship between flow experience and happiness. According to Tinsley, if an individual cannot experience flow by participating in an activity, it is not considered a true leisure activity (as cited in Tao et al., 2022). As a matter of fact, individuals who engage in nature sports report experiencing positive emotional states during the activity (Pomfret, 2006). Through the balance between skill and challenge, individuals participating in outdoor sports can experience flow, which triggers intense feelings of happiness. Walker et al. (1998) state that outdoor activities promote flow and also increase positive emotions and happiness.

Asakawa (2004) observed that the feeling of happiness is heightened in high-flow states and stated that flow can increase psychological happiness in this context. Therefore, happiness is a result of the cognitive and emotional assessments of the flow experience. As a result, during flow, individuals become so immersed in the activity that everything else seems to lose its significance, except for responding to clear goals and feedback and developing a sense of control over the activity performed through their skills (Csikszentmihalyi, 1975; Tao et al., 2022). The connection established between the individual and the activity contributes to the formation of feelings of happiness. In this context, it can be stated that flow experience is an important predictor of happiness. Based on these the following hypothesis explanations, was proposed:

H3: The recreational flow experience has a mediating effect on the relationship between leisure attitude and happiness.

METHOD

Research Model

Correlational research provides a framework for determining the nature of the relationship between two or more variables and is considered a useful model for making predictions about an outcome variable (Karasar, 2012). In this context, the study, conducted to examine the mediating effect of flow experience in the relationship between leisure attitude and happiness, is designed according to the correlational survey model, which is one of the quantitative research methods. In this context, the



study, conducted to examine the mediating effect of flow experience in the relationship between leisure attitude and happiness, was designed according to the correlational survey model, which is one of the quantitative research methods.

Data Collection Tools

The data were collected through face-to-face surveys conducted by researchers. The prepared questionnaire consists of two sections. The first section included questions aimed at identifying the demographic characteristics of the participants (gender, age). The second section included statements designed to measure the participants' leisure attitude, flow experience, and happiness levels. To assess the participants' leisure attitudes, the Leisure Attitude Scale (LAS), developed by Ragheb and Beard (1982) and adapted into Turkish by Akgül and Gürbüz (2011), was used. LAS was a 5

Table 1. Descriptive statistics

points Likert scale and consisted of 3 subscales and 36 items. In the study by Akgul and Gurbuz (2011), Cronbach's alpha values for the sub-dimensions ranged from 0.81 to 0.92 To measure the participants' flow levels, the Recreational Flow Experience Scale, developed by Ayhan, Eskiler and Soyer (2020), was used. The recreational flow experience scale consisted of 9 items and a single dimension. The items were measured on a 7-point Likert scale (ranging from 1 - strongly disagree to 7 - strongly agree). In the study by Ayhan et al. (2020) Cronbach's alpha value was .94. Finally, to assess happiness levels, the Oxford Happiness Scale, developed by Hills and Argyle (2002) and adapted into Turkish by Doğan and Akıncı Çötok (2011), was utilized. The scale consisted of 7 items and followed a 5-point Likert type. Items 1 and 7 were reversecoded. Additionally, the Cronbach's alpha value of the scale was .74.

Variables	X	SD	Skewness	Kurtosis
Leisure attitude	2.57	1.07	.292	839
Recreational Flow Experience	2.59	1.09	.177	-1.019
Happiness	3.13	.65	247	.582
N=246				

Data Analysis

IBM SPSS 22 software was used for data analysis. First, the normality of the data was tested using skewness and kurtosis values. The obtained skewness and kurtosis values were found to fall within the range of +2 and -2 (George & Mallery, 2016). Descriptive statistics (such as mean, standard deviation, etc.) were used in the analysis, and regression analysis employing the Bootstrap **RESULTS**



Figure 1. The direct influence of leisure attitude on happiness

method was applied to assess the mediation effect. For this analysis, the Hayes Process Macro plugin was utilized. The Bootstrap method involved 5.000 resampling iterations (Hayes, 2013). In evaluating the mediation effect, the effect size was assessed based on the K² value, with the following criteria: a value close to .01 indicates a small effect, around .09 indicates a medium effect, and close to .25 indicates a large effect (Preacher & Kelley, 2011).

