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Research Article

Examining the Essential Factors of Physical and Recreation Management to Enhance Healthy Lifestyles and Subjective Well-being in the Twenty-first Century

Xiaoyu Hu[1] and Khunanan Sukpasjaroen[2*]
[1] *Chakrabongse Bhuvanarth International College of Interdisciplinary Studies, Rajamangala University of Technology Tawan-ok, Thailand, Email: xiaoyu.hu@rmutto.ac.th*
[2*] *Chakrabongse Bhuvanarth International College of Interdisciplinary Studies, Rajamangala University of Technology Tawan-ok, Thailand, * Corresponding author: khunanan__su@rmutto.ac.th*

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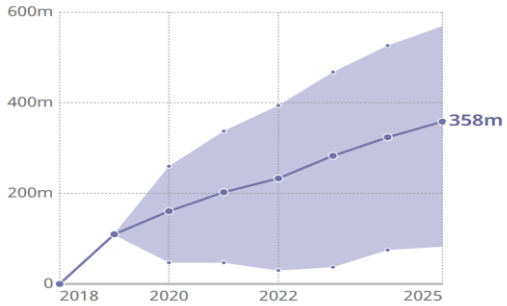
ABSTRACT

This study examines healthy behaviors, workout environments, perceived worth, and well-being among Chinese youth, with the goal of identifying major influencers and making concrete recommendations for improvement. This study examines Chinese adolescents in the 21st century and utilizes quantitative research methodologies. A preliminary survey was done utilizing the quota sampling approach, encompassing 509 Chinese youths from four cities in China. The statistical technique examines all data, encompassing reliability, validity, frequency, percentage, mean, standard deviation, and level. Chinese youth have elevated scores in healthy lifestyles, fitness surroundings, and subjective well-being, achieving the highest ratings in nutrition, physical activity patterns, perceived cost, and life satisfaction. This study found that nutrition, physical activity patterns, and perceived price are key factors influencing Chinese youth's health and subjective well-being.

Keywords: Chinese youth, healthy lifestyle, and subjective well-being.

INTRODUCTION

According to the United Nations (2023), there has been significant progress in improving global health in recent years, notably in regard to the sustainable development goal of Goal 3, which strives to ensure healthy lifestyles and promote well-being for all people of all ages. For example, 146 out of 200 nations or regions have already reached or are on their way to attaining the Sustainable Development Goal (SDGs). In addition, to promote healthy lifestyles and well-being, all countries, particularly developing ones, must increase their ability for early warning, risk reduction, and management of national and global health concerns. In case of China with healthy lifestyles and well-being issues, the health target development in China indicates that by 2025, an estimated 358.2 million individuals (82.3 million – 569.2 million) are projected to have improved health and wellbeing, as seen in Figure 1.



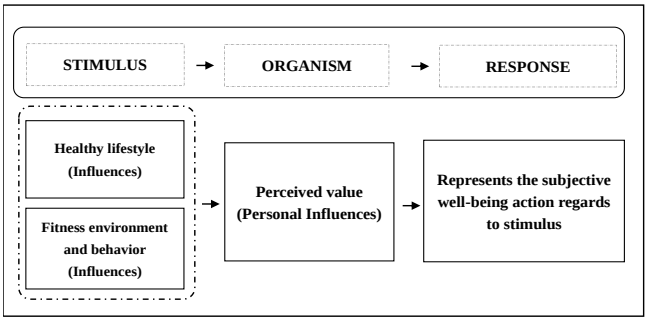
Figures 1. Projected number of additional people expected to be enjoying better health and wellbeing, China, 2018 – 2025

The youth group is the main force for the future development of the country. The development of physical activity can promote the healthy growth of young people to a large extent. Regarding the development of physical activity, young people are restricted by the characteristics of physical activity itself, and their willingness to develop is reduced. In the case of the integrated development of physical activity and entertainment, the extension of fitness drives the relationship between adolescents' perceived value of physical activity entertainment, healthy lifestyle, and adolescent happiness. With respect to the China's perspective in the twenty-first century on the impact of a healthy lifestyle and subjective well-being, the purpose of this paper is to focus on examining the significant aspects of physical and recreation management in order to improve healthy lifestyles and subjective well-being. What influence will it have on a healthy lifestyle and subjective well-being: China's perspective in the 21st century? The findings can be used as a guideline to execute comprehensive management techniques, such as improving their healthy life through sports and exercise.

