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The Involvement, Flow Experience, and Happiness at the 2022 National Chung-Cheng Cup Hockey Tournament

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Abstract:- This study investigated the relationship between hockey participants' involvement, flow experience, and happiness. This study used a questionnaire method to collect data. A total of 300 questionnaires were administered to hockey participants from 2022/12/06 to 2022/12/11 at the National Chushan Senior High School hockey field using a convenience sampling method. After deducting the 12 questionnaires with incomplete answers, the total number of valid questionnaires was 288, with a validity rate of 96.0%. The data were analyzed using SPSS 21.0 for descriptive statistics to understand the distribution of sample attributes. Smart PLS 3 was used to analyze the convergent validity, discriminant validity, goodness of fit, and hypothesis validation of the hockey participants' involvement, flow experience, and happiness models. The results suggest that the 2022 National Chung-Cheng Cup Hockey Tournament participants' involvement, flow experience, and happiness models had good convergent validity, discriminant validity, and goodness of fit. The involvement of hockey participants in the sport significantly influenced the flow experience (path coefficient of 0.818*). The flow experience had moderate to high explanatory power (R2 = 0.669). The involvement of hockey participants in the sport significantly affected happiness (path coefficient 0.215*), flow experience significantly affected happiness (path coefficient of 0.294*), and happiness had a moderate to high explanatory power (R2 = 0.236). We propose specific recommendations for hockey promotion organizations and future studies based on this study's results.

Keywords:- *Hockey; Involvement; Flow Experience; Happiness.*

I. INTRODUCTION

➢ *Research Background and Motives*

Hockey, also known as field hockey, is one of the oldest and most glorious Olympic sports, predating the Olympic Games by more than 1,200 years. Hockey is an ancient sport, first becoming official at the London Olympics in 1908. Many historians believe that hockey has been around since the ancient civilizations of many countries and has been recorded in China, India, and Persia. Initially, people played with round stones and rolled them with curved sticks or spherical objects with branches. These initial activities evolved and improved, eventually leading to the modern sport of hockey (Chang, 2013). Hockey has a long history, but today's society is increasingly focused on economic development while neglecting the protection and management of the body. Hence, the physical fitness of the public has declined. Studying the physical characteristics and training techniques of hockey can improve athletes' overall fitness and fuel the sport's promotion. Furthermore, the study of hockey introduces an exercise that can stimulate and strengthen the body while motivating people to become more physically fit (Wang, 2019). Hence, the importance of hockey can be shown through this research.

When defining sports involvement, it is essential to focus on "involvement" because it expresses the behavioral state of a sport, i.e., whether an individual is experiencing it first-hand or indirectly. The key is the form of the individual's participation, which will determine the role of the individual in the sport, and whether they are a spectator or a practitioner. Therefore, it is essential to pay attention to the meaning of "participation" to better grasp the meaning of sports participation. By the late 1960s, scholars in the United States became interested in the phenomenon of sports participation. This interest continued until the 1980s, when they attempted to analyze sports participation behavior in four ways: (1) the degree of participation (frequency, duration, and intensity); (2) the nature of participation (actual or alternative participation); (3) the type of participation (affective, behavioral, or perceptive); (4) the form of participation (training, dance, physical activity, or games) (Liu & Yu, 2005).

Mclntyre (1989) argued that involvement is an attitude toward an activity, a state of psychological motivation and attention to the activity that allows participants to decide whether or not to continue participating. Wiley, Shaw, and Haviz (2000) suggested that participants with different levels of involvement have various subsequent behavioral outcomes and that participants with higher levels of involvement generally show richer and more diverse subsequent behavioral outcomes.

Csikszentmihalyi (1975) proposed the theory of flow experience: "Participants enter a special mode in which they are drawn in, their consciousness is focused on the sport they are doing, they have no other perceptions and lose consciousness, creating a sense of control through the

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manipulation of the environment, reflected in specific goals and clear feedback." A flow experience occurs when one can overcome obstacles and finish the task, which means an experience with its own purpose. When an individual's ability is above average, they can completely overcome external challenges. As such, the participant is fully engaged and has a sense of completion and a sense of accomplishment afterward.

Veenhoven (1994) emphasized that happiness is how much an individual enjoys life; in other words, happiness is a positive emotional response. Csikszentmihalyi and Wong (1991) identified positive emotions as one of the characteristics of happiness. Diener and Seligman (2004) defined happiness as an individual's positive evaluation of life. From the above definitions, it is clear that happiness is a subjective feeling that includes positive emotions.