The analysis results indicated that the direct effect of leisure attitude on happiness was statistically significant (c = .226, t = .318, p > .05, standardized effect = .373). These findings supported the acceptance of Hypothesis H1. It was observed that approximately 14% of the variance in the happiness variable was explained by the predictor variable ($R^2 = .139$, p < .001).



Figure 2. The mediating role of the recreational flow experience

H2 was tested using the mediation model presented in Figure 2. It was found that leisure attitude has a positive and statistically significant effect on the recreational flow experience (path a =.914, t = 5.344, p < .001). Furthermore, approximately 79% of the variance in recreational flow experience was explained by the predictor variable ($R^2 = .794$, p < .001). The results indicated that H2 was supported. Similarly, it was found that recreational flow experience had a positive and statistically significant effect on happiness (path b = .274, t = 3.627, p < .001).

RESULTS

Table 2. Regression Analysis Results of Variables

	Outcome Variables					
	Recreational Flow Experience			Happiness		
Prediction Variables		b	SE		b	SE
Leisure attitude (X)	а	.914***	.030	c'	.025	.078
Recreational Flow Experience (M)	-	-	-	b	.274***	.076
Constant	İм	.232	.083	İу	2.481	.099
	R ² = .794			R ² = .183		
	F _(1; 244) = 943.60, p<.001			F _(2; 243) = 27.247, p<.001		
Note: ***n< 001: SE: Standard error Unstan	dardized beta c	pefficients (h) are i	reported			

p<.001; SE: Standard error, Unstandardized beta coefficients (b) are reported.

When the mediation test results of recreational flow experience were examined (Figure 2, Table 2), it was evident that the indirect effect of leisure attitude on happiness was statistically significant. Thus, recreational flow experience mediated the relationship between the two variables (a*b = .251, 95% CI [.094, .386], standardized indirect effect = .414). The direct path coefficient from leisure attitude to happiness (H1) significantly decreased from .37 (p < .001) to .04 (p = .751) when the mediator variable (i.e., recreational flow experience) was included in the model. Additionally, the results

DISCUSSION AND CONCLUSION

This study contributes to the existing literature on the relationship between leisure attitude, flow experience, and happiness. Based on the tested model, it was found that leisure attitude has a positive effect on both recreational flow experience and happiness and that recreational flow experience mediates the effect of leisure attitude on happiness. The interpretations and discussions of the findings of the Bootstrap analysis indicated that the biascorrected and accelerated confidence interval values (95% CI) did not include zero (0) (Hayes, 2009; Hayes, 2013). These findings supported the acceptance of the H3 hypothesis. Furthermore, approximately 18% of the variance in the happiness variable was explained by the predictor variables (R² = .183, F(2, 243) = 27.247, p < .001). The fully standardized effect size of the mediation was found to be $K^2 = .414$, which can be interpreted as representing a high effect size (Preacher & Kelley, 2011).

related to the research hypotheses were presented below.

According to the analysis results, leisure attitude was found to have a positive effect on happiness. Accordingly, it was observed that as participants' positive attitudes toward leisure activities increased, their levels of happiness also increased. This result supported the H1 hypothesis of the study. Studies in the literature conducted with individuals living in



China (Wei et al., 2015), Korea (Lee et al., 2020), and Japan (Shimamoto, 2020), as well as with motorcyclists (Ching-Te et al., 2021; Kruger & Venter, 2020; Yang et al., 2022), electric bicyclists (Lin et al., 2021), scuba divers (Matsumoto, 2018), and individuals aged 65 and older (Lin et al., 2020), have found that leisure attitude has a positive effect on happiness, supporting the findings of this study. The current study supported the findings of previous research. As a matter of fact, leisure activities help individuals reduce their stress levels and relax, allow time for their hobbies and personal development, enable quality time with family and friends, improve health through physical activities, enhance their sense of control over life, and promote creativity, leading to mental rejuvenation (Kim & Brown, 2018; Mansfield et al., 2020; Zhang et al., 2018). Moreover, the proper and balanced use of leisure plays an important role in increasing individuals' overall life satisfaction and happiness (Nawjin & Veenhoven, 2012; Schmiedeberg & Schröder, 2017). The positive outcomes derived from activities lead individuals to display a positive attitude towards the activity, which enhances their satisfaction with leisure activities and, in this context, contributes to the increase in their happiness levels (Yoo, 2022). Based on this information, it can be stated that leisure attitude is an important predictor of happiness.