LITERATURE REVIEW

The research studies and literature related to the present research were thoroughly reviewed as follows. The concept of the stimulus-organization-response (SOR) model theory highlights the importance of healthy lifestyles, fitness environments and behaviors, perceived value, and subjective well-being among young people in China.

According to Zhai et al. (2019), the concept of the stimulus-organization-response (SOR) model theory has the potential to explain and illustrate how many external factors can function as stimuli, influencing an individual's internal state or the organism as a whole and leading to a certain behavioral response. By using the SOR theory to this study, it is possible to define an external stimulus (S) as an external source that influences an individual's internal state, such as a healthy lifestyle, fitness environment, or conduct. An organism (O), also known as an internal state, is the internal perspective of a person's emotional cognition. It has both cognitive and affective components, with the mediator exerting personal influence on perceived values. The response (R), which is the result of an observable activity, represents the organism's reaction to a certain stimulus. As a result, the response (R) can represent an individual's subjective well-being in respect to the stimulus. Figure 2 illustrates the application of the SOR theory to the research framework.



Figures 2. The application of the SOR theories

The Concept of a Healthy Lifestyle: The World Health Organization (WHO) defines a healthy lifestyle as "a lifestyle that reduces the risk of serious illness or early death." (World Health Organization, 1999). Enhance general physical, mental, and spiritual well-being to minimize the likelihood of severe illness or premature mortality. Important elements include consistent exercise, a well-rounded diet, sufficient rest, abstaining from smoking, restricting alcohol intake, and avoiding the usage of recreational substances. According to A. Proctor and colleagues (2023), adopting such practices could greatly decrease the worldwide illness burden, averting millions of deaths annually caused by conditions including cardiovascular disease, cancer, and type 2 diabetes. According to Loef and Walach (2012), integrating these principles can enhance health advantages, perhaps prolonging life expectancy by 7–10

years in the absence of significant illnesses. In previous research, Zhu, NB., et al. (2019) found that the Chinese population does not comply with healthy lifestyle behaviors. Results differ significantly because of methodological variations, such as the criteria used to include people and the definitions of healthy lifestyle practices. Some studies included participants aged ≥ 20 years. In addition, Zhu, NB., et al. (2019) included only middle-aged participants in their study. This study aims to explore the significance of a healthy lifestyle for Chinese youth in the 21st century.

The concept of the fitness environment and behavior, Physical fitness refers to the deliberate engagement in physical exercises that aim to enhance both physical and mental well-being (Wu ZY, et al., 2000). In addition, the World Health Organization (WHO) has identified physical inactivity as the fourth most significant risk factor for mortality on a global scale (WHO, 2014). According to Tremblay et al., (2016), Children and adolescents worldwide often have a low level of physical activity, which decreases as they age and is currently a critical national health issue. To address this difficulty, the field of worldwide public health promotion underwent a transition from focusing on physical fitness testing to adopting a more comprehensive approach to promoting physical activity throughout the latter part of the 20th century. In developed nations such as Canada (Barnes et al., 2016) and the United States (Katzmarzyk et al., 2016), sports literacy and physical health tests are combined with physical activity assessment to provide a comprehensive diagnosis of the physical fitness development of children and adolescents. This approach integrates both the environment and individuals' characteristics. It establishes a foundation for decision-making among key stakeholders (government, schools, families, communities, children, and adolescents), encourages collaborative efforts across many disciplines and sectors, and has resulted in beneficial societal impacts. Prior research has demonstrated that an individual's perception of their environment serves as a connection between the environment and physical activity, depending on their perceptual understanding of their surroundings (Brownson, R. C. et al., 2009). Environmental factors that contribute positively to physical activity include recreational amenities, sidewalks, and well-designed traffic patterns (Sallis, J. F., et al., 2012). More research on the relationship between environment and health is difficult because most studies in this field lack health and fitness findings. Hence, the objective of this study is to analytically assess the correlation between fitness environment and behavior, healthy lifestyle, and subjective well-being of young Chinese individuals by examining the environment and physical activity pattern.

The concept of perceived value: In 1954, Drucker, considered the pioneer of contemporary management, proposed that what consumers purchase is not the physical product itself but rather the inherent value included in it. Porter (1985) was the first to propose the concept of consumer perceived value. He posited that consumer perceived value is the equilibrium between anticipated benefits and possible costs before consumers make purchases of products or services. The notion of perceived value has developed, resulting in increased scholarly attention and explanations in academic circles. The present study posits that the subjective well-being of youths might be influenced by their perceived value of the growth processes of physical and recreation management. The notion of perceived value can be classified into two primary categories: the comparison perspective of value and the comprehensive concept of value. Additionally, Sweeney (2001) divides perceived product value into three categories: functional value, emotional value, and social value. In a study conducted by Yao Y. (2016), the influence of WeChat marketing on consumers' purchase intentions was investigated. The authors assessed this influence from two distinct viewpoints: value and risk. Moreover, Shi Yan (2022) added two dimensions—perceived price and perceived risk— to the study of the perceived value dimension. Based on this research, the classification of perceived value is divided into five dimensions: emotional value, social value, functional value, perceived price, and perceived risk.

The Concept of Subjective Well-Being: According to Diener, subjective well-being is defined as a favorable judgment of life and the sensation of emotional fulfillment. To explain, they define an individual as having a high level of subjective well-being if they consistently experience life satisfaction and enjoyment while rarely experiencing

negative emotions such as grief or fury. In contrast, they consider an individual to have low subjective well-being if they express dissatisfaction with their existence, rarely experience happiness or excitement, and frequently experience negative emotions such as wrath and fear (Diener, Suh, and Oishi, 1997). A UNICEF survey discovered that 62% of Japanese under-18s and 90% of Dutch under-18s are content. In 2020, around 190,000 Japanese primary and secondary school pupils omitted due to bullying and boredom, setting a new record. China's young well-being has skyrocketed in the twenty-first century, while Japan's has not kept pace with Asia's progress. China placed 64th out of 71 countries in terms of student satisfaction on the 2018 PISA test. Chinese youth's satisfaction fell from 41st in 2015 to 42nd.A full assessment of happiness in China requires the integration of several criteria. The subjective happiness of youths correlates positively with the happiness levels in urban regions. To determine China's Happiest City, we selected 103 finalist cities, including Hangzhou. According to the report, Hangzhou, Chengdu, Guangzhou, Ningbo, Nanjing, Wuhan, Wenzhou, Shenzhen, Shanghai, and Shenyang are China's 10 happiest cities.

METHODOLOGY

The research design and instrument in this study employed a quantitative approach, utilizing questionnaires to gather information. Social science statistical techniques such as frequency, percentage mean, standard deviation (SD.), and interpreted the levels of frequency were employed. The research focused on the Chinese youth generation of the 21st century. In addition, the number of Chinese youths is around 15 million persons (China National Bureau of Statistics, 2022). The author calculated the sample size at a 95% confidence level and a 5% margin of error using Taro Yamane's formula, resulting in approximately 400 samples. Then, these implemented the multistage sampling method, adhering to 1) the quota sampling method and 2) the convenience sampling method, to gather the data in a proportional manner. Furthermore, this research used the item-objective congruence (IOC) technique to validate the question with an IOC of 0.5 and above. According to Cronbach (2003), the value of Coefficient Cronbach's Alpha is the following: ≥ 0.9 = excellent, ≥ 0.8 = good, ≥ 0.7 = acceptable, ≥ 0.6 = questionable, ≥ 0.5 = poor, and ≤ 0.5 = unacceptable. Therefore, in order for the research questionnaire to be reliable, the value of the coefficient Cronbach's alpha must be at least 0.7. The Cronbach's alpha coefficient test revealed the reliability values of the questions to be 0.983, indicating a high level of reliability. The data collection was carried out by the distribution of 600 questionnaires, with a total of 509 respondents providing complete information. This indicates that 509 respondents, or 85 percent of the total, returned the questionnaire.

RESULTS AND DISCUSSION

The findings of the study indicated in Table 1 that demographic information suggested that about 50.10 percent of the group that was tested was comprised of male, with the group of individuals who were 19 years old accounting for the largest number, which was estimated to be 29.67 percent. With regard to the distribution of grades, the total number of graduates from universities was 308, which is equivalent to 60.51 percent. The percentage of people who were employed was 21.22 percent. The proportion of family support is the greatest among the current sources of income, accounting for 58.74% of the total, while the overall average monthly income is between 501-1000 RMB, accounting for 25.74% of the total. The second group, which accounts for 22.99% of the total, has an income that is less than 500 yuan.

Table 1. Results of demographic frequency analysis

Items		Frequency	Percent (%)
Gender	Male	255	50.10
	Female	254	49.90
Age	18	93	18.27
	19	151	29.67
	20	12	2.36
	21	90	17.68
	22	55	10.81
	23	26	5.11
	24	82	16.11
Status	Senior high school	93	18.27
	College or university	308	60.51
	Employment	108	21.22
Type of current income	Family support	299	58.74
	Part-time	108	21.22
	Full-time	102	20.04
Average monthly income	500 RMB or less than	117	22.99
	501-1000 RMB	131	25.74
	1001-2000 RMB	89	17.49
	2001-3000 RMB	64	12.57
	More than 3000 RMB	108	21.22

The findings of the investigation into the levels of healthy lifestyle within the context of the descriptive statistics are presented in Table 2.

Table 2. Results of descriptive statistics of a healthy lifestyle

Item	Mean	Standard deviation	Level
Interpersonal Relationship (IR)	3.75	0.990	High
Nutrition (NU)	3.77	0.969	High
Health Responsibility (HR)	3.74	1.002	High
Spiritual Growth (SG)	3.75	0.976	High
Stress Management (SM)	3.75	.934	High
Physical Activity (PA)	3.71	.993	High
Overall degree levels of healthy lifestyle	3.75	.945	High

From Table 2. It is shown that the level of healthy lifestyles was high (mean = 3.75, SD = 0.945); all the factors, including interpersonal relationships (mean = 3.75, SD = 0.990), nutrition (mean = 3.77, SD = 0.969), health responsibility (mean = 3.74, SD = 1.002), spiritual growth (mean = 3.75, SD = 0.976), stress management (mean = 3.75, SD = 0.934), and physical activity (mean = 3.71, SD = 0.993), had the highest average level. The highest score is Nutrition. Prioritizing nutritional education and awareness is crucial for promoting healthier lifestyle choices and enhancing overall well-being.

The findings of the investigation into the levels of fitness environment and behavior within the context of the descriptive statistics are presented in Table 3.

Table 3. Results of descriptive statistics of fitness environment and behavior

Item	Mean	Standard deviation	Level
Family fitness environment (FFE)	3.70	1.132	High
School fitness environment (SFE)	3.71	1.044	High
Community fitness environment (CFE)	3.69	1.001	High
Physical activity pattern (PAP)	3.72	1.059	High
Overall degree levels of fitness environment and behavior	3.71	.982	High

From Table 3. The results of the study into the levels of fitness environment and behavior showed that the levels of fitness environment and behavior were high (mean = 3.71, SD = 0.982). All of the factors, such as family fitness environment (mean = 3.70, SD = 1.132), school fitness environment (mean = 3.71, SD = 1.044), community fitness environment (mean = 3.69, SD = 1.001), and physical activity pattern (mean = 3.72, SD = 1.059), had high average levels. The highest-scoring factor in the fitness environment and behavior category is physical activity pattern. It is likely to enhance programs and initiatives that encourage regular physical activity among youth to maintain and improve their fitness levels.

The findings of the investigation into the levels of perceived value within the context of the descriptive statistics are presented in Table 4.

Table 4. Results of descriptive statistics of perceived value

Item	Mean	Standard deviation	Level
Emotional value (EV)	4.04	.866	High
Social value (SV)	4.01	.823	High
Functional value (FV)	4.00	.808	
Perceived price (PP)	4.05	.758	High
Perceived risk (PR)	4.01	.853	High
Overall degree levels of perceived value	4.02	.738	High

Table 4 shows the descriptive statistics of perceived value. The level of perceived value was high (mean=4.02, SD=0.738). All of the factors that made up perceived value were high on average. These were emotional value (mean=4.04, SD=0.866), social value (mean=4.01, SD=0.823), functional value (mean=4.00, SD=0.808), perceived price (mean=4.05, SD=0.758), and perceived risk (mean=4.01, SD=0.853). The highest-scoring factor in the perceived value category is Perceived Price. It is likely to focus on making fitness-related products and services more affordable to increase participation and accessibility for a broader range of individuals.

The findings of the investigation into the levels of subjective well-being within the context of the descriptive statistics are presented in Table 5.

Table 5. Results of descriptive statistics of subjective well-being

Item	Mean	Standard deviation	Level
Positive And Negative Affect Schedule (PANAS)	3.62	.988	High
Satisfaction With Life Scale (SWLS)	3.67	.980	High
Overall degree levels of subjective well-being	3.651	.966	High

In Table 5, the descriptive statistics of subjective well-being, which show the levels of subjective well-being, were found to be high (mean = 3.651, SD = 0.966). All of the factors, such as the positive and negative affect schedule

(mean = 3.62, SD = 0.988) and the satisfaction with life scale (mean = 3.67, SD = 0.980), also had high average levels. The highest-scoring factor in the subjective well-being category is the satisfaction with life scale. It is suggested to implement programs that further enhance life satisfaction by promoting balanced lifestyles, including physical, mental, and social well-being for Chinese youth.

By analysis of the measured variables, the correlation of different variables showed significant positive correlation. The details are presented in Table 6.

Table 6: The relationships between the variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Interpersonal Relationship (IR)	1																
Nutrition (NU)	0.927**	1															
Health Responsibility (HR)	0.924**	0.937**	1														
Spiritual Growth (SG)	0.926**	0.925**	0.930**	1													
Stress Management (SM)	0.912**	0.920**	0.901**	0.914**	1												
Physical Activity (PA)	0.925**	0.921**	0.928**	0.931**	0.897**	1											
Family fitness environment (FFE)	0.323**	0.295**	0.267**	0.321**	0.297**	0.276**	1										
School fitness environment (SFE)	0.481**	0.468**	0.454**	0.511**	0.486**	0.489**	0.776**	1									
Community fitness environment (CFE)	0.465**	0.467**	0.441**	0.486**	0.483**	0.461**	0.756**	0.887**	1								
Physical activity pattern (PAP)	0.456**	0.467**	0.430**	0.471**	0.473**	0.441**	0.728**	0.876**	0.873**	1							
Emotional value (EV)	0.226**	0.255**	0.235**	0.212**	0.182**	0.241**	0.171**	0.229**	0.225**	0.285**	1						
Social value (SV)	0.247**	0.305**	0.252**	0.255**	0.237**	0.255**	0.309**	0.309**	0.290**	0.351**	0.757**	1					
Functional value (FV)	0.246**	0.241**	0.237**	0.232**	0.225**	0.246**	0.249**	0.303**	0.269**	0.331**	0.780**	0.729**	1				
Perceived price (PP)	0.223**	0.223**	0.221**	0.190**	0.183**	0.234**	0.235**	0.222**	0.240**	0.273**	0.782**	0.715**	0.742**	1			
Perceived risk (PR)	0.308**	0.315**	0.302**	0.302**	0.276**	0.304**	0.285**	0.320**	0.313**	0.348**	0.815**	0.702**	0.783**	0.789**	1		
Positive And Negative Affect Schedule (PANAS)	0.464**	0.476**	0.441**	0.470**	0.440**	0.475**	0.407**	0.512**	0.530**	0.465**	0.305**	0.303**	0.255**	0.248**	0.384**	1	
Satisfaction With Life Scale (SWLS)	0.381**	0.390**	0.355**	0.391**	0.363**	0.372**	0.382**	0.496**	0.510**	0.454**	0.254**	0.221**	0.198**	0.199**	0.350**	0.929**	1

* $p<0.05$ ** $p<0.01$

CONCLUSIONS

To sum up, this study identified key findings regarding healthy lifestyles, fitness environments, perceived value, and subjective well-being among Chinese youth in order to identify major influencers and make practical suggestions for improvement. In terms of a healthy lifestyle, nutrition had the highest score, emphasizing the critical role of balanced eating habits. In addition, physical activity pattern was the highest-rated aspect of fitness environment and behavior, highlighting the need for continuous support in promoting physical activity. Moreover, perceived price stood out as the most significant factor in perceived value, underscoring the importance of making fitness products and services more affordable. Furthermore, the satisfaction with life scale scored highest in subjective well-being, showing that participants were generally content with their lives but could benefit from more comprehensive well-being programs.

Based on these findings, it is suggested to enhance nutritional education and awareness, particularly among youth, and to strengthen efforts by schools, families, and communities in promoting physical activity. We should prioritize lowering the costs of fitness-related services to increase their accessibility to a wider population. Furthermore, programs aimed at improving overall life satisfaction through balanced physical, mental, and social health should be developed. There are several limitations to this study. First, the data is based on self-reported measures, which may introduce biases such as overestimation or underestimation of lifestyle behaviors. The study's focus on Chinese youth limits its generalizability to other age groups and cultures. Moreover, the cross-sectional design restricts the

ability to establish causal relationships between the factors examined. Future research should address these limitations by incorporating objective measures of health behaviors and expanding the study to other demographic groups. Longitudinal research could provide insight into how lifestyle factors evolve. Furthermore, collaboration with key stakeholders, such as the government, educational institutions, and healthcare providers, is crucial for developing policy-driven strategies that promote healthy lifestyles, fitness environments, and well-being on a broader scale. Such collaboration would ensure more sustainable and impactful improvements in youth health and well-being across different regions.

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