

Article

Driving Factors of the Health and Wellness Tourism Industry: A Sharing Economy Perspective Evidence from KPK Pakistan

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Abstract: In the recent years, the health and wellness tourism industry has become one of the new emerging industries in Pakistan. In terms of the sharing economy, the driving mechanism of the health and wellness tourism industry has undergone significant changes. Based on a combination of theoretical and practical research, the paper explores the dynamic system and mechanism of innovation development of health and wellness in the tourism industry in Pakistan. Firstly, it theoretically constructs the driving factors in four aspects, which include market demand, industrial supply, infrastructure, and external environment. Secondly, taking Khyber Pakhtunkhwa province (KPK) as an example, it uses the entropy method and Grey relational analysis to test the driving factors system. The empirical results show that four aspects jointly influence the innovation of the health and wellness tourism industry in Pakistan. Finally, this study discusses several practical implications for the development of the health and wellness tourism industry of KPK for academics, policymakers, business owners, and scholars, with recommendations for future research.

Keywords: tourism economy; sharing economy; health and wellness tourism; innovation



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1. Introduction

International tourism is becoming increasingly vital throughout the world [1]. As per the report of the World Tourism Organization (WTO) in 2018, international tourists spent \$1.3 billion per day and in total \$462 billion in the year 2001 alone. In most countries, tourism revenue is considered a substitute for export earnings and significantly contributes to their balance of payment [2]. The government can generate revenue and enhance household income by developing this sector and easing austere visa policies for international visitors/tourists. There are many examples where tourism has a very positive impact on the economy, and tourism positively contributes to the economic development of Pakistan [3]. Tourism positively contributes to the local income development of KPK Pakistan [4].

In the new sharing economy era, against the backdrop of implementing a healthy Pakistan strategy and vigorously developing a modern service industry, Pakistan's health and wellness tourism industry has risen rapidly [5,6]. The health care tourism industry is an emerging industrial form formed by the mutual penetration, crossover, and gradual integration of multiple sectors such as the elderly care service industry, tourism, healthcare, leisure, real estate, and cultural industries [7]. It has gradually become a new growth point and source of vitality for my country's national economy [8]. In the new era, a new

economic model centered on improving the utilization efficiency of idle resources using an information technology style sharing economy has gradually risen, in addition to its development concept, business logic, and profit model [9,10].

The formula and other aspects have had a significant impact on the traditional health tourism industry and brought new challenges and opportunities as well as new problems to the development of the health tourism industry [11,12]. The motivation and motivation mechanism of the innovative action of the health and wellness tourism industry under the sharing economy is a major theoretical issue for the development of the health and wellness tourism industry in the new economic environment. It is a scientific plan for the development strategy of the health and wellness tourism industry prerequisites and foundations [13,14].

The rise and development of the health tourism industry is affected by many factors [15]. Scholars have conducted extensive research on the motivations of the development of the health tourism industry; these include external driving factors, including world political and economic integration [16–18], government support and promotion [19,20], economic and social effects [21,22], network communication technology and information technology revolution [23,24], faster transportation [25] (Rodriguez, 2001), healthy lifestyle of the new generation [26–28], population aging and lifestyle changes, the formation of residents' healthy consumption concepts, and tourism consumption demand [29–32]. Internal driving factors mainly include health tourism resources, such as medical technology and service projects [33], cost and benefit [34], medical equipment [35], and environmental infrastructure [36–38].

In summary, health and wellness tourism refers to individuals' tourism activities undertaken to fulfill physical, emotional, psychological, and intellectual wellness [39,40]. Health and wellness tourism thus offer various opportunities to enhance life satisfaction, happiness with life, health condition, social/emotional wellbeing, and mental health [41]. The research scope of the development motivation of the health tourism industry at Pakistan and abroad continues to extend, and the research content is gradually refined and deepened. With the advent of the era of the sharing economy, the external and internal environment for the development of the health and wellness tourism industry has undergone significant changes. Traditional theories can no longer effectively explain the new theoretical issues that have emerged in developing the health and wellness tourism industry under the new economy. This article is based on the research on the motivations of the innovation and development of the health tourism industry and its driving mechanism in the new environment of the sharing economy, which can fill the gaps in existing research in this regard. Driving factors for the innovation and development of the health tourism industry under the sharing economy and theoretical thoughts combined with the development practice of the health tourism industry under the new economic environment construct a dynamic framework for the innovation and development of the health tourism industry (Figure 1). The framework is composed of four sub-elements: market demand power system, industrial power system, infrastructure power system, and external environmental power that constitute a power system with the same overall system, and the roles of each component are different. The market demand power system is the source of consumption power. The industry supply power system is the source of power. Both influence the direction of innovation and development of the health tourism industry from the market side and the supply side. Infrastructure power material guarantees power, which ensures the orderly operation of the industrial system. Material conditions and the external environmental power system are the inducing power, which supports the innovative development of the health tourism industry from the aspects of politics, economy, culture, technology, and so on.