The analysis results indicated that leisure attitude had a positive and significant effect on flow experience. Accordingly, it has been observed that as participants' positive attitudes towards leisure activities increase, they experience more flow during the activity. This finding supported the H2 hypothesis of the study. Similar results have been found in studies with individuals participating in sports (Lim, 2016) and other recreational activities (Ahn, 2012), university students (Khang & Chou, 2014), Pilates practitioners (Yoon et al., 2020), water sports participants (So & Ha, 2018), and bowling players (Hyung & Myoung, 2010), as well as five-star hotel employees (Cheon & Cheon, 2017). A positive attitude towards leisure helps individuals experience more positive outcomes through activities, contributing to greater involvement and satisfaction (Freire & Teixeira, 2018; Yoo, 2022; Wu et al., 2021). Therefore, perceiving leisure as an enjoyable process facilitates more frequent flow experiences (Cheng & Lu, 2015). The results indicated that participants' positive attitudes towards leisure activities served as a significant predictor of the recreational flow experience they experience during the activity.

Finally, the analysis results revealed that recreational flow experience mediated the

relationship between leisure attitude and happiness. In this regard, it has been observed that recreational flow experience plays a significant role in enhancing participants' happiness levels through their positive attitudes towards leisure activities. This finding supported the H3 hypothesis of the study. According to flow theory, flow and happiness are significantly phenomena (Csikszentmihalyi, related 1975). Individuals participating in outdoor sports experience different emotional states (Pomfret, 2006), and it has been reported in the literature that outdoor recreational activities can trigger flow and enhance positive emotions and happiness (Walker et al., 1998). In addition, Asakawa (2004) reported that happiness arises in a high-flow state. Csikszentmihalyi (1990) suggested that flow experiences do not occur during passive moments, but when an individual is deeply engaged in a motivating activity, focused and challenged. This creates a sense of excitement, satisfaction and happiness in individuals. In this context, individuals who engage in outdoor sports as a leisure activity with a positive attitude and for recreational purposes may potentially experience flow through a balance between skill and challenge, leading to emotions that result in intense happiness. In conclusion, individuals who participate in activities with a positive attitude engage with full focus and motivation during the flow experience. This motivated participation evokes a sense of happiness in individuals (Asakawa, 2004; Csikszentmihalyi, 1975; Rogatko, 2009; Yoon et al., 2020). Having a positive attitude towards leisure activities encourages individuals to engage in such activities more frequently. However, the results of the current study indicated that the increase in happiness could not solely related to individuals' leisure attitudes. In other words, happiness can be experienced more intensely through the flow experience during the activity. The flow experience maximizes the satisfaction and enjoyment derived from the activity, thereby strengthening the increase in happiness.

Limitations and Suggestions

Like all other studies, this research had limitations that should be addressed along with suggestions for future research. First, only camping and mountaineering activities were examined in this study as nature sports. Future studies could include individuals who engage in rock climbing, orienteering, spelunking, mountain biking, rowing, swimming, surfing, diving, sailing, rafting, skiing, snowboarding, and paragliding. Studies conducted with participants from different activities would be meaningful and valuable in determining whether the mediation effect found in this study is applicable in different contexts. This research focused on the

variables of leisure attitude and recreational flow experience that affect happiness in individuals who participate in nature sports. Future studies could consider other factors such as leisure satisfaction, recreational benefits, and excitement seeking, among others. Diversification of this line of research by testing models that include different variables in

REFERENCES

- Ahn, B.-W. (2012). Relationships between leisure attitude, flow, satisfaction and re-participant in leisure activity participant. *Journal of Korean Leisure Science*, *3*(2), 11–20.
- Akgül, B. M., & Gürbüz, B. (2011). The leisure attitude scale: Validity and reliability study. *Gazi Journal of Physical Education and Sport Sciences*, 16(1), 37–43.
- Asakawa, K. (2004). Flow experience and autotelic personality in Japanese college students: How do they experience challenges in daily life? *Journal of Happiness Studies, 5*(2), 123–154.
- Ayhan, C. (2023). Predictors of re-participation intention: Leisure involvement, leisure satisfaction, recreational flow experience, and recreational benefit (F. Soyer, Ed.). Ankara: Gazi Publishing House. ISBN: 6253653598.
- Ayhan, C., Eskiler, E., & Soyer, F. (2020). Measuring flow experience in recreational participants: Scale development and validation. *Journal of Human Sciences, 17*(4), 1297–1311.
- Byoung, W., & Younggyu, J. (2019). Structural relationship between leisure flow, psychological happiness, and re-attendance intention for leisure marine sports participants. *Journal of Arts, Humanities, and Social Multimedia, 9*(11), 983–991.
- Cheng, T. M., & Lu, C. C. (2015). The causal relationships among recreational involvement, flow experience, and well-being for surfing activities. *Asia Pacific Journal of Tourism Research, 20*(sup1), 1486–1504.
- Cheon, B.-M., & Cheon, Y.-S. (2017). A study on the correlation among leisure attitude, leisure flow, and life satisfaction of hotel employees: Focusing on five-star hotels. *Journal of Tourism and Leisure Research, 29*(4), 313–330.
- Cho, C. K., & Shin, M. C. (2020). The effects of middle school students' participation motivation in judo as a recreational sport activity on exercise flow and psychological happiness. *Journal of The Korea Society of Computer and Information*, *25*(10), 203–209.

the proposed samples could extend the benefits to recreational activity providers, participants, and theory to different cultural settings. Additionally, the current study was entirely quantitative; therefore, future use of a qualitative or mixed methods design could advance different perspectives on theory and practice

- Choi, S. H., & Yoo, Y. J. (2017). Leisure attitude and satisfaction with leisure and life: Proposing leisure prioritization and justification. *World Leisure Journal, 59*(2), 140–155.
- Csikszentmihalyi, M. (1975). *Beyond boredom and anxiety*. San Francisco: Jossey-Bass.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper Collins.
- Diener, E., & Seligman, M. E. P. (2004). Beyond money: Toward an economy of well-being. *Psychological Science in the Public Interest*, 5(1), 1–31.
- Doğan, T., & Çötok, N. A. (2011). Adaptation of the short form of the Oxford happiness questionnaire into Turkish: A validity and reliability study. *Turkish Psychological Counseling and Guidance Journal, 4*(36), 165– 172.
- Folkman, S. O., & Moskowitz, J. (2000). Positive affect and the other side of coping. *American Psychologist*, 55(6), 647–654. <u>https://doi.org/10.1037/0003-066X.55.6.647</u>
- Frederickson, B. L. (2002). Positive emotions. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology*(pp. 120–134). New York: Oxford University Press.
- Freire, T., & Teixeira, A. (2018). The influence of leisure attitudes and leisure satisfaction on adolescents' positive functioning: The role of emotion regulation. *Frontiers in Psychology*, 9, 1349.

https://doi.org/10.3389/fpsyg.2018.01349

- George, D., & Mallery, P. (2016). *IBM SPSS Statistics* 23 step by step: A simple guide and reference (13th ed.). New York, NY: Routledge. ISBN: 0134320255.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, *76*(4), 408–420. <u>https://doi.org/10.1080/0363775090331036</u> <u>0</u>
- Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis:

A regression-based approach (Methodology in the Social Sciences). New York: Guilford Press.

- Hills, P., & Argyle, M. (2002). The Oxford Happiness Questionnaire: A compact scale for the measurement of psychological well-being. *Personality and Individual Differences, 33*, 1073–1082. <u>https://doi.org/10.1016/S0191-8869(02)00002-6</u>
- Hills, P., & Argyle, M. (1998). Positive moods derived from leisure and their relationship to happiness and personality. *Personality and Individual Differences*, *25*(3), 523–535. <u>https://doi.org/10.1016/S0191-</u> <u>8869(98)00082-8</u>
- Hyun, S. Y., & Park, M. K. (2010). The constructive relations of lifestyle, leisure attitude, leisure flow, and life satisfaction of bowling participants. *Korean Society for the Study of Physical Education*, *15*(3), 109–122.
- Jalali, Z., & Heidari, A. (2016). The relationship between happiness, subjective well-being, creativity, and job performance of primary school teachers in Ramhormoz city. *International Education Studies*, 9(6), 45–52. https://doi.org/10.5539/ies.v9n6p45
- Jeong, K. (2021). A study on the relationship between social self-perception, psychological happiness, and leisure flow of golf lesson participants. *Korean Journal of Sport Science*, 19(3), 97–106. https://doi.org/10.46669/kss.2021.19.3.009
- Karasar, N. (2012). *Scientific research methods*. Ankara: Nobel Publishing. ISBN: 9786055426583
- Kawalya, C., Munene, J. C., Ntayi, J., Kagaari, J., Mafabi, S., Kasekende, F., & Belso-Martinez, A. (2019). Psychological capital and happiness at the workplace: The mediating role of flow experience. *Cogent Business & Management*, 6(1). <u>https://doi.org/10.1080/23311975.2019.167</u> 6504
- Keltner, D., & Bonanno, G. A. (1997). A study of laughter and dissociation: Distinct correlates of laughter and smiling during bereavement. *Journal of Personality and Social Psychology*, 73(4), 687–702. <u>https://doi.org/10.1037/0022-3514.73.4.687</u>
- Khang, H. K., & Chou, T. (2014). Leisure attitudes, enjoyment, and flow experience in physical leisure activity in Korean university students. *Journal of Leisure and Recreation Studies*, 38(1), 33–42.

- Kim, J. H., & Brown, S. L. (2018). The associations between leisure, stress, and health behavior among university students. *American Journal* of *Health Education*, 49(6), 375–383. <u>https://doi.org/10.1080/19325037.2018.151</u> 7175
- Kitayama, S., Markus, H. R., & Kurokawa, M. (2000). Culture, emotion, and well-being: Good feelings in Japan and the United States. Cognition & Emotion, 14(1), 93–124. <u>https://doi.org/10.1080/026999300379003</u>
- Kleiber, D. A., Hutchinson, S. L., & Williams, R. (2002). Leisure as a resource in transcending negative life events: Self-protection, selfrestoration, and personal transformation. *Leisure Sciences*, 24(2), 219–235. <u>https://doi.org/10.1080/0149040025290016</u> <u>Z</u>
- Kruger, S., & Venter, D. (2020). I can't buy happiness but could own a motorcycle: Does leisure life matter? *African Journal of Hospitality, Tourism and Leisure, 9*(4), 469– 483.
- Lathia, N., Sandstrom, G. M., Mascolo, C., & Rentfrow, P. J. (2017). Happier people live more active lives: Using smartphones to link happiness and physical activity. *PLOS One, 12*(1), e0160589. <u>https://doi.org/10.1371/journal.pone.016058</u> <u>9</u>
- Lee, K. J., Cho, S., Kim, E. K., & Hwang, S. (2020). Do more leisure time and leisure repertoire make us happier? An investigation of the curvilinear relationships. *Journal of Happiness Studies, 21*(5), 1727–1747.
- Liang, J., Yamashita, T., & Brown, J. S. (2013). Leisure satisfaction and quality of life in China, Japan, and South Korea: A comparative study using AsiaBarometer 2006. Journal of Happiness Studies, 14(14), 753–769. https://doi.org/10.1007/s10902-012-9353-3
- Lim, J.-G. (2016). The relationship among leisure perception attitude, leisure flow, and leisure benefit of leisure sports participants of age. *Journal of the Korean Society for Wellness*, *11*(1), 13–25. https://doi.org/10.21097/ksw.2016.02.11.1. <u>13</u>
- Lin, C.-T., Lin, Y.-S., Yang, C.-C., Wu, C.-P., & Shen, C.-C. (2021). The relationships among leisure motivation, leisure attitude, perceived value, and happiness for motorcycle riders. *Global Conference on Business and Social Sciences Proceeding*, 12(55), 55.



https://doi.org/10.35609/gcbssproceeding.20 21.12(55)

- Lin, H. H., Shen, C. C., Hsu, I., & Wu, P. Y. (2021). Can electric bicycles enhance leisure and tourism activities and city happiness? *Energies*, 14(23), 8144. <u>https://doi.org/10.3390/en14238144</u>
- Lin, Y. T., Chen, M., Ho, C. C., & Lee, T. S. (2020). Relationships among leisure physical activity, sedentary lifestyle, physical fitness, and happiness in adults 65 years or older in Taiwan. International Journal of Environmental Research and Public Health, 17(14), 5235. https://doi.org/10.3390/ijerph17145235
- Liu, H., & Da, S. (2020). The relationships between leisure and happiness: A graphic elicitation method. *Leisure Studies*, *39*(1), 111–130. <u>https://doi.org/10.1080/02614367.2020.170</u> <u>6953</u>
- Liu, H., & Yu, B. (2015). Serious leisure, leisure satisfaction, and subjective well-being of Chinese university students. *Social Indicators Research*, *122*(1), 159–174. <u>https://doi.org/10.1007/s11205-014-0674-0</u>
- Mansfield, L., Daykin, N., & Kay, T. (2020). Leisure and wellbeing. *Leisure Studies, 39*(1), 1–10. <u>https://doi.org/10.1080/02614367.2020.171</u> <u>3195</u>
- Matsumoto, H., Sato, S., Asada, A., & Chiashi, K. (2018). Exploring the relationship among leisure engagement, affective and cognitive leisure involvement, and subjective happiness: A mediating role of leisure satisfaction. *World Leisure Journal*, 60(2), 111–126. https://doi.org/10.1080/16078055.2018.145 3832
- Mooksook, L., & Kwon, I. (2020). The relationship among sports-taking participants' fun, leisure flow, and psychological happiness of the elderly. *Korean Journal of Adapted Physical Activity, 28*(3), 63–76. <u>https://doi.org/10.24071/kjapa.2020.28.3.06</u> <u>3</u>
- Myers, D. G., & Diener, E. (2018). The scientific pursuit of happiness. *Perspectives on Psychological Science*, *13*(2), 218–225. <u>https://doi.org/10.1177/1745691618765171</u>
- Nawijn, J., & Veenhoven, R. (2012). Happiness through leisure. In H. Gibson (Ed.), *Positive leisure science: From subjective experience to social contexts* (pp. 193–209). Dordrecht:

 Springer
 Netherlands.

 https://doi.org/10.1007/978-94-007-2574 5

 5
 11

- Newman, D. B., Tay, L., & Diener, E. (2014). Leisure and subjective well-being: A model of psychological mechanisms as mediating factors. *Journal of Happiness Studies*, 15(3), 555–578. <u>https://doi.org/10.1007/s10902-013-9435-x</u>
- Ngai, V. T. (2005). Leisure satisfaction and the quality of life in Macao, China. *Leisure Studies*, 24(2), 195–207. <u>https://doi.org/10.1080/0261436041233131</u>3502
- Oswald, A. J., Proto, E., & Sgroi, D. (2015). Happiness and productivity. *Journal of Labor Economics*, *33*(4), 789–822. <u>https://doi.org/10.1086/681096</u>
- Pomfret, G. (2006). Mountaineering adventure tourists: A conceptual framework for research. *Tourism Management*, 27(1), 113–123. <u>https://doi.org/10.1016/j.tourman.2005.02.0</u> <u>12</u>
- Preacher, K. J., & Kelley, K. (2011). Effect size measures for mediation models: Quantitative strategies for communicating indirect effects. *Psychological Methods*, 16(2), 93–115. <u>https://doi.org/10.1037/a0022658</u>
- Ragheb, M. G., & Beard, J. G. (1982). Measuring leisure attitude. *Journal of Leisure Research*, *14*(2), 155–167. <u>https://doi.org/10.1080/00222216.1982.119</u> <u>69498</u>
- Rogatko, T. P. (2009). The influence of flow on positive affect in college students. *Journal of Happiness Studies, 10*(2), 133–148. <u>https://doi.org/10.1007/s10902-008-9112-5</u>
- Sahoo, F. M., & Sahu, R. (2009). The role of flow experience in human happiness. *Journal of the Indian Academy of Applied Psychology*, *35*(Special Issue), 40–47.
- Schmiedeberg, C., & Schröder, J. (2017). Leisure activities and life satisfaction: An analysis with German panel data. *Applied Research in Quality of Life, 12,* 137–151. https://doi.org/10.1007/s11482-016-9484-2
- Shimamoto, K. (2020). Effects of leisure activities on happiness in the case of Japan. *Regional Science Inquiry*, 12(1), 11–22.
- So, Y.-H., & Ha, S.-W. (2018). Relationship among leisure attitude, flow, and intention to continuance of marine sports participants.

Korean Journal of Sports Science, 27(6), 373– 387. https://doi.org/10.35159/kjss.2018.12.27.6. 373

- Stebbins, R. A., & Liu, H. (2012). Leisure and happiness: An intricate relationship. *Journal of Zhejiang University (Social Sciences and Humanities), 42*(1), 31–43.
- Tao, H., Zhou, Q., Tian, D., & Zhu, L. (2022). The effect of leisure involvement on place attachment: Flow experience as a mediating role. Land, 11(2), 151. <u>https://doi.org/10.3390/land11020151</u>
- Tappolet, C. (2022). Sailing, flow and happiness. In *The Sailing Mind* (pp. 17–29). Cham: Springer International Publishing. <u>https://doi.org/10.1007/978-3-030-96486-</u> <u>5 2</u>
- Teixeira, A., & Freire, T. (2013). The Leisure Attitude Scale: Psychometric properties of a short version for adolescents and young adults. *Leisure/Loisir, 37,* 57–67. https://doi.org/10.1080/14927713.2013.769 791
- Tsaur, S. H., Lin, W. R., & Cheng, L. M. (2015). Toward a structural model of challenge experience in adventure recreation. *Journal of Leisure Research*, 47(3), 322–336. <u>https://doi.org/10.1080/00222216.2015.119</u> 50363
- Walker, G. J., Hull, R. B., & Roggenguck, J. W. (1998). On-site optimal experience and their relationship to off-site benefits. *Journal of Leisure Research*, 30(4), 453–471. <u>https://doi.org/10.1080/00222216.1998.119</u> <u>49716</u>
- Wang, M., & Wong, M. (2011). Leisure and happiness in the United States: Evidence from survey data. *Applied Economics Letters*, *18*(18), 1813–1816. <u>https://doi.org/10.1080/13504851.2011.558</u> <u>343</u>

- Wei, X., Huang, S., Stodolska, M., & Yu, Y. (2015). Leisure time, leisure activities, and happiness in China: Evidence from a national survey. *Journal of Leisure Research*, 47(5), 556–576. <u>https://doi.org/10.1080/00222216.2015.119</u> <u>50530</u>
- World Health Organization. (2011). The happiness effects. Retrieved from http://www.who.int/bulletin/volumes/89/4/1 1-020411/en/
- Wu, Y., Sun, J., Fan, F., Wang, X., & Peng, Y. (2021). The influence of motivation, attitudes, and obstacles for middle school students' participation in leisure activities on their leisure satisfaction in Southwest China. *Frontiers in Psychology*, 12, 758858. https://doi.org/10.3389/fpsyg.2021.758858
- Yang, C. C., Lin, C. T., Mao, T. Y., Anggara, A. A., & Wu, C. P. (2023). Leisure motivation and happiness, mediation of leisure attitude and perceived value: Evidence from large and heavy motorbike riders in Taiwan. *Annals of Applied Sport Science*, 11(2), 153–162. https://doi.org/10.22034/aass.2023.267146. 1056
- Yoo, J. (2022). Attitude toward leisure, satisfaction with leisure policy, and happiness are mediated by satisfaction with leisure activities. *Scientific Reports, 12*(1), 11723. https://doi.org/10.1038/s41598-022-15657-<u>3</u>
- Yoon, H. L., Kim, K. H., & Kim, K. R. (2020). The effect of professionalism of instructors perceived by Pilate participants on flow experience and leisure attitude. *Korean Journal of Sport Science, 29*(2), 263–275. <u>https://doi.org/10.35159/kjss.2020.06.29.2.</u> <u>263</u>
- Zhang, C., Qing, N., & Zhang, S. (2021). The impact of leisure activities on the mental health of older adults: The mediating effect of social support and perceived stress. *Journal of Healthcare Engineering*, 2021, 6264447. <u>https://doi.org/10.1155/2021/6264447</u>