Therefore, this study applied a structural equation model to test the reliability and validity of involvement, flow experience, and happiness models for the 2022 National Chung-Cheng Cup Hockey Tournament according to the hypotheses specified below.

II. METHODOLOGY

➢ *Research Hypotheses and Theoretical Inference*

Csikszentmihalyi (1997) suggested that individuals must be fully engaged in the activity to obtain a flow experience. Several Taiwanese and international scholars have also found that the frequency of leisure participation, perceptual freedom, and attitude toward an individual's participation affect their flow experience (Chang, 2000; Lin & Huang, 2008; Mannell, Zuzanek, & Larson, 1988). Havitz and Mannell (2005) also found a high correlation between individuals' enduring and contextual involvement in leisure and non-leisure activities and the generation of flow experiences, i.e., the higher the individuals' involvement in a leisure activity, the more intense their flow experience.

Brown et al. (2000) showed that the higher the participation frequency in sports, the higher the happiness perceived. McAuley et al. (2000) mentioned that participation in sports significantly increased life satisfaction and positively affected happiness. According to Lee and Russell (2003), maintaining exercise will lead to higher happiness levels. These studies suggest that enduring involvement positively affects happiness.

Several scholars have suggested that happiness is constructed through the pleasure and satisfaction generated by daily life activities (Haworth & Hill, 1992; Mannell, 1994). Ellis, Voelkl, and Morris (1994) used Flow Theory to analyze individual life experiences. They found that individual differences affect the variation in individuals regarding positive affection and that individual differences are an essential indicator of flow experience. Lin and Tsai (2015) studied self-actualization, flow experience, and happiness in middle-aged and elderly triathletes. They found that middle-aged and elderly triathlon participants felt happiness due to the flow they experience during the race.

➢ *Based on the above Literature, the following Research Hypotheses are Proposed:*

- H1: The involvement of hockey participants in the sport significantly affects the flow experience.
- H2: The involvement of hockey participants in the sport significantly affects happiness.
- H3: The flow experience of hockey participants significantly affects happiness.

➢ *Research Tools*

The scale was divided into four parts: background variables, involvement, flow experience, and happiness of hockey participants, which are described below:

- Subjects' background variables: Four items, including gender, marital status, age, and educational level, were used to understand the sample distribution.
- Involvement scale: This study defined involvement as the perceived level of excitement and engagement that a hockey participant feels when participating in a hockey activity. The scale questions were designed based on McIntyre and Pigram's (1992) three dimensions of enduring involvement. Based on the research models of Kyle et al. (2004) and Chen and Lin (2011), this involvement scale was constructed with 15 questions.
- Flow experience scale: The flow experience was defined as the joy and satisfaction that hockey participants feel after being fully engaged in hockey activities and experienced fluency. The scale design was based on Csikszentmihalyi's (1975; 1990) nine dimensions of flow experience. Based on the studies by Jackson and Marsh (1996) and Chen and Lin (2011), we reduced the flow experience scale to six dimensions and 21 questions.
- Happiness scale: Happiness is defined as the frequency of positive emotions and satisfaction of hockey participants after participating in hockey activities. The scale was based on the dimensions of Chen and Lin's (2011) study with four questions. The current study used a structural equation model for validation analysis. Moreover, Bollen (1989) pointed out that a seven-point scale has a higher degree of variability and is more suitable for structural equation model validation studies. As such, we adopted the seven-point Likert scale.

➢ *Research Subjects*

The survey questionnaire was conducted from December 6 to 11, 2022, at the National Chushan Senior High School hockey field. A total of 300 hockey participants were enrolled in this study. After deducting 12 questionnaires with incomplete answers, the total number of valid questionnaires was 288, with an effective recovery rate of 96.0%.

➢ *Statistical Analysis Methods*

This study applied the SPSS 21.0 statistical software package to analyze individual background variables. Partial least squares (PLS) has been widely valued and applied in different disciplines in recent years (Hsu, 2016). PLS has considerable potential for future growth as a research tool, an interdisciplinary methodological innovation, and a practical

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application (Chiou, 2011). Therefore, this study applied Smart PLS 3 statistical software to analyze the convergent validity, discriminant validity, goodness of fit, and hypotheses of the 2022 National Chung-Cheng Cup Hockey Tournament's involvement, flow experience, and happiness models.