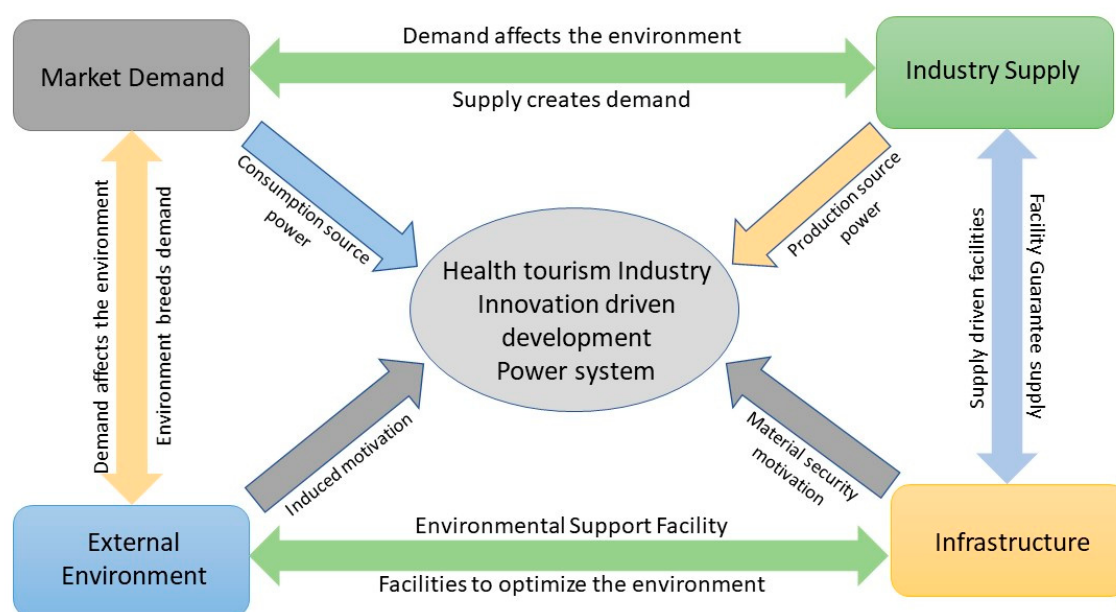


Figure 1. Framework Health tourism industry innovation driven development power system.

1.1. Market Demand Power System

Significant changes have taken place in the market demand for health and wellness tourism in the era of the sharing economy [42,43]. The expansion of market demand, the upgrading of market consumption structure, and the transformation of market demand patterns have promoted the health and wellness tourism industry [14,44].

1.1.1. The Scale of Market Demand in the New Era

With the rapid development of Pakistan social economy and continuous improvement, people's dual demand for health and tourism, has promoted the rapid growth of the new market for health and wellness tourism [45,46]. The sharing economy relies on mobile Internet technology, cloud computing, big data, intelligent terminals, and other technical means to improve the efficiency of the use of idle resources and innovate the consumption method of "use instead of ownership" that separates the right to use and ownership, to provide health for tourists [18]. Elderly consumer groups, in particular, obtain comfortable health and agree tourism services at a lower cost, which increases the purchasing power of health and wellness tourists, drives the increase in total purchasing power, and improves the welfare level of the entire health and wellness tourism consumer, thereby stimulating health and wellness—the diverse needs of the tourism market. Second, the sharing economy broadens health tourism consumption by creating idle resources and reusing the market. Relying on the sharing platform to make more efficient use of scattered resources, meeting the personalized and diversified needs of the health tourism market with lower cost and higher efficiency under the sharing economy model, and realizing the long tail effect and scale effect [47] can further expand the scale of the health tourism market.

