ORIGINAL ARTICLE

Leisure Motivation and Happiness, Mediation of Leisure Attitude and Perceived Value: An Evidence from Large and Heavy Motorbike Riders in Taiwan

[1]Chin-Cheng Yang, [2,3]Ching-Te Lin *, [1]Tso-Yen Mao, [4]Ali Akbar Anggara, [1]Chen-Ping Wu

[1]Department of Leisure Services Management, Chaoyang University of Technology, Taichung City, TAIWAN (R.O.C.). [2]General Education Center, Chaoyang University of Technology, Taichung City, TAIWAN (R.O.C.) [3]Department of Business Administration, National Yunlin University of Science and Technology, Yunlin City, TAIWAN (R.O.C.). [4]Economic and Business Faculty, University of Muhammadiyah Purwokerto, Central Java, Indonesia.

ABSTRACT

Background. The current study has been based on the Theory of planned behavior. It is "the intention of an individual to get involved in the specific behavior. **Objectives.** The current research aimed to empirically investigate the impact of leisure motivation on the happiness of large and heavy motorbike riders in Taiwan. **Methods.** In this cross-sectional field study, grounded in the Theory of Planned Behavior, the mediation of leisure attitude and perceived value was also explored. The field data of 427 heavy motorbike riders were collected using convenient sampling, men 387 (90.6%), and women 40 (9.4%). **Results.** The PLS analysis revealed that attitudes toward leisure and perceived value mediate the relationship between leisure motivation and happiness. Large heavy-duty motorcyclists opt to engage in self-preferred riding actions to satisfy their self-demand, enhance life satisfaction, and encourage greater happiness. **Conclusion.** The study brings key policy insights for sports manufacturing business professionals and suggests future research directions.

KEYWORDS: *Happiness, Leisure Motivation, Leisure Attitude, Perceived Value, Theory of Planned Behavior.*

INTRODUCTION

Heavy and large motorcycle riding is becoming more and more famous worldwide. People want to spend their leisure time doing things that will help them relieve or relax from the various stresses in their lives and at work to improve or increase their standard of living (1). According to statistics from "Taiwan's Ministry of Transportation's Statistics Department (2020)", about 340,000 people have heavy-duty aircraft driving licenses, with about 60% of them using them for leisure or tourism purposes, indicating that social approval of a huge moving machine is growing (2, 3). Rider behavior and actions are two of the most significant features of the rider, although nothing has been documented on such constructs (4). It has proven to be a useful study instrument for examining driver behavior, and its three-part classification has been effectively replicated in different research throughout the country (5, 6). Studies focusing on this recreational and passion-oriented segment of the population are scarce in the sports management

*. Corresponding Author:
Ching-Te Lin, Ph.D.
E-mail: ctlin@cyut.edu.tw

literature. That is where it proves the "why" of this research as it is attempting to bridge this gap in the literature.

Motivation is a heightened urge that motivates people to accomplish something or engage in particular conduct to satisfy their desires. Leisure motivation having such components as sociability, physiologic, intelligence, and stress relief, is considered an important factor in human life. The intensity with which behaviors are performed, energy expended, and opposition to shifting, segmentation, and persistence intervals all indicate that these behaviors are driven intrinsically. Motivation, according to Kruger and Venter, "is an individual's intrinsic behavioral inclination that can elicit desire and desire to spend time discussing favorite things." Leisure motivation is the fundamental component and source of motivation that led people to engage in leisure activities (3). As a result, focusing on how to stimulate people's strong enthusiasm to engage in leisure time and their perceptions and opinions while participating in such activities. Individuals' subjective cognition and concept about something are then transformed into actual behavioral intentions by their attitudes. The basis of later conduct is also influenced by the favorable or unfavorable judgment of individual actions and experiences. Although intellect, emotion, and conduct are all linked, the reaction inclination to like or dislike particular things has the significance of appraisal (4). Leisure attitudes are cognitions and ideas about something while people engage in leisure activities, which are referred to as thoughts or expressions of activities (7). You can have a wonderful time with a favorable attitude toward leisure (4). One could, for instance, demonstrate their devotion (i.e., affect) to particular pursuits without possessing the necessary competencies and capabilities. Intelligence and sociability have already been mentioned as components of leisure motivation, representing how people engage in particular tasks (2, 3, 8-10). The current study is important to focus these constructs in a unique Taiwan setting which makes it more significant for the body of literature.

However, the current research was conducted on leisure motivation, attitude, perceived value, and motorcycle riders' happiness in Taiwan. Finally, the current study has been based on the Theory of planned behavior. It is "the intention of an individual to get involved in the specific behavior" (11). The appraisal of the behavior as good or bad is reflected in attitudes. Based on this theory current study advanced the literature to explore the relationship between leisure motivation, leisure attitude, perceived value, and happiness in Taiwan heavy and large motorcycle riders. Furthermore, the current study aims to achieve the following objectives:

1. To examine leisure motivations (Intelligence, sociability, physiologic, and stress relief) significantly affect happiness (life satisfaction, self-affirmation, and interpersonal relationship).

2. To examine leisure attitudes (cognition, emotion, and behavior) and perceptual value (price value, emotion, and quality value) mediate the relationship between leisure motivations (Intelligence, sociability, physiologic and stress relief) and happiness (life-satisfaction, self-affirmation, and interpersonal relationship). To highlight important aspects of motivation and satisfaction of people engaged in this sport.

The current research focuses on leisure motivation (Intelligence, sociability, physiologic and stress relief), leisure attitude (cognition, emotion, and behavior), perceived value (price value, emotion, and quality value), and heavy motorcycle rider's happiness (life satisfaction, self-affirmation, and interpersonal relationship) in Taiwan. Especially current research grounded in planned behavior theory contributes to the literature related to sports motivation and heavy motorcycle rider's happiness related cases in the context of Taiwan. It is defined as "attitudes, subjective norms, and perceived behavioral control are the main stimuli of an individual to complete the behavior, and then the behavior is regulated by intention" (11). The appraisal of the behavior as good or bad is reflected in attitudes. Normative beliefs represent the amount of social influence a person feels whether participating in an activity or not. This model of planned behavior provides a theoretical base to link motivation and happiness with constructs such as leisure attitude and perceived value as mediators. Conclusively, this theoretical integration advances the literature on sports motivation, value, and attitude that derives individuals' happiness.

Relationship between leisure motivations and happiness. Happiness seems to have become a universal phenomenon, and the desire to be happy is a key condition for a better existence (12, 13). Happiness is a happy life that includes self-

satisfaction, self-affirmation, and interpersonal relationships (14). Even though there are distinctions between happiness and leisure motivation, the two can be used interchangeably as indicators of total happiness (15-17). In this research, motivation is used as an appropriate substitute for happiness. It's crucial to investigate the link between leisure motivation and happiness by including leisure attitude in the framework.

In the past, studies on leisure activities found that participation behavior induced by leisure motivation has affected the happiness of event participants (4, 12, 14, 18). The framework of leisure motivation is self-directed or influenced by the individual. While there are four motivating factors, they can also be influenced by intelligence, sociability, physiologic, and stress relief (3). Moreover, motivation varies depending on the person, region, and estimated ability (19). Previous studies discovered numerous aspects: cooperation, diversion, personality, identity, consciousness, displacement from regular activities, distracting leisure, good interpersonal interaction, workouts, and cognitive aesthetics (4, 20, 21). Define motivation as "an organism becoming ready for action and expressing behaviors following a goal as a result of its drives or wants, and feeling relieved after achieving that objective" (15).

Leisure motivation, which means taking an activity to do anything, gives someone strength and influences their desire to engage in the behavior. Guo et al. (15) reported, "Leisure plays a dynamic role in individuals' lives, and it would be important to know how the satisfaction derived from leisure activities, links to mental and physical health, personal and social adjustment, and overall happiness". The connection between leisure motivation and happiness has been widely researched. According to Ito and Hikoji (14) research, participation in leisure activities that induce emotional flow impacts long-term enjoyment. Leisure activity is considered the best indicator of happiness as a prior leisure motivation (6, 19). Although workout involvement was related to greater happiness levels, the research found no causal link between leisure motivation and happiness (1). Some studies (3, 7, 14, 19, 22). Yang et al. (1) have raised concerns about the validity of the causal association between leisure motivation and happiness and reported contradictory results. In comparison, most of the studies have reported a positive relationship

between leisure motivation and happiness. Thus, there was a need to test these associations in a diverse cultural setting like Taiwan.

A leisure attitude mediates the relationship between leisure motivations and happiness. Individuals' perception and concept about something is then transformed into actual effort expectancy by their attitudes. According to Will et al. (5), Leisure attitudes are thoughts, feelings, and ideas about something while people engage in leisure activities, which are referred to as ideas or emotions of actions. You can have a wonderful time with a favorable attitude about leisure (12, 23, 24). As seen from the above arguments, establishing a large-scale heavy-duty rider's leisure attitude necessitates individual consciousness related to understanding the choice of leisure activity. This is then transformed into actual engagement actions through emotion assessment, resulting in knowledge traits of interest. It influences how people live their lives and how they behave. It has been observed that leisure attitude studies grow in line with individual leisure motivation. Attitudes are statements of unfavorable or favorable evaluations of ideas, characters, or experiences (25). Another recent research by Ito & Hikoji (14), defined attitude as a person's feelings toward any item, material, or idea. Three major components of attitude reported are cognitive, emotional, and behavior (3). Individual views, understanding, and knowledge are pitted against the stimuli in the environment to create the cognitive aspect. The affective factor encompasses the person's favorable and unpleasant thoughts toward stimulation in the environment and the person's mental reaction to them.

The cognitive component concerns people acting following their emotions and understanding (15). Knowledge and views about fitness, pleasure, developing friendships, leisure, and relaxation are all cognitive elements in leisure attitudes. While the affective aspect of leisure includes the beliefs and feelings associated with leisure attitude, as well as the emotions experienced after participating in leisure attitude, the behavior part involves the expressions of thoughts and feelings after willingness to participate, as well as the consequences of enjoyment and fun after that (11, 26, 27). According to Matsumoto et al. (19), there is a poor association between era, religion, wealth, status, and demographics and cognitive,

emotional, and behavioral leisure attitudes. According to Ito & Hikoji (14), there is a link between leisure motivation and leisure attitude. Happiness is said to be a characteristic of a happy life, and we cannot or do not achieve it. Sadness, on either side, is rather effective at treating anxiety in others, intending to make them cheerful.

Furthermore, improving the happiness of someone else and yourself, as well as the happiness of the entire society. Leisure attitude was a significant source of happiness (7). For instance, the attitude was discovered to elicit resounding emotions, which were frequently accompanied by experiences. Given the variety of leisure attitudes available, people's personalities may influence their leisure choices, which in turn may affect their work. Forms of leisure behavior (e.g., visiting entertainment centers, nightclubs, casinos, scuba diving, motorcycling, riding). When demographic characteristics (e.g., age) are controlled for, studies have discovered that regardless of employment, socioeconomic class, or religion, there is a substantial link between leisure attitude and happiness (1, 3, 6, 13, 19). Conclusively, based on literary evidence, leisure considerably impacts individual behavior.

Perceptual Value Mediates the Relationship Between Leisure Motivations and Happiness. Perceptual value is a type of being, a type of drive, and a type of goal. It determines how people live their lives and how they behave. Perceptual value, according to Tian et al. (28), is a comparison of the relationship between customers' perceptual costs and benefits. Because value perception happens at every point of the purchasing process, the psychological condition of feedback through the product is used to compare an individual's subjective perception of what is perceived and what is paid (14, 15). Individuals who are well-adjusted in their daily lives self-assess their level of contentment through inner heart processes and have more positive and pleasant feelings (28). As a result, knowing whether a heavy-duty rider's experience is pleasant or not during the riding process has an impact on the individual's inner subjective feeling of satisfaction.

There are three components of perceptual value such as quality value, price value, and emotion. Quality value is defined as "The degree of suitability of a relationship to fulfill the needs of the consumer associated with that relationship" (3). In this respect, experts have concluded that the quality of the relationship plays an important part in the judging process of users. Quality is concerned with how people are satisfied with their service interactions. In other terms, clients assess their sense of happiness with a service company's relation and determine whether their expected standards are realized (13). The honesty of a rider and the level of happiness of a customer are both important elements in determining a greater standard of loyalty.

The manufacturer's anticipated short- and long-term expenses are referred to as price value. All these quality and price values emphasize the factor of perceptual value. Emotional values represent the customer's information processing emotional state towards the motorcycle rider. In more depth, emotional value refers to "the utility of a product/service derived from customers' emotions" (3). People are cognizant of the worth of merchandise when the quality of such goods is higher than the cost, they invested a concept known as "value-for-money" (3, 29).

Experts and managers are increasingly focusing on perceptual value to predict users' emotional decision-making processes in this context. According to experts, clients' repeated behavior might be encouraged when they feel great value in the items. Leisure motivation is a key factor in happiness and is the one most people can influence. There are numerous views about what motivates leisure entertainment; it will be demonstrated that the primary incentive is the frequency to seek pleasure in real and imagined peer interaction of leisure groups (3). Many people and institutions act as if this is the case, however, rising earnings have had little influence on happiness, gaining prizes has adverse implications for those, and the wealthy are no happier than the middle class; those who are most focused on wealth are the least satisfied. Many studies (14) have shown that leisure motivation is the most important factor influencing happiness with the mediating effect of perceptual value-related attributes. According to (14), there is a link between leisure motivation and happiness, but that link has not been explained earlier in the literature. Overall, leisure motivation has a considerable impact on individual emotions, values, and behavior. Thus, it is predicted that perceptual value is the mediating link between leisure motivation and happiness.
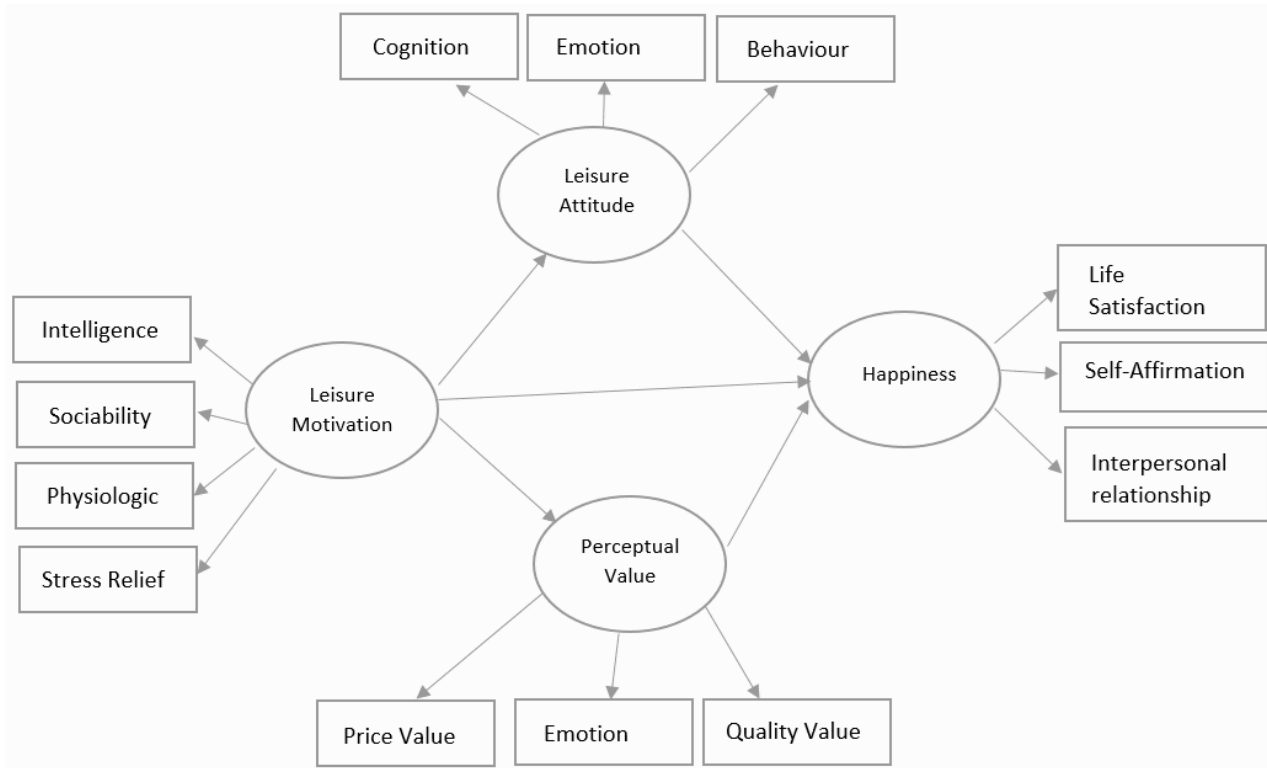
Figure 1. Conceptual Model

MATERIALS AND METHODS

The research plan of this study was to identify the potential rider groups in Taipei city and then approach them to seek their willingness to conduct the cross-sectional field survey and analyze the results for a conclusion. The study's theoretical framework was developed based on in-depth theoretical grounding and literature review support as presented above in Figure 1, and hypotheses were proposed based on planned behavior theory. The essence of this study focused on the sample of large heavy-duty motorcycle riders in the central region of Taiwan. The questionnaires were distributed in a deliberate convenient sampling method. The researchers initially collected basic information from one of the riders to know the regular meeting points of heavy bike riders. Usually, the city and locality riders meet every week, and some larger groups every month. Their interval of meeting and meeting points was marked and a data collection plan was fabricated. All study authors and some students volunteered to help with the data collection activity. The meeting points and groups were assigned to each team member. The team member just walked in during the meeting time and explained the purpose of the research and most of the riders voluntarily agreed to participate in the survey. They were assured of anonymity of responses and their level of English language proficiency was also asked before handing over the questionnaire to each rider. Some riders agreed to participate but they had difficulty understanding the survey language so team members just thanked them and excluded them from the survey. This practice was repeated on weekends for 04 consecutive weeks and 15 meeting points were accessed. Team members also did some repeat visits to get survey forms filled by riders who were absent in one week and their friends mentioned they will join next week's meetings. In this study, a total of 17 main and sub-constructs are under investigation. So, if as per the criteria, 15 samples are sufficient for each obvious article, then ($17 \times 15 = 255$). According to another criterion by (36, 37). The sample size should be 5 times larger than the total number of items included in the survey. In this case, the current study has 37 items in the questionnaire and 5 questions related to demographic information. So, a calculation based on these criteria revealed that ($42 \times 5 = 210$) should be our acceptable sample size. Beyond this is considered always better sample size. A total of 515

questionnaires were distributed. Based on checking, partially filled and unengaged 88 responses were excluded from the final data set. The valid questionnaires totaled 427, with an effective response rate of 82.91%.

Measurement Scales. A 37-item questionnaire was devised to analyze leisure motivation (Intelligence, sociability, physiologic and stress relief), leisure attitude (cognition, emotion, and behavior), perceived value (price value, emotion, and quality value), and motorcycle rider's happiness (life-satisfaction, self-affirmation, and interpersonal relationship) in Taiwan.

1. The leisure motivation component of intelligence has a 3-item scale adopted by Beard and Ragheb (32). Items are "To expand my interests" and "To seek stimulation". The results were collected by a "7-point Likert scale ranging from 1= Strongly Disagree to 7 = strongly agree". The reliability of this construct in the current study was observed (α= 0.707).

2. The leisure motivation component of sociability has a 3-item scale adopted by Beard and Ragheb (32). Items are "To satisfy my curiosity" and "To explore new ideas". The results were collected by a "7-point Likert scale ranging from 1= Strongly Disagree to 7 = strongly agree". The reliability of this construct in the current study was observed (α = 0.729).

3. The leisure motivation component of Physiologic has a 3-item scale adopted by Beard and Ragheb (32). Items are "To discover new things" and "To be creative". The results were collected by a "7-point Likert scale ranging from 1= Strongly Disagree to 7 = strongly agree". The reliability of this construct in the current study was observed (α = 0.701).

4. The leisure motivation component of stress relief has a 3-item scale adopted by Beard and Ragheb (32). Items are "To meet new and different people" and "To develop close friendships". The results were collected by a "7-point Likert scale ranging from 1= Strongly Disagree to 7 = strongly agree". The reliability of this construct in the current study was observed (α = 0.701).

5. The leisure attitude component of cognition has a 2-item scale adopted by Yang et al. (1). Item included in this scale is "After watching sports internet celebrity videos, I can establish the right rider concept". The results were collected by a "7-point Likert scale ranging from 1= Strongly Disagree to 7 = strongly agree". The reliability of this construct in the current study was observed (α = 0.791).

6. The leisure attitude component of emotion has a 2-item scale adopted by Yang et al. (1). Item included in this scale is "After watching riders internet celebrity's videos, I can feel relaxed". The results were collected by a "7-point Likert scale ranging from 1= Strongly Disagree to 7 = strongly agree". The reliability of this construct in the current study was observed (α = 0.714).

7. The leisure attitude component of behavior has a 2-item scale adopted by Yang et al. (1). Item included in this scale is "After watching internet celebrity videos, I will want to join rider's competition". The results were collected by a "7-point Likert scale ranging from 1= Strongly Disagree to 7 = strongly agree". The reliability of this construct in the current study was observed (α = 0.761).

8. The perceptual value component of price value has a 3-item scale adopted by Han et al. (3). Item included in this scale is "This motorcycle is reasonably priced". The results were collected by a "7-point Likert scale ranging from 1= Strongly Disagree to 7 = strongly agree". The reliability of this construct in the current study was observed (α = 0.795).

9. The perceptual value component of emotion has a 3-item scale adopted by Han et al. (3). Item included in this scale is "This motorcycle is the one that I would enjoy". The results were collected by a "7-point Likert scale ranging from 1= Strongly Disagree to 7 = strongly agree". The reliability of this construct in the current study was observed (α = 0.807).

10. The perceptual value component of quality value has a 3-item scale adopted by Han et al. (3). Item included in this scale is "This motorcycle is well made". The results were collected by a "7-point Likert scale ranging from 1= Strongly Disagree to 7 = strongly agree". The reliability of this construct in the current study was observed (α = 0.773).

11. The happiness component of life satisfaction has a 2-item scale adopted by Cheung and

Lucas (2). Item included in this scale is "How satisfied are you with your work". The results were collected by a "7-point Likert scale ranging from 1= Strongly Disagree to 7 = strongly agree". The reliability of this construct in the current study was observed (α = 0.786).

12. The happiness component of life affirmation has a 2-item scale adopted by Cheung and Lucas (2). Item included in this scale is "I am happy that I am a member of a good family". The results were collected by a "7-point Likert scale ranging from 1= Strongly Disagree to 7 = strongly agree". The reliability of this construct in the current study was observed (α = 0.775).

13. The happiness component of life satisfaction has a 2-item scale adopted by Dearing and Steadman (25). Item included in this scale is "My relationship with clients is therapeutic rather than social". The results were collected

by a "7-point Likert scale ranging from 1= Strongly Disagree to 7 = strongly agree". The reliability of this construct in the current study was observed (α = 0.905).

Statistical Analysis. The current study used SPSS and SmartPLS software to analyze structural equation modeling (SEM) of the data and produce results for conclusion and discussion.

RESULTS

Demographics. In total received and reviewed 427 completed surveys. 87 percent males and 13 percent females in the gender description in Table 1 below. According to age groups, 20 to 30 years old accounted for 53%, 20 to 30 years old accounted for 36%, and 30 to 40 years old accounted for 11%. There were 47% bachelor's degree holders, 34% FA/FSC degree holders, and 19% master's degree holders in terms of qualification.

Table 1. Demographic profile

Demography	Description	No. of Responses	%
Gender	Male	370	87%
	Female	57	13%
Age	Above 20	170	36%
	20 to 30	250	53%
	30 to 40	50	11%
Qualification	FA/FSC	160	34%
	Bachelors	220	47%
	Master	90	19%

Measurement Model. Measurement model is defined as, "the relationship between the observed variables or indicators and the latent variables" (31). Figure 2 depicts the measurement model algorithm used in this investigation and data for the research variables.

Furthermore, the measurement model was used to calculate "Cronbach's Alpha (C.A.) and composite reliability (C.R.)" to examine the coherence of the measurements. "C.A. and C.R. value more than 0.7" were found in all investigation items, indicating that they met the

reliability criterion (30). Factor loading levels have been classified into three categories by Lamber et al., namely "unattractive (value 0.3), acceptable (value > 0.5), and extremely desired (value > 0.7)" (31). As a result, each item contributed great reliability and measurement accuracy to the current study results. The value of C.A. ranges from "0 to 1, and it is also divided into three categories; fair reliability (value of 0.6), satisfactory reliability (value from 0.6 to 0.7), and highly satisfactory reliability (value from 0.7 to 0.9)" (Table 2).
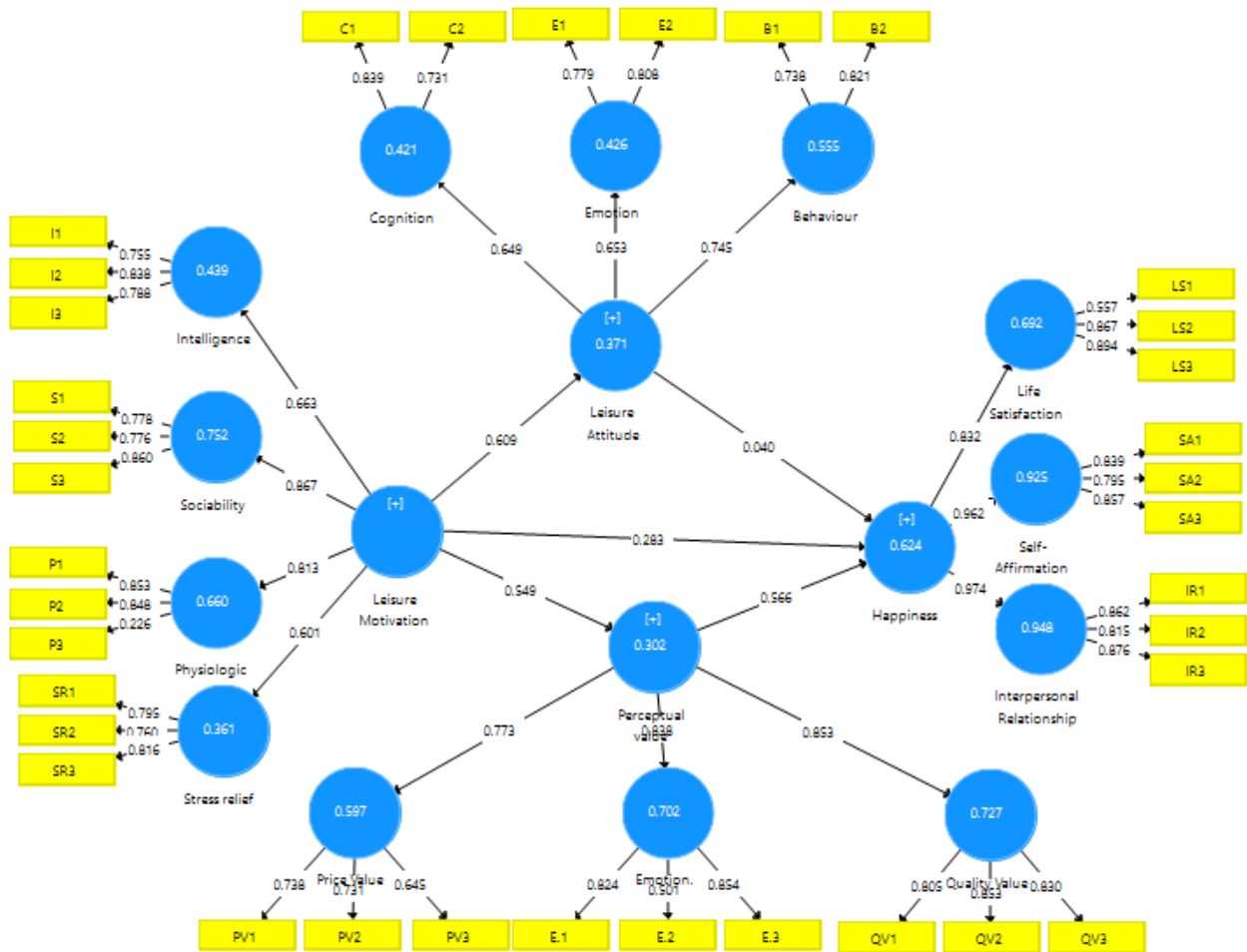
Figure 2. The output of the measurement model algorithm

Table 2. Composite reliability, Cronbach's Alpha, and AVE values

• Constructs/Items	CA	Rho-A	CR	AVE
Behavior	0.761	0.772	0.756	0.608
Cognition	0.791	0.792	0.766	0.621
Emotion	0.714	0.714	0.773	0.630
Emotion.	0.779	0.763	0.778	0.553
Happiness	0.905	0.918	0.925	0.584
Intelligence	0.707	0.713	0.836	0.631
Interpersonal Relationship	0.810	0.812	0.888	0.725
Leisure Attitude	0.705	0.701	0.752	0.538
Leisure Motivation	0.804	0.826	0.848	0.529
Life Satisfaction	0.786	0.771	0.825	0.620
Perceptual value	0.807	0.825	0.855	0.507
Physiologic	0.701	0.888	0.712	0.699
Price Value	0.795	0.784	0.746	0.695
Quality Value	0.773	0.775	0.869	0.688
Self-Affirmation	0.775	0.776	0.869	0.690
Sociability	0.729	0.739	0.847	0.649
Stress relief	0.701	0.707	0.834	0.626

"Note: CR=composite reliability; AVE=average variance extracted; CA= Cronbach's Alpha"

According to Fornell and Larcker (31), Discriminant validity is "the amount to which a given latent variable differs from other latent variables". It was calculated by looking at the correlation between the latent variable item and the actual number of AVEs. When establishing discriminant validity, recommends using latent components with a value of 0.50 or higher. Discriminant validity explains whether or not one construct is distinct from another. Discriminant validity relationship between two variables. Likewise, "the square root of every variable's (AVE) must be greater than the highest relationship of the construct with the other latent variable to assess the discriminant validity of the construct using the Fornell and Larker criterion" (31). Table 3 demonstrates that the value at the head of each column is greater than the amount below it, showing that the variables have discriminant validity.

Table 3. Discriminant validity

	B	C	E	E.	H	I	IR	LA	LM	LS	PV	P	P.V.	Q.V.	S.A.	S.	S.R.
Behavior	0.780																
Cognition	0.199	0.788															
Emotion	0.297	0.458	0.794														
Emotion.	0.331	0.162	0.199	0.743													
Happiness	0.669	0.115	0.120	0.548	0.764												
Intelligence	0.450	0.206	0.113	0.379	0.486	0.794											
Interpersonal Relationship	0.670	0.126	0.109	0.511	0.974	0.476	0.851										
Leisure Attitude	0.692	0.739	0.780	0.330	0.450	0.362	0.452	0.861									
Leisure Motivation	0.475	0.423	0.218	0.435	0.618	0.658	0.614	0.523	0.874								
Life Satisfaction	0.530	0.063	0.094	0.544	0.832	0.461	0.703	0.342	0.523	0.888							
Perceptual Value	0.450	0.194	0.207	0.865	0.663	0.444	0.631	0.408	0.505	0.635	0.889						
Physiologic	0.378	0.214	0.081	0.353	0.519	0.387	0.515	0.320	0.813	0.419	0.384	0.876					
Price Value	0.420	0.240	0.188	0.546	0.544	0.440	0.554	0.407	0.503	0.461	0.765	0.393	0.893				
Quality Value	0.378	0.109	0.142	0.626	0.564	0.317	0.519	0.303	0.353	0.565	0.871	0.247	0.473	0.889			
Self-Affirmation	0.645	0.121	0.127	0.475	0.962	0.417	0.967	0.444	0.573	0.666	0.582	0.501	0.489	0.492	0.831		
Sociability	0.320	0.245	0.123	0.359	0.552	0.378	0.551	0.331	0.867	0.459	0.411	0.703	0.382	0.301	0.518	0.805	
Stress Relief	0.271	0.649	0.359	0.181	0.239	0.192	0.244	0.580	0.606	0.182	0.241	0.303	0.279	0.262	0.228	0.388	0.891

The value of the square ranges from zero to one. Moreover, Fornell and Larcker (31) recommended that the Square of "0.13 is considered weak", "0.33 is moderate", and "0.67 is considered as strong". R Square "explains the variance in the endogenous variable explained by the exogenous variable". In Table 4, the R square value of behavior was 0.479 which is considered moderate, the R square value of quality cognition was 0.546 which is also considered moderate, the

R square value of emotion leadership was 0.609 which consider as moderate. Additionally, the R square value of emotion was 0.74 (strong), the R square value of happiness was 0.552 (moderate), the R square value of intelligence was 0.443 (moderate), and the R square value of I.R. was 0.943 (stronger). On the other hand, the R square value of leisure attitude was 0.371 (moderate), the R square value of life satisfaction was 0.692 (stronger), the R square value of perceptual value attitude was 0.302 which was considered as moderate, the R square value of physiologic was 0.660 which is also considered as moderate. The remaining constructs of the study also revealed the R square value of price value was 0.585 (moderate), the R square value of quality value was 0.758 (stronger), the R square value of self-affirmation value was 0.925 (stronger), and the R square value of sociability value was 0.752 which considered as stronger.

Table 4. Assessment of R square

	R^2
Behavior	0.479
Cognition	0.546
Emotion	0.609
Emotion.	0.749
Happiness	0.552
Intelligence	0.433
Interpersonal Relationship	0.948
Leisure Attitude	0.371
Life Satisfaction	0.692
Perceptual Value	0.302
Physiologic	0.660
Price Value	0.585
Quality Value	0.758
Self-Affirmation	0.925
Sociability	0.752
Stress Relief	0.367

Structural model. The structural model is "a multivariate statistical technique that allows researchers to estimate and test causal relationships" (31). Figure 3 shows structural model bootstrapping in this study, which shows variables data.

Figure 3. The output of the structural model algorithm

The proposed model for the study uses a structural model to stress the interconnectedness of the relationships. The structural model in P.L.S. looks at the direct relationship between the offered hypotheses and their t-values and regression coefficients; an indirect effect is the same as a standardized beta value in regression analysis (30). The t-values and beta values of the regression coefficients are used to determine significance; t-values more than "1.64" are statistically significant, and are then used to make conclusions about the suggested hypothesis (31). The model's two main purposes are to examine direct linkages and to verify projected interactions between components using a structural model. Overall, it provided a good fit for the overall model being investigated in this study. In Table 5, all hypotheses were accepted because the p-value was less than 0.05.

Table 5 shows results for the first hypothesis of the study which proposed a positive impact of leisure motivation on individual happiness revealing the statistics as (ß = 0.974, p < 0.000)".

It shows that the hypothesis was significantly accepted. Similarly, the 2nd dimension hypothesis of the study proposed happiness direct impact on life satisfaction, and results (ß = 0.832, p < 0.000) provided support for it. The 3rd dimension hypothesis of happiness directly impacts self-affirmation rendered the results (ß = 0.962, p < 0.00) supported the notion. The 4th dimension hypothesis proposed leisure attitude's direct impact on cognition (ß = 0.692, p < 0.009) was also supported. The 5th dimension hypothesis leisure attitude directly impacts behavior (ß = 0.739, p < 0.000)" shows that hypothesis was accepted. The 6th dimension hypothesis of leisure attitude's direct impact on emotion (ß = 0.780, p < 0.00) was also supported. The 7th dimension hypothesis that leisure motivation directly impacts happiness (ß = 0.385, p < 0.000) was also confirmed. The 8th dimension hypothesis of leisure motivation's direct impact on intelligence (ß = 0.343, p < 0.014) was held. The 9th dimension hypothesis of leisure motivation's direct impact on leisure attitude (ß =

0.658, p < 0.000) rendered good support. The 10th hypothesis leisure motivation direct impact on perceptual value (ß = 0.523, p < 0.000), physiology (ß = 0.505, p < 0.012), sociability (ß = 0.813, p < 0.000), and stress relief (ß = 0.867, p < 0.000) provided good support for study hypotheses. The next hypothesis is perceptual value direct impact on price value (ß = 0.606, p < 0.000), quality value (ß = 0.865, p < 0.000), emotions (ß = 0. 765, p < 0.000), and finally on happiness (ß = 0.671, p < 0.00) provided marvelous support for study hypotheses.

Table 5. Direct Hypothesis testing

Path	B-Value	Sample Mean	Standard Deviation	*T* Value	*P-*Value	
Happiness -> Interpersonal Relationship	0.974	0.974	0.003	39.728	0.000	Supported
Happiness -> Life Satisfaction	0.832	0.833	0.025	32.807	0.000	Supported
Happiness -> Self-Affirmation	0.962	0.962	0.008	12.247	0.000	Supported
Leisure Attitude -> Behavior	0.692	0.691	0.059	11.765	0.000	Supported
Leisure Attitude -> Cognition	0.739	0.743	0.046	15.978	0.000	Supported
Leisure Attitude -> Emotion	0.780	0.782	0.042	18.780	0.000	Supported
Leisure Attitude -> Happiness	0.385	0.387	0.076	1.117	0.000	Supported
Leisure Motivation -> Happiness	0.343	0.339	0.064	5.327	0.000	Supported
Leisure Motivation -> Intelligence	0.658	0.659	0.059	11.141	0.000	Supported
Leisure Motivation -> Leisure Attitude	0.523	0.516	0.084	6.226	0.000	Supported
Leisure Motivation -> Perceptual Value	0.505	0.510	0.066	7.704	0.000	Supported
Leisure Motivation -> Physiologic	0.813	0.816	0.027	30.269	0.000	Supported
Leisure Motivation -> Sociability	0.867	0.869	0.020	43.384	0.000	Supported
Leisure Motivation -> Stress Relief	0.606	0.599	0.086	7.043	0.000	Supported
Perceptual Value -> Emotion.	0.865	0.866	0.018	47.623	0.000	Supported
Perceptual Value -> Happiness	0.455	0.454	0.062	7.295	0.000	Supported
Perceptual Value -> Price Value	0.765	0.768	0.034	22.402	0.000	Supported
Perceptual Value -> Quality Value	0.871	0.871	0.018	49.616	0.000	Supported

In Table 6, the study indirect first hypothesis perceptual value mediates the relationship between leisure motivation and happiness (ß = 0.230, p < 0.000) provided good support to accept the hypothesis. The

second indirect hypothesis that leisure attitude mediates the relationship between leisure motivation and happiness (ß = 0.245, p < 0.000) also supported significantly from study results.

Table 6. Indirect Hypothesis testing

Path	B-Value	Sample Mean	Standard Deviation	*T* Value	P-Value	
Leisure Motivation -> Perceptual Value -> Happiness	0.230	0.232	0.046	4.950	0.000	Supported
Leisure Motivation -> Leisure Attitude -> Happiness	0.245	0.247	0.048	4.878	0.000	Supported

DISCUSSION

The major goal of this study was to explore the mediated and unexplored links between leisure motivation and happiness. The study is unique in its stance as no such attempt can be traced back in the literature to date. Based on the theory of planned behavior (39, 40), this research proposed two mediating variables to explain the theoretical linkages between leisure motivation and happiness, which is previously stated by Newman et al. (41) which they focus on the psychological mechanism, and also this is fully in agreement to Sirgy et al. (42) who reported benefits theory of leisure well-being. The empirical evidence from Taiwan's heavy and large motorbike riders has supported the proposed theoretical framework, such as Sirgey et al. (42) and Wu et al. (43).

The empirical evidence from Taiwan's heavy and large motorbike riders has supported the proposed theoretical framework and hypotheses. All of the hypotheses are supported by the findings.

The current research focuses on leisure motivation (Intelligence, sociability, physiologic and stress relief), leisure attitude (cognition, emotion, and behavior), perceived value (price value, emotion, and quality value), and the motorcycle rider's happiness (life-satisfaction, self-affirmation, and interpersonal relationship) in Taiwan. Furthermore, demographic data revealed that females are more likely than males to enjoy as riders in Taiwan.

Furthermore, this research provides policymakers, practitioners, and managers with relevant information in various ways. To begin, the current study shows that motorcycle riders' happiness in Taiwan is linked with leisure motivation through some links which were very important to be explored for further advancement of literature in this research domain. First, the current research grounded in planned behavior theory contributes to motorcycle riders' happiness in Taiwan. Individuals seek to plan and invest time, money, and energy in leisure activities which ultimately are a source of their happiness in life. Emerging increases in such activities necessitate regulatory measures to streamline the practices and avoid unforeseen and adverse circumstances for the leisure seekers and community. Certain types of riders, such as private motorcycle riders and vehicles, should be targeted for security initiatives by governments. Trying to enforce instruction and establish it as a condition for acquiring riding licenses is one technique to ensure that motorcyclists gain some expertise before driving. The training time would act as a means of getting skills. Lastly, means must be intended to guarantee that licensed motorcyclists exclusively use Taiwan roads. The large-heavy motorcycle industry can hold multiple trial rides so that potential participants can continue to experience and cultivate interest, and then provide short-term rental preferential programs allowing potential participants to invest more in large heavy motorcycle activities. The government can also provide tax incentives and loan benefits related to the large heavy motorcycle industry, on the other hand, potential young and middle-aged people can participate. Heavy machinery industry players can also cooperate with this industry to organize various tourism activities in combination with different industries to enrich the riding experience and increase opportunities to get along with other large heavy motorcycle rider. Married motorcycle riders can also try different riding routes and locations, or change the way of travel with family as a new trend. First, take short trips as the learning goal and then extend it to long trips and leisure experiences. Through the beautiful scenery and enjoying the riding, achieve the satisfaction of the

experience, and enhance the perception of the value of perception. And then enhance the degree of satisfaction in happiness. Government can take measures to connect the boost of this passion activity with tourism activities in the country to attract more international tourists to join such sports activities. Many countries use sports and entertainment plus passion events to attract millions of foreign tourists annually. So, governments can benefit from attracting motorbike riders worldwide to come to Taiwan for such activities .

Large heavy motorcycle riders have a high degree of recognition in the exploration of new concepts and improved technology. The riders achieve stress relief and self-affirmation through riding. Therefore, the large heavy motorcycle riders' group can establish a positive image by participating in public welfare activities and self-disciplined riding, and reverse the public's negative impression of it. Since large heavy motorcycle rider also pays great attention to the personal style of the bike and enjoys being chased and taking pictures, we recommended that government legalizes machine modification within certain specifications, where the large heavy motorcycle industry can also hold modified beauty pageants, a well-planned place allows riders to be more engaged and focused when participating in activities, thereby improving overall evaluation after riding, to obtain new goals in life and realize their dreams.

CONCLUSION

The current research focuses on leisure motivation, leisure attitude, perceived value, and motorcycle riders' happiness in Taiwan. Especially current research grounded in planned behavior theory contributes to motorcycle riders' happiness in Taiwan. After analyzing the linear structure model, this study found that the leisure opportunity of heavy-duty riders positively affects leisure attitude, perceived value, and well-being; leisure attitudes will positively affect perceived value, leisure attitude, and perceived value have a mediating effect between leisure motivation and happiness. Therefore, the heavy-duty rider chooses to engage in love riding activities, and the happiness experience generated by his preference increases. Moreover, the rider pays more attention to the positive feelings and evaluations obtained during the reading process and believes that the time and energy spent are worthwhile to obtain positive inner feedback and satisfaction and

relatively improve their happiness. For various theoretical and practical insights, the research establishes a solid foundation for policy development and the happiness of motorcycle riders. The current research extended the literature in the fields of leisure motivation, sports literature, happiness literature, and social sciences literature and can be used as a base study for future explorations in the area of research.

This study takes the Taiwan central region as an example and will expand to other regions in the future to explore whether there are similar research results. In addition, in the follow-up research, different variables or research aspects will be added to explore the relationship between different variables or aspects. The current study, like all others, contains substantial shortcomings that must be addressed in future research attempts. Motorcycle riders in Taiwan participated in the current study. As a result, extrapolating study findings to other countries and other challenging sports activities may be difficult to generalize. Future research could encompass a diverse sample of the happiness of motorcycle riders. Second, the data were collected in a cross-sectional format, despite the likelihood that future researchers may use a longitudinal study design to better accurately assess causation. To generate more meaningful results in future studies, researchers should investigate variables that may mediate the effects. Finally, in future studies, the researcher can use a moderating effect for better results. Furthermore, because the license rate is very low; hence, the influence of license ownership could not be evaluated and was not controlled. Future studies must be considered only those riders who have a license.

APPLICABLE REMARKS
- The present study brings key policy insights for the sports manufacturing business for focusing on leisure motivation, leisure attitude, perceived value, and motorcycle riders' happiness, which will develop this sport among young people at the professional level and with income for the sports industry.

ACKNOWLEDGMENTS

AUTHORS' CONTRIBUTIONS

Study concept and design: Chin-Cheng, Yang, and Ching-Te, Lin. Acquisition of data: Chin-Cheng, Yang and Chen-Ping, Wu. Analysis and interpretation of data: Chin-Cheng, and Ali Akbar Anggara. Drafting of the manuscript: Chin-Cheng, Yang. Critical revision of the manuscript for important intellectual content: Chin-Cheng, Yang.

Statistical analysis: Chen-Ping, Wu. Administrative, technical, and material support: Chin-Cheng, Yang and Chen-Ping, Wu. Study supervision: Chin-Cheng, Yang and Ching-Te, Lin.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

REFERENCES

1. Yang CC, Liu LW, Lin YS, Lin CT, Chang YN. The impact on sports internet celebrity's video watching behavior to sports attitudes and sports behaviors. Talent Development & Excellence. 2020;12:1731-1741.
2. Cheung F, Lucas RE. Assessing the validity of single-item life satisfaction measures: Results from three large samples. Quality of Life research. 2014;23:2809-18. [**doi**:10.1007/s11136-014-0726-4] [**pmid**:24890827]
3. Han H, Chua BL, Lee S, Koo B. Quality, emotion, price, and social values in building passenger loyalty: Impact of relationship quality (mediator) and in-flight physical environments (moderator). Journal of Travel & Tourism Marketing. 2021;38(2):123-138. [**doi**:10.1080/10548408.2021.1887054]
4. Williams DM. Happiness and freedom in direct action: critical mass bike rides as ecstatic ritual, play, and temporary autonomous zones. Leisure Studies. 2018 ;37(5):589-602. [**doi**:10.1080/02614367.2018.1480650]
5. Will S, Metz B, Hammer T, Pleß R, Mörbe M, Henzler M, Harnischmacher F. Relation between riding pleasure and vehicle dynamics-Results from a motorcycle field test. Applied ergonomics. 2021;90:103231. [**doi**:10.1016/j.apergo.2020.103231] [**pmid**:32882503]
6. Kruger S, Venter D. I can't buy happiness but could own a motorcycle: Does leisure life matter. African Journal of Hospitality, Tourism and Leisure. 2020;9(4):469-83.
7. Lin HH, Shen CC, Hsu I, Wu PY. Can electric bicycles enhance leisure and tourism activities and city happiness?. Energies. 2021;14(23):8144. [**doi**:10.3390/en14238144]
8. Ali A, Ahmad-Ur-Rehman M, Haq IU, Jam FA, Ghafoor MB, Azeem MU. Perceived organizational support and psychological empowerment. European Journal of Social Sciences. 2010;17(2):186-92.
9. Belkebir H, Moumen O. Dietary Habits Associated with Sociodemographic and Clinical Parameters of Diabetic Patients in Algeria. Pakistan Journal of Life & Social Sciences. 2022;20(1):15-22.
10. Ashnaiy T, Mostafazadeh M. The Applying of The Urban Lost Spaces In Old Yazd By Using The Concept of Leisure Time. J Art Arch Stud. 2014;3(2):87-94.
11. Damalas CA. Farmers' intention to reduce pesticide use: the role of perceived risk of loss in the model of the planned behavior theory. Environmental science and pollution research international. 2021;28(26):35278-85. [**doi**:10.1007/s11356-021-13183-3] [**pmid**:33665698]
12. Ahmed, A., & Abdur, R. A Study of Intrinsic Leisure Motivation among Prospective Teachers in relations to their Academic Achievement. Educational Quest, 2021; 12: 14-27. [**doi**:10.30954/2230-7311.1.2021.3]
13. Wei X, Huang S, Stodolska M, Yu Y. Leisure time, leisure activities, and happiness in China: Evidence from a national survey. Journal of leisure research. 2015;47(5):556-76. [**doi**:10.18666/jlr-2015-v47-i5-6120]
14. Ito E, Hikoji K. Relationships of involvement and interdependent happiness between domestic and international Japanese masters games tourists. Annals of Leisure Research. 2021;24(2):262-8. [**doi**:10.1080/11745398.2019.1610665]
15. Guo R, Liu X, Song H. Structural relationships among strategic experiential modules, motivation, serious leisure, satisfaction and quality of life in bicycle tourism. International journal of environmental research and public health. 2021 ;18(23):12731. [**doi**:10.3390/ijerph182312731] [**pmid**:34886457]
16. Khomkaiy U. Service Quality that Affects the Behavioral Intention to Re-Visit Low Cost Airline. International Journal of Business and Administrative Studies. 2017;3(4):144-51. [**doi**:10.20469/ijbas.3.10003-4]

17. Sadik F. Investigating primary school teachers' views about their classroom management behavior. Journal of Advances in Humanities and Social Sciences. 2016;2(2):76-84. [**doi**:10.20474/jahss-2.2.2]

18. Chen YC, Li RH, Chen SH. Relationships among adolescents' leisure motivation, leisure involvement, and leisure satisfaction: A structural equation model. Social indicators research. 2013;110:1187-99. [**doi**:10.1007/s11205-011-9979-2]

19. Matsumoto H, Sato S, Asada A, Chiashi K. Exploring the relationship among leisure engagement, affective and cognitive leisure involvement, and subjective happiness: A mediating role of leisure satisfaction. World Leisure Journal. 2018;60(2):111-126. [**doi**:10.1080/16078055.2018.1444669]

20. Waheed M, Kaur K, Ain N, Hussain N. Perceived learning outcomes from Moodle: An empirical study of intrinsic and extrinsic motivating factors. Information Development. 2016 ;32(4):1001-13. [**doi**:10.1177/0266666915581719]

21. Ziauddin I, Khan M, Jam F, Hijazi S. The impacts of employees' job stress on organizational commitment. European Journal of Social Sciences. 2010;13(4):617-22.

22. Sanni SA, Ngah ZA, Karim NH, Abdullah N, Waheed M. Using the diffusion of innovation concept to explain the factors that contribute to the adoption rate of e-journal publishing. Serials Review. 2013 ;39(4):250-7. [**doi**:10.1080/00987913.2013.10766406]

23. Shahbaz M, Jam FA, Bibi S, Loganathan N. Multivariate Granger causality between CO2 emissions, energy intensity and economic growth in Portugal: evidence from cointegration and causality analysis. Technological and Economic Development of Economy. 2016;22(1):47-74. [**doi**:10.3846/20294913.2014.989932]

24. Waheed M, Jam FA. Teacher's intention to accept online education: Extended TAM model. Interdisciplinary Journal of Contemporary Research in Business. 2010;2(5):330-44.

25. Dearing KS, Steadman S. The Psychometric Properties of the Self-Assessment of the Interpersonal Relationship Scale. Perspectives in Psychiatric Care. 2011;47(4):176-82. [**doi**:10.1111/j.1744-6163.2010.00287.x] [**pmid**:21950364]

26. Waheed M, Kaur K. Knowledge quality: A review and a revised conceptual model. Information Development. 2016;32(3):271-84. [**doi**:10.1177/0266666914539694]

27. Waheed M, Kaur K, Kumar S. What role does knowledge quality play in online students' satisfaction, learning and loyalty? An empirical investigation in an eLearning context. Journal of Computer Assisted Learning. 2016 ;32(6):561-75. [**doi**:10.1111/jcal.12153]

28. Tian T, Wang H, Kwong S, Kuo CC. Perceptual image compression with block-level just noticeable difference prediction. ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM). 2021 ;16(4):1-5. [**doi**:10.1145/3408320]

29. Smith SM, Krajbich I. Mental representations distinguish value-based decisions from perceptual decisions. Psychonomic Bulletin & Review. 2021;28:1413-22. [**doi**:10.3758/s13423-021-01911-2] [**pmid**:33821461]

30. Hair JF, Risher JJ, Sarstedt M, Ringle CM. When to use and how to report the results of PLS-SEM. European business review. 2019 ;31(1):2-4. [**doi**:10.1108/EBR-11-2018-0203]

31. Sarstedt M, Hair Jr JF, Nitzl C, Ringle CM, Howard MC. Beyond a tandem analysis of SEM and PROCESS: Use of PLS-SEM for mediation analyses!. International Journal of Market Research. 2020;62(3):288-99. [**doi**:10.1177/1470785320915686]

32. Beard JG, Ragheb MG. Measuring leisure motivation. Journal of leisure research. 1983;15(3):219-28. [**doi**:10.1080/00222216.1983.11969557]

33. Antoniazzi D, Klein R. Risky riders: A comparison of personality theories on motorcyclist riding behaviour. Transportation research part F: traffic psychology and behaviour. 2019;62:33-44. [**doi**:10.1016/j.trf.2018.12.008]

34. Memon MA, Ramayah T, Cheah JH, Ting H, Chuah F, Cham TH. PLS-SEM statistical programs: a review. Journal of Applied Structural Equation Modeling. 2021;5(1):1-4. [**doi**:10.47263/JASEM.5(1)06]

35. Hult GT, Hair Jr JF, Proksch D, Sarstedt M, Pinkwart A, Ringle CM. Addressing endogeneity in international marketing applications of partial least squares structural equation modeling. Journal of International Marketing. 2018;26(3):1-21. [**doi**:10.1509/jim.17.0151]

36. Black W, Babin BJ. Multivariate data analysis: Its approach, evolution, and impact. InThe Great Facilitator: Reflections on the Contributions of Joseph F. Hair, Jr. to Marketing and Business Research

2019 Mar 19 (pp. 121-130). Cham: Springer International Publishing. [**doi**:10.1007/978-3-030-06031-2_16]

37. Chou C, Hsiao MC. Internet addiction, usage, gratification, and pleasure experience: the Taiwan college students' case. Computers & Education. 2000;35(1):65-80. [**doi**:10.1016/S0360-1315(00)00019-1]

38. Downward P, Dawson P. Is it pleasure or health from leisure that we benefit from most? An analysis of well-being alternatives and implications for policy. Social indicators research. 2016;126:443-65. [**doi**:10.1007/s11205-015-0887-8]

39. Hagger MS, Hamilton K. Social cognition theories and behavior change in COVID-19: A conceptual review. Behaviour Research and Therapy. 2022; 12:104095. [**doi**:10.1016/j.brat.2022.104095] [**pmid**:35605335]

40. Norman P, Conner M. The theory of planned behavior and exercise: Evidence for the mediating and moderating roles of planning on intention-behavior relationships. Journal of Sport and Exercise Psychology. 2005 ;27(4):488-504. [**doi**:10.1123/jsep.27.4.488]

41. Newman DB, Tay L, Diener E. Leisure and subjective well-being: A model of psychological mechanisms as mediating factors. Journal of happiness studies. 2014;15:555-578. [**doi**:10.1007/s10902-013-9435-x]

42. Sirgy MJ, Uysal M, Kruger S. Towards a benefits theory of leisure well-being. Applied Research in Quality of Life. 2017;12:205-28. [**doi**:10.1007/s11482-016-9482-7]

43. Wu HC, Ai CH, Chang YY. What drives experiential sharing intentions towards motorcycle touring? The case of Taiwan. Journal of China Tourism Research. 2021 ;17(1):90-119. [**doi**:10.1080/19388160.2019.1705955]