III. RESULTS

➢ *Descriptive Statistics*

Regarding gender, the study sample participants were mainly male (184 people, accounting for 63.9%); Marital status was mainly unmarried (210 people, accounting for 69.8%); Age was primarily between 21 and 30 years old (119 people, accounting for 41.3%); Educational level was mainly university and college (191 people, accounting for 6.3%).

Table1 Analysis of Background Variables of the Study Sample (N = 288)

Background Variables	Group	Number of times	Percentage %
Gender	Male	184	63.9
	Female	104	36.1
Marital status	Unmarried	201	69.8
	Married (without children)	24	8.3
	Married (with children)	63	21.9
Age	Under 20 years old	16	5.6
	21-30 years old	119	41.3
	31-40 years old	110	38.2
	41-50 years old	36	12.5
	Above 51 years old	7	2.4
Educational level	Senior and vocational high school and below	30	10.4
	University and college	191	66.3
	Graduate school (and above)	67	23.3

➢ *Convergent Validity*

Fornell and Larker (1981) stated that the factor loadings criterion must be greater than 0.7. While the Composite Reliability (CR) is greater than 0.7, the average of variance extracted (AVE) needs to be greater than 0.5. Cronbach's α criterion is greater than 0.7. This study's factor loadings of 0.723-0.918 were greater than 0.7. The compositional reliability of all dimensions was 0.864-0.941; the AVE was 0.648-0.800; the above showed that the AVE was greater than 0.5. Cronbach's α values were 0.764-0.921; Cronbach's α values were greater than 0.7. This study met the criteria of convergent validity based on the above statistical results (see Table 2).

Table 2 Convergent Validity Analysis

Dimension	Factor loadings	Cronbach's Alpha	Component reliability	Average of variance extracted (AVE)
Attractiveness	0.800-0.892	0.921	0.939	0.718
Self-expression	0.729-0.888	0.817	0.880	0.648
Lifestyle centrality	0.723-0.885	0.865	0.903	0.650
Self-forming experience	0.850-0.900	0.900	0.930	0.769
Loss of self-awareness and altered sense of time	0.758-0.842	0.824	0.883	0.655
Challenge and skill balance	0.766-0.879	0.764	0.864	0.681
Full concentration	0.767-0.872	0.822	0.883	0.653
Clear goals	0.801-0.869	0.779	0.872	0.694
Integrated movement and perception	0.855-0.875	0.831	0.899	0.747
Happiness	0.840-0.918	0.917	0.941	0.800

➢ *Discriminant Validity*

- *AVE Method*

This study used the AVE method to analyze the discriminant validity. Fornell and Lacker (1981) suggested that the root of the AVE of the dimensions is greater than the correlation coefficient between the dimensions, indicating the discriminant validity between them. This study's results show that the square root of the AVE was greater than the correlation coefficient. As such, this study met the discriminant validity criterion.

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Table 3 Discriminant Validity Analysis

	FE1	FE2	FE3	FE4	FE5	FE6	Happiness	IN1	IN3	IN3
FE1	**0.877**									
FE2	0.572	**0.809**								
FE3	0.459	0.542	**0.825**							
FE4	0.631	0.617	0.586	**0.808**						
FE5	0.422	0.392	0.428	0.516	**0.833**					
FE6	0.488	0.574	0.582	0.636	0.547	**0.864**				
Happiness	0.401	0.406	0.340	0.433	0.238	0.337	**0.895**			
IN1	0.704	0.501	0.400	0.565	0.403	0.442	0.347	**0.848**		
IN3	0.666	0.612	0.531	0.607	0.413	0.556	0.451	0.610	**0.805**	
In3	0.630	0.553	0.558	0.625	0.456	0.549	0.396	0.553	0.653	**0.807**

- Note: Diagonal bold text is the square root of the Average Variance Extraction (AVE) FE1 = self-forming experience; FE2 = loss of self-awareness and altered sense of time; FE3 = challenge and skill balance; FE4 = full concentration; FE5 = clear goals; FE6 = integrated movement and perception; IN1 = attractiveness; IN2 = self-expression; IN3 = lifestyle centrality

- *HTMT*

The HTMT criterion of Hair et al. (2019) is less than 0.90, and all the dimensions in this study are less than 0.90 to meet the criterion.

Table 4 The Dimensions in this Study

	FE1	FE2	FE3	FE4	FE5	FE6	IN1	IN2
FE2	0.658							
FE3	0.551	0.682						
FE4	0.729	0.744	0.735					
FE5	0.501	0.487	0.550	0.643				
FE6	0.563	0.690	0.729	0.767	0.680			
IN1	0.772	0.572	0.476	0.646	0.475	0.504		
IN2	0.770	0.736	0.676	0.734	0.516	0.670	0.692	
IN3	0.706	0.651	0.688	0.730	0.554	0.645	0.607	0.769

- Note: FE1 = self-forming experience; FE2 = loss of self-awareness and altered sense of time; FE3 = challenge and skill balance; FE4 = full concentration; FE5 = clear goals; FE6 = integrated movement and perception; IN1 = attractiveness; IN2 = self-expression; IN3 = lifestyle centrality

➢ *Goodness of Fit*

Goodness of Fit (GOF) = √Commonality × Explainable Variance = √Redundancy. GOF is a measurement of the overall indicator of a model, with 0.1 being a weak fit, 0.25 being a moderate fit, and 0.36 being a high fit (Vinzi, Trinchera, & Amato, 2010). The present study's fit was 0.564, indicating a good fit.

➢ *Path Analysis*

Involvement->flow experience path coefficient 0.818; standard deviation 0.028; (T value 29.280; P value 0.000<0.05). Therefore, the hypothesis that involvement significantly impacts flow experience is valid.

Involvement->happiness path coefficient 0.215; standard deviation 0.106 (T value 2.033; P value 0.042<0.05). Therefore, the hypothesis that involvement significantly impacts happiness is valid.

Flow experience ->happiness path coefficient 0.215; standard deviation 0.028; (T value 2.855; P value 0.004<0.05). Therefore, the hypothesis that flow experience significantly impacts happiness is valid.

Explanatory power is an indicator of whether a model is good (Chin, 1998), endogenous latent variable $R^2 > 0.67$ represents high explanatory power, $R^2 > 0.33$ represents medium explanatory power, and $R^2 > 0.19$ represents low explanatory power (Chin, 1998; Ringle, 2004). The R^2 value was 0.236 for happiness and 0.669 for flow experience, showing moderate to high explanatory power.

Table 5 Results of the Path Analysis

	Path coefficient	Standard deviation	T Statistics	P Values	R^2
Involvement-> flow experience	0.818	0.028	29.280	0.000	0.669
Involvement->happiness	0.215	0.106	2.033	0.042	0.236
Flow experience->happiness	0.294	0.103	2.855	0.004	

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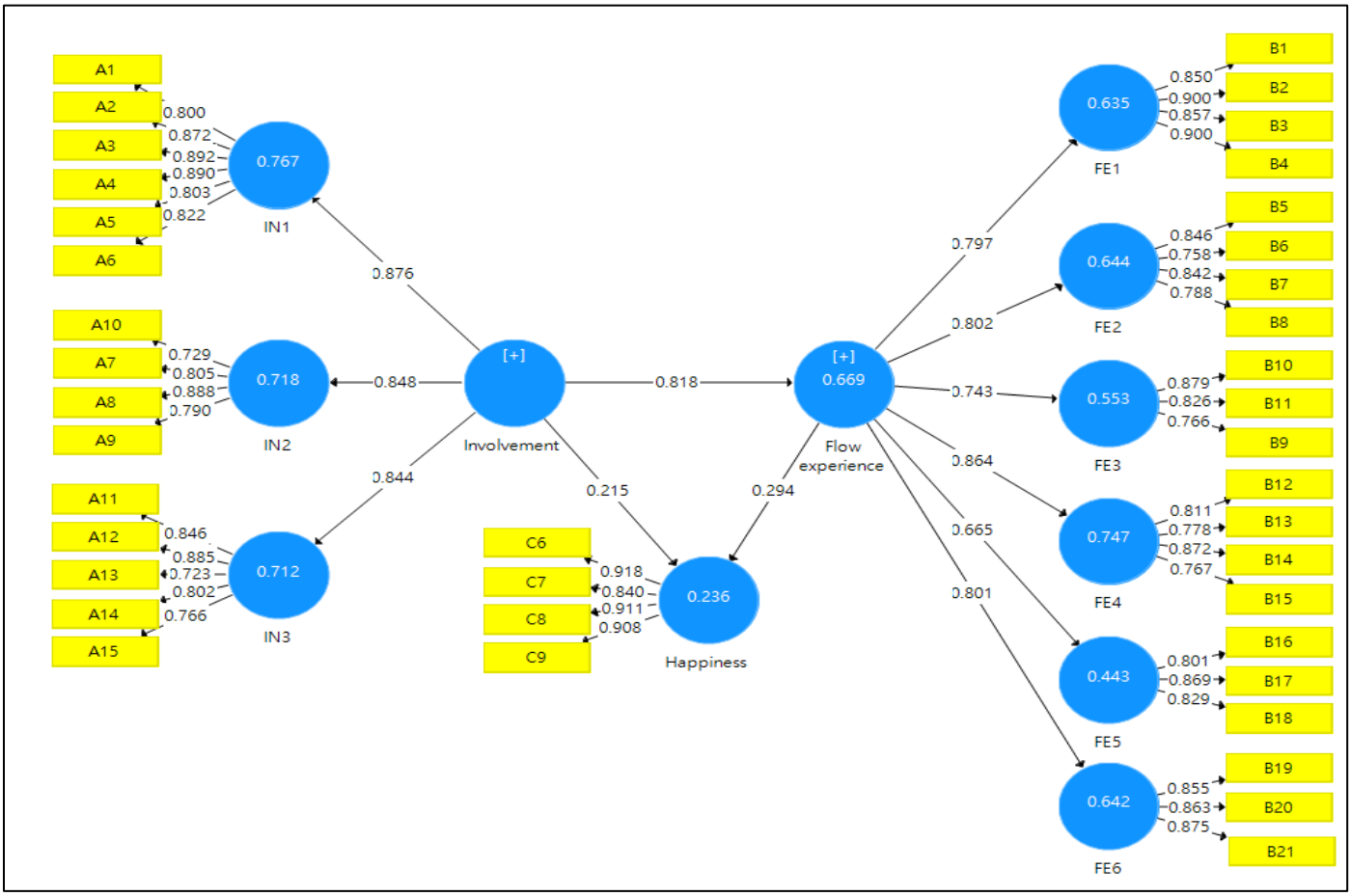

Fig 1 PLS Statistical Model Chart

- Note: FE1 = self-forming experience; FE2 = loss of self-awareness and altered sense of time; FE3 = challenge and skill balance; FE4 = full concentration; FE5 = clear goals; FE6 = integrated movement and perception; IN1 = attractiveness; IN2 = self-expression; IN3 = lifestyle centrality

IV. DISCUSSION

➢ *Results*

This study's results reveal that the 2022 National Chung-Cheng Cup Hockey Tournament had good convergent validity, discriminant validity, and goodness of fit in terms of involvement, flow experience, and happiness models. The descriptive statistical analysis results show that the study sample was predominantly male, unmarried, and between 21-30 years old. This is primarily because hockey is a strenuous physical sport, and the physical ability and endurance of males are generally higher than females. Therefore, hockey participants are primarily young men.

Regarding the verification of this study's hypotheses, H1 (The involvement of hockey participants in the sport significantly affects the flow experience) was supported. This finding is consistent with Lin and Huang's (2008) study on college students' leisure activities and similar to Wei's (2016) study on soccer, which found that involvement significantly impacted the flow experience. This finding is because young people are physically capable of participating in and coping with strenuous sports. Hockey meets the needs of young people for exciting and physically demanding sports and was therefore preferred by the participants in this study. In this regard, this study's results show that the factor loadings of attractiveness were the highest among the sub-dimensions of involvement. The mean of the attractiveness dimensions showed that the participants considered hockey meaningful, enjoyable, and fun. Therefore, higher involvement in hockey made it easier for participants to obtain a flow experience during the process. In other words, participants' involvement in hockey affected the flow experience of the process.

H2 (The involvement of hockey participants in the sport significantly affects happiness) is consistent with the findings of Lee and Russell (2003) and similar to the results of Yang (2020), who found a significant effect of involvement on happiness in a study on college students' participation in volleyball. We suggest this may be because participants are attracted to hockey and willing to continue participating in the sport. Godbey (l999) suggested that continued involvement in a particular sport could reduce negative emotions by relieving daily life's stress and improving the quality of life, thus increasing happiness. According to the current study's results, the mean of the happiness dimension indicated that the participants felt happy more frequently and were more satisfied with their current lifestyle in the last three months after participating in hockey. Therefore, it is evident that the participants' involvement in hockey affected their happiness.

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H3 (The flow experience of hockey participants significantly affects happiness) is consistent with Lin and Tsai's (2015) study. The possible reason for this finding is that hockey participants were able to integrate their minds and bodies into the sport. According to the flow theory proposed by Csikszentmihalyi (1975), when individuals concentrate on their sport and have the skills to cope with the challenges they face, they are likely to have flow experience during the activity. The results of the current study indicate that among the sub-dimensions of fluency experience, total concentration was the most reflective of flow experience. The mean of full concentration dimensions indicated that the participants thought they could temporarily forget unpleasant events and focus on the hockey process by participating in hockey. As such, they would obtain a flow experience from hockey and thus have greater happiness. In this regard, it is evident that participants' flow experience during hockey affected their happiness.

V. SUGGESTIONS

The current study results show that the hypotheses significantly impacted the happiness of hockey participants by increasing the involvement and flow experience. Therefore, the following specific recommendations are proposed based on the results of this study:

- *Enhancing Hockey's Attractiveness*

The results of this study show that involvement had an effect on the flow experience and happiness, increasing the involvement could enhance the flow experience and happiness, and involvement was the most critical component of attractiveness. Therefore, we suggest to advertise the benefits of hockey for participants by enhancing the sport's attractiveness. For example, hockey is a sport that requires a high level of activity and is full of physical and mental challenges and excitement. Not only does it burn up young people's energy and help them relieve the stress of daily life, but it builds a stronger physical body. Hence, it is an essential and meaningful sport worth more promotion for more people to participate. By increasing their involvement in hockey, participants will gain a greater sense of happiness.

- *Improving the Concentration of Hockey Participants*

The results of this study suggest that flow experience influenced happiness and that improving flow experience might increase happiness. Moreover, the key to gaining flow experience was to concentrate during the sport. Hockey is a sport that requires a high degree of physical coordination, including passing, catching, scooping, and pushing skills. Therefore, we recommend that coaches be able to organize the team members' roles based on individual abilities during hockey training so that they have the skills to meet the challenges of the sport. This organization helps participants feel more confident in exerting their potential in hockey and focusing on their role on the team. As hockey participants can gain flow experience easier in the process, this gives them a higher sense of happiness, and they will be willing to continue participating in hockey-related sports.

- *Suggestions for Future Studies*

This study collected data at the 2022 National Chung-Cheng Cup Hockey Tournament. The study subjects should have been involved in hockey for a particular time and had a specific level of sport-related skills. The results apply to professional athletes and cannot be generalized to hockey fans across the country. In this regard, we suggest that subsequent research may examine all levels of schools or associations, having hockey teams or clubs as study groups, to investigate the involvement, flow experience, and happiness of hockey participants further to provide more knowledge value for the sport of hockey.

REFERENCES

[1]. Wang, D. (2019). Analyzing the Physical Characteristics and Training Methods of Hockey Sports. Slam Dunk, 19, 36-36.
[2]. Chen, H. L., & Lin, A. T. (2011). A Study of the Relationships among Mountain-Climbing Participants' Involvement, Flow Experience, and Well-being. Journal of Taiwan Society for Sport Management, 11 (1), 25-50.
[3]. Chiou, H. J. (2011). When PLS Meets with SEM: Issues and Dialogues. αβγ of the Journal for Quantitative Research, 31, 20-53.
[4]. Hsu, M. C. (2016). Application of Partial Least Square in the Sports Field. Sports Research Review, 136, 55-65.
[5]. Lin, H. T., & Tsai, M. T. (2015). The Research of the Middle-aged and Elderly Adults on Self Actualization, Flow Experience and Well-being during Triathlon Involvement. Journal of Sport and Recreation Management, 12 (2) 15-28.
[6]. Chang, H. M. (2000). The Related Study of Perception Competence, Control of Leisure and Involvement of Flow Experience. Sports & Exercise Research, 2 (1), 47-57.
[7]. Zhang, H. L. (2013). A Brief Discussion on Hockey. Journal of Tianjin Manager College, 3, 51-52.
[8]. Lin, P. Y., Huang, C. F. (2008). Research on Leisure Perceived Freedom and Flow Experience of College Students in Central Taiwan. Physical Education Journal of National Taichung University of Science and Technology**, 5**, 88-105.
[9]. Liu, H. Y., Yu, H. (2005). On the Concept of Sports Participation. Journal of Shenyang Sport University, 1, 79 -80.
[10]. Yang, C. S. (2020). A Study on College Students' Degree of Volleyball Involvement and Happiness. Journal of National Formosa University, 35 (1), 79-86.
[11]. Wei, C. E. (2016). Empirical Study on Level of Involvement, Flow Experience and Happiness of Football Game Participants. Journal of Sport and Recreation Management, 13 (4), 1-17.
[12]. Bollen, K. A. (1989). Structural equations with latent variables. New York: Wiley.

ISSN No:-2456-2165 https://doi.org/10.38124/ijisrt/IJISRT24SEP1210

[13]. Brown, W. J., Mishra, G., Lee, C., & Bauman, A. (2000). Leisure Time physical activity in Australian women: Relationship with Well Being and Symptoms. Research Quarterly for Exercise and Sport, 72(3), 206-216.
[14]. Csikszentmihalyi, M. (1975). Beyond boredom and anxiety: The experience of play in work and games. San Francisco: Jossey-Bass.
[15]. Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. New York: HaperCollins.
[16]. Csikszentmihalyi, M., Wong, M. M. (1991). The situational and personal correlates of happiness: a cross-national comparison. In Fritz Strack, Michael Argyle Norbert Schware (Eds), Subject Well-Being, 193-212. England: Regimen Press Plc.
[17]. Diener, E., & Seligman, M. E. P. (2004). Beyond money: Toward an economy of well-being. American Psychological Society, 5(1), 1-31.
[18]. Ellis, G. D., Voelkl, J. E., & Morris, C. (1998). Measure flow experience in daily life: An examination of the items used to measure challenge and skill. Journal of Leisure Research, 30(3), 380-389.
[19]. Fornell, C., & Larker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18, 39-50.
[20]. Godbey, G. C. (1999). *Leisure in your life: An exploration* (5th ed.). State College, PA: Venture Publishing.
[21]. Havitz, M. E. & Mannell R. C. (2005). Enduring involvement, Situational Involvement, and Flow in Leisure and Non-leisure Activities. Journal of Leisure Research, 37, 152-177.
[22]. Haworth, J. T. & Hill, S. (1992).Work, leisure, and psychological well-being in a sample of young adults. Journal of Community and Applied Social Psychology, 2, 147-160.
[23]. Jackson, S. A., & Marsh, H. W. (1996). Development and validation of a scale to measure optimal experience: The Flow State Scale. Journal of sport and exercise psychology, 18(1), 17-35.
[24]. Kyle, G., Graefe, A., Manning, R., & Bacon, J. (2004). An examination of the relationship between leisure activity involvement and place attachment among hikers along the Appalachian trail. Journal of Leisure Research, 35(3), 249-273.
[25]. Lee, C., & Russell, A. (2003). Effects of Physical Activity on Emotional Well-being among Older Australian Women Cross-sectional and Longitudinal Analyses. Journal of Psychosomatic Research, 54(2), 155-160.
[26]. Mannell, R. C. (1994).High investment activity and life satisfaction among older adults: committed, serious leisure, and flow activities, in J. R. Kelly (ed.), Activity and Aging: Staying involved in Later life, Newbury Park, CA: Sage.
[27]. Mannell, R., Zuzanek, J., & Larson, R. (1988). Leisure state and flow experience: Testing perceived freedom and intrinsic motivation hypotheses. Journal of Leisure Research, 20(4), 289-304.
[28]. McAuley, E., Blissmer, B., Marquez, D. X., Jerome, G. J., Kramer, A. F., & Katula, J. (2000). Social Relations, Physical Activity, and Well-being in Older Adults. Preventive Medicine, 31(5), 608-617.
[29]. McIntyre, N., & Pigram, J. J. (1992). Recreation specialization reexamined: The case of vehicle-based campers. Leisure Sciences, 14(1), 3-15.
[30]. Mclntyre, N. (1989). The personal meaning of involvement: Enduring involvement. Journal of Leisure Research, 21(2), 167-179.
[31]. Veenhoven, R. (1994). Is happiness a trait? Test of the theory that a better society does not make people any happier. Social Indicators Research, 32, 101-160.
[32]. Wiley, C. G., Shaw, S. M., & Haviz, M. E. (2000). Men's and women's involvement in sports: An examination of the gendered aspects of leisure involvement. Leisure Sciences, 22(1), 19-31.
[33]. Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. European business review.