1.1.2. Market Consumption Structure

The sharing economy has reduced transaction costs and increased supply through advanced information technology [48]. The need to match efficiency has relatively improved the level of consumption in the market and broadened the scope of consumption, making improving the quality of life a common pursuit of public health tourism consumers, thereby promoting the upgrade of the consumption structure of the health tourism market from sightseeing consumption to experiential consumption [49,50]. Upgrade from material consumption to service consumption [51], upgrade from physiological consumption to

spiritual consumption [52]. The proportion of non-basic tourism consumption of leisure and entertainment, physical and mental health, cultural experience, social and emotional communication, and value realization of health tourists have increased. In contrast, the proportion of basic tourism consumption has declined [53]. The consumption structure upgrade of the health care tourism market directly promotes the upgrading of domestic health care tourism products, the deconstruction and reconstruction of the health care tourism industry chain, and the transformation of industrial production and management, which promote the innovative development of the health care tourism industry [54,55].

1.2. Industrial Power Supply System

Tourism development has become a main policy of the government of KPK to create employment and regional economic [56–58]. However, tourism has long been observed as having environmental effects [6,20] and results in a full variety of such influences and should be regarded as any other industry, especially in natural or semi-natural environments. Governments, non-governmental organizations (NGOs), local communities, and the commercial sector are all concerned about the obvious need for tourist management and environmental planning [59,60]. To mitigate the negative effects of tourism, a variety of measures are encouraged, including land-use zoning, carrying capacity analysis, limits of acceptable change (LAC), and environmental impact assessments (EIA), but they are mostly used to address issues relating to outdoor recreation, with few relating to catering management.

In the new environment of the sharing economy, the supply of the health care tourism industry has undergone significant changes in external industry competition and internal industrial upgrading, which promotes the innovative development of the health care tourism industry [56,61].

1.2.1. External Industry Competition

The driving force of external industry competition is the market environment of the health and tourism industry under the sharing economy [62,63], competition in the face of alternative competitors [64]. The sharing economy has broken the traditional pattern of industrial competition and promoted adaptive adjustments to the innovation activities of the health and tourism industry, thereby affecting the scope, direction, and degree of industrial innovation [65]. The alternative competitors of the health care tourism industry include health care institutions, the nursing service industry, health food, medical care, etc. [66]. Tourism real estate, education, training, leisure, and entertainment industries in the sharing economy, alternative competitors in the health and tourism industry can use the Internet, big data, cloud computing, and other high-tech means to establish more efficient and economical connection channels with consumers, reduce market entry barriers, and increase market supply. This all promotes industrial competition and innovation. In short, external industrial competitiveness has become an important driving force for creating and developing the health tourism industry [67].

1.2.2. Internal Industrial Upgrading

Pursuing profits is an economic motivation for promoting the innovation of the health and wellness tourism industry [68]. Most profitable big erization and cost minimization are the fundamental driving forces for the internal upgrading of the health and wellness tourism industry. New market opportunities are the source of profit. Under the sharing economy, the market demand for health care tourism is gradually showing a trend of diversification, individualization, decentralization, and nickelization, which puts forward new requirements for the supply mode and efficiency of the health care tourism industry [69]. To open up new markets, companies within the health care tourism industry have gradually increased their investment in operations, marketing, and research and development. They have continuously strengthened their capabilities in product innovation, market boundary expansion, and technological innovation [70]. At the same time, under the shar-

ing economy, health and tourism enterprises integrate idle social resources for integrated management, innovate “asset-light” business models to save operating costs, use shared trading platforms to optimize transaction processes, build collaborative partnerships to keep transaction costs, use information technology means, innovative marketing methods to save market costs, innovative, agile manufacturing systems and shared rental services to respond to the personalized customization needs of health tourists promptly [71]. By reducing costs, health care tourism companies can increase market share and expand reproduction with products with higher price-performance ratios, thereby promoting a benign interaction between production and consumption [72]. Therefore, the internal upgrading power of the health tourism industry under the sharing economy is the leading motivation for continuous innovation.

1.3. Infrastructure Power System

Infrastructure is the essential material condition for the orderly operation of health tourism economic activities and one of the driving factors to promote the innovation of the health tourism industry [73]. The cost of production and operation activities for health tourism companies in areas with good infrastructure conditions will be lower than in other regions [74]. At the same time, regions with good infrastructure will have a larger market size and market opportunities, which will have more significant opportunities for health tourism companies [75]. The infrastructure power system includes elements such as medical facilities, transportation facilities, cultural and sports facilities, and commercial service facilities [76,77].

1.4. External Environment Power System

Under the sharing economy, the political, economic, social, cultural, and technological environments of the health and wellness tourism industry have undergone significant changes [46]. The policy superimposition affects economic transformation, and development, social and cultural differences, and scientific and technological innovation have become essential to promote the creation and development of the health and wellness tourism industry's creation and development [78].

1.4.1. Policy Environment

Entering the era of sharing economy, as Pakistan population increasingly ages as an essential part of the health industry, the health and wellness tourism industry has gradually received more attention [79]. With the attention and support of the central and local governments, the new PTI government has issued a series of preferential policies, such as several opinions on promoting the development of the health service industry and trying to give various preferential policies to the health and wellness tourism industry in terms of investment, approval, taxes, land, management, and talents [61]. The superimposed effect of the policy can not only invest a large amount of fiscal funds to increase social security expenditures and improve people's living standards [80], it can also attract social capital into the health tourism industry, from a suitable market guidance mechanism [81], and becomes an essential motivation for promoting the innovation of the health tourism industry.

1.4.2. Economic Environment

The domestic economic environment presents new characteristics, which affect the direction, method, and efficiency of the innovative development of the health tourism industry. In the new era, the less-developing countries' economies are downward, and Pakistan's economy has entered a unique, developing situation. The economy has shifted from high-speed growth to medium- and high-speed growth, from extensive growth of scale and speed to intensive growth of quality and efficiency, and from being factor investment-driven to innovation-driven. Affected by the economic environment, people's incomes have fallen, unemployment has risen, disposable income has fallen, and market purchasing power has fallen relatively. Therefore, people have begun to re-examine the

concept of consumption. More and more people have gradually accepted the sharing of consumption methods to reduce consumption costs and increase sources of income and livelihood [82]. The rapid development of the sharing economy has expanded the scale of demand in the health and health tourism market, increased the level of demand and purchasing power, and stimulated the expansion of reproduction and innovation and upgrading of the health and health tourism industry; the sharing economy model uses the right to use idle resources through the monetization of idle resources [83]. Production and operation have greatly enriched the supply of operating resources for the health and wellness tourism industry, reduced resource use costs and resolved overcapacity, and promoted the development of the health and wellness tourism industry from extensive development of a scale to intensive development of quality, and a “heavy asset” management mode. There was a shift to the “asset-light” business model, and shift from being capital-driven to innovation-driven.

1.4.3. Cultural Environment

Pakistan’s aging population is gradually increasing, and population flows are becoming more frequent [83]. In addition to the accelerating pace of modern life, the structure and functions of Pakistani families have undergone tremendous changes [84]. The family structure tends to be miniaturized and empty-nested, and family functions tend to be core, leading to the continuous weakening of family care functions. More and more families seek social services to meet the needs of the elderly. The contradiction between the rapid growth of market demand for health care tourism and the relative shortage of market supply forces the health care tourism industry to urgently need innovation [85]. On the other hand, the changes in consumption concepts in the new environment of the sharing economy have caused health tourism tourists to shift from focusing on product ownership to using rights, from preferring mass consumption to individual consumption, from focusing on material consumption to spiritual and cultural consumption, and from advocating excessive consumption to sustainable green consumption. The change of consumption concept directly causes the consumption behavior and consumption pattern of health tourists to change accordingly, which has become a significant force to promote the innovation of the health tourism industry.

1.4.4. Technological Environment

The technological environment has undergone significant changes. Data, cloud computing, mobile payment, artificial intelligence, and other advanced science and technology continue to penetrate and optimize the products, production and operation methods, markets, supply chains, organizations, and other aspects of the health tourism industry and are in the process of the development of the health tourism industry [86,87] that carried out continuous and repeated small innovations until the accumulation becomes a qualitatively changing disruptive innovation, forming a spiraling development trajectory for the industry [88]. Technological innovation will speed up the development of new health tourism products, shorten the life cycle of existing health tourism products, and accelerate product upgrades [89]. Technological innovation has created a “supplier-sharing platform-consumer” platform economy business model, which has changed the traditional supply-demand relationship [90,91]. At the same time, technological innovation reduces costs by optimizing transaction processes and institutional changes, thereby promoting innovation in the health and wellness tourism industry. The platform economy created by technological innovation enables the health and wellness tourism industry to disintermediate or re-intermediate and establish platform-based transaction relationships. In contrast, the cost and expense of the platform are lower than that of the enterprise, thus effectively reducing transaction costs [92], and technology innovation is realized the instant optimal matching of supply and demand has reduced information asymmetry, and effectively reduced the money and time costs of transactions; the popularity of smartphones and other intelligent terminals, and mobile payment technology, have improved transaction

efficiency and security, and effectively reduced the cost of payment [93]. Platform big data and trading institutions have established a trust mechanism for the network economy, which effectively protects both supplier's and consumers' rights and interests and effectively reduces the risk and cost of online market transactions [94].

2. Materials and Methods

Variable Selection and Data Sources

Based on the theoretical analysis of the article to construct the driving factors and indicator system of the innovation and development of the health tourism industry KPK Pakistan under the sharing economy environment (see Table 1), the article uses Pakistan the annual time series data from 2009 to 2018. The relevant index data are from 2009–2018 (Annual Statistical reports, KPK national economic, and social development statistical data) (see Table 2).

Table 1. Index system of driving factors for the innovation and development of the health tourism industry.

Level	Element	Evaluation Index
Market demand	Market demand scale Market consumption structure external industry competition	Number of tourists (X1) Number of elderly population (X2)
Dynamics system	Internal industry upgrades medical facilities Transportation facilities	Health care as a share of consumer spending (X3) Beds in nursing homes (X4)
Infrastructure Power System	Sports facilities Commercial Service Facilities	Tourism revenue/tertiary industry (X5) Number of health beds per 10,000 population (X6) Mileage of road routes per square kilometre (X7) Number of buses and trams per 10,000 inhabitants (X8) Per capita sports area (X9) Total retail sales of consumer goods per capita (X10)
External environmental dynamic system	Policy environment Economic environment Humanities environment science and technology environment	Growth rate of tertiary industry investment (X11) GDP per capita (X12) Per capita disposable income of permanent residents (X13) Cultural institutions per 10,000 population (X14) Number of patents granted (X15)

Table 2. Statistical value of the driving factors for the innovation and development of the KPK health care tourism industry from 2009 to 2018.

Index	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total number of tourists (100 million yuan) (X0)	561.53	703.23	917.85	1268.62	1662.15	1171.02	2003.37	2250	2645	3308
Tourists (100 million yuan) (X1)	1.01	1.23	1.62	2.22	2.9	3.08	3.49	3.92	4.5	5.42
Number of elderly population (10,000) (X2)	319.39	325.35	333.41	337.73	341.03	352.84	359.27	367.11	381.97	406.54
Health care as a share of consumer spending (X3)	0.0613	0.066	0.0638	0.0588	0.0639	0.0679	0.07	0.0738	0.082	0.0822
Beds in nursing homes (piece) (X4)	61,199	69,171	76,996	91,746	102,251	113,066	156,763	83,473	85,511	82,005
Tourism revenue/tertiary industry (%) (X5)	26.89	28.42	32.18	35.01	38.24	33.7	30.02	30.01	31.12	34.59

Table 2. Cont.

Index	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Number of health beds per 10,000 population (X6)	23.92	26.5	29.16	32.18	36.29	40.7	44.06	48.75	52.3	56.79
Road mileage per km2 (X7)	1.318	1.347	1.419	1.439	1.465	1.491	1.546	1.706	1.734	1.795
Buses and electric vehicles per 10,000 population (X8)	3.292	2.825	2.618	2.68	2.71	4.07	4.169	4.256	4.273	4.4466
Per capita sports area (m2) (X9)	0.68	0.8	0.9	1	1.1	1.2	1.37	1.37	1.37	1.37
Total retail sales of consumer goods per capita (RMB) (X10)	7291	8671	10,624	12,019	13,758	17,095	19,159	21,385	3978	26,349
Growth rate of tertiary industry investment (X11)	0.249	0.281	0.316	0.249	0.285	0.217	0.185	0.161	0.119	0.0068
GDP per capita (yuan) (X12)	20,618	23,085	27,800	34,762	39,236	43,599	48,288	52,837	58,502	63,689
Per capita disposable income of permanent residents (X13)	9915	10,361	11,775	14,055	16,263	16,569	18,352	20,110	22,034	24,153
Cultural institutions per 10,000 population (X14)	0.037	0.042	0.042	0.042	0.042	0.052	0.054	0.055	0.056	0.058
Patent grants (X15)	4820	7501	12,080	15,525	20,364	24,828	24,312	38,915	42,738	34,780

As an objective weighting method, the entropy method has more apparent advantages when the number of evaluation objects is more significant, and the index system is more complicated [11]. It is more objective and scientific. According to the step calculation of non-dimensional processing of evaluation indicators and objective weighting by the entropy method [12], the final weight results of each indicator are determined (see Table 3), and the weighted calculations of KPK health tourism in each year from 2009 to 2018 are presented. The level of industrial innovation development is presented in Table 4, and finally Grey relational analysis is used for the factor affecting KPK health tourism.

Table 3. Index weight calculation result.

Level	Element	Index	Weight
Market demand	Market demand scale	number of tourists (X1)	0.0642
Seek motivation		Number of elderly population (X2)	0.0606
system Industry	Market consumption structure	Proportion of healthcare in consumer expenditure (X3)	0.0702
supply	External industry competition	Number of beds in elderly care institutions (X4)	0.0532
Give motivation	Internal industrial upgrading	Tourism income/tertiary industry (X5)	0.053
system	External industry competition	Number of sanitary beds per 10,000 people (X6)	0.0687
Industrial supply	Internal industrial upgrading	Highway mileage per square kilometer (X7)	0.0711
Give motivation	Medical Facilities	Number of public automobile and electric vehicles per 10,000 people (X8)	0.0998
system	Transportation Facilities	Sports ground area per capita (X9)	0.0697
Infrastructure	Sports Facilities commercial service facilities	Total retail sales of consumer goods per capita (X10)	0.0693
Power		Tertiary industry investment growth rate (X11)	0.043
System			
outer ring	cultural environment	GDP per capita (X12)	0.0676
		Per capita disposable income of permanent residents (X13)	0.0694
Environmental dynamics	Economic environment	Number of cultural institutions per 10,000 people (X14)	0.0721
system	Technological environment	Number of patents granted (X15)	0.081

Table 4. Level of innovation and development of KPK tourism industry from 2009 to 2018.

Year	Score	Year	Score
2008	0.078	2013	0.555
2009	0.154	2014	0.641
2010	0.221	2015	0.712
2011	0.286	2016	0.807
2012	0.397	2017	0.884

3. Results

3.1. Objective Weighting Method

The results show that the innovation and development level of the KPK health and wellness tourism industry has grown very rapidly in the past ten years, reflecting the typical innovation-driven development characteristics of the KPK health and wellness tourism industry.

3.2. Grey Relational Analysis

The above analysis shows that the innovative development of the KPK health and wellness tourism industry is affected by many factors. However, the extent of these factors is still unknown, and further analysis is needed. Julong [95] proposed the grey system theory, which compared with traditional statistical methods, is applicable regardless of the sample size or the irregularities of the sample [96]. Therefore, the grey relational analysis method can be used to analyze the degree of influence of different dynamic factors on the innovation and development of the KPK health tourism industry. Regarding the creation and development of the KPK health and wellness tourism industry as a gray system, the total tourism revenue of KPK from 2009 to 2018 is used as the reference sequence, and the comparison sequence of 15 evaluation indicators is shown in Table 2.

Association sequence (see Tables 5 and 6). Suppose the gray correlation degree of a certain driving factor is greater. In that case, the correlation degree between this factor and KPK tourism income is higher, and the degree of influence on the innovation and development of the health tourism industry is more significant; if the gray correlation degree is smaller, the factor is the lower the degree of correlation with KPK tourism income, the smaller the impact on the innovation and development of the tourism industry of health and wellness. As COVID-19 affects every sector of the economy, the Pakistan tourism industry also suffers from COVID-19 during the period for 2019 to 2021 [97,98].

Table 5. Calculated value of correlation coefficient.

Year Index	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
X1	0.9862	0.9942	0.9872	0.9882	0.9871	0.9896	0.986	0.9841	0.9849	0.9163
X2	0.6311	0.6589	0.7075	0.8212	0.9963	0.9668	0.8667	0.7827	0.6806	0.558
X3	0.6381	0.6443	0.7182	0.9005	0.9566	0.9513	0.8634	0.8008	0.7339	0.5704
X4	0.7471	0.7451	0.7687	0.7969	0.8796	0.8395	0.6519	0.7062	0.6142	0.4854
X5	0.659	0.6749	0.6787	0.7381	0.8172	0.9851	0.8086	0.7229	0.6318	0.5358
X6	0.7773	0.7878	0.8257	0.9248	0.9589	0.9975	0.9582	0.9361	0.8261	0.6723
X7	0.6487	0.6772	0.7157	0.8318	0.9888	0.9446	0.862	0.8333	0.7062	0.563
X8	0.6212	0.7185	0.8299	0.9857	0.828	0.8968	0.9944	0.8984	0.7447	0.5949
X9	0.7791	0.7643	0.7862	0.8661	0.9882	0.9632	0.948	0.9184	0.7557	0.5824
X10	0.8876	0.885	0.888	0.9939	0.8971	0.9717	0.9787	0.984	0.951	0.7722
X11	0.5278	0.508	0.4966	0.6781	0.7048	0.9818	0.7845	0.6496	0.5047	0.3338
X12	0.8529	0.8703	0.879	0.9085	0.9803	0.9805	1	0.9667	0.8853	0.7165
X13	0.7811	0.8171	0.8446	0.8951	0.9798	0.9781	0.9526	0.9199	0.8318	0.6829
X14	0.6909	0.6808	0.7454	0.8824	0.9111	0.9556	0.9555	0.8534	0.7219	0.5759
X15	0.8965	0.9266	0.9991	0.9484	0.934	0.9441	0.9126	0.7087	0.7417	0.7142

Table 6. Evaluation results of grey relational degree and relational order.

Element	Evaluation Index	Correlation	Associative Order
Market demand scale	Number of tourists (X1)	0.98038	1
	Number of elderly population (X2)	0.76698	12
Market consumption structure	Proportion of healthcare in consumer expenditure (X3)	0.77777	10
External industry competition	Number of beds in elderly care institutions (X4)	0.72345	14
Internal industrial upgrading	Tourism income/tertiary industry (X5)	0.72521	13
Medical Facilities	Number of sanitary beds per 10,000 people (X6)	0.86629	6
Transportation Facilities	Highway mileage per square kilometer (X7)	0.77736	11
	Number of public automobile and electric vehicles per 10,000 people (X8)	0.81125	8
Sports facilities	Sports ground area per capita (X9)	0.83515	7
Commercial Service Facilities	Total retail sales of consumer goods per capita (X10)	0.92094	2
Policy Environment	Tertiary industry investment growth rate (X11)	0.61697	15
Economic environment	GDP per capita (X12)	0.90399	3
	Per capita disposable income of permanent residents (X13)	0.86830	5
cultural environment	Number of cultural institutions per 10,000 people (X14)	0.7973	9
Technological environment	Number of patents granted (X15)	0.87231	4

The evaluation results show that the gray correlation between tourism income and various driving factors in KPK is ranked as follows: number of tourists, total retail sales of consumer goods per capita, GDP per capita, number of patent authorizations, per capita disposable income of permanent residents, and health per 10,000 people; the number of beds, the area of sports venues per capita, the number of public automobile and vehicles per 10,000 people, the number of cultural institutions per 10,000 people, the proportion of medical care in consumption expenditure, the mileage of roads per square kilometer, the number of elderly people, tourism income/tertiary industry; the number of beds in pension institutions, and the growth rate of investment in the tertiary industry (see Table 6).

4. Discussion

According to Zada, Zada [4], tourism creates employment opportunities and contributes to Pakistan's local economic development. However, fewer studies in this context look at Pakistan. As a result, we investigated the research gap and found a positive impact on the development of health and wellness in the tourism industry in KPK Pakistan. To further strengthen the tourism in KPK in the new era, the innovative development of the KPK health tourism industry needs to implement the following development strategies. First, create a good external environment. The emerging strategic pillar industry of the service industry will further promote the integrated development of sharing economy, Internet economy, service economy, and health tourism terms of the economic environment of KPK. Regarding the social and cultural environment, KPK should strengthen the promotion and education of the concept of health and wellness tourism consumption and the concept of shared consumption to guide market consumption. Our findings link with the research of Kanwal, Rasheed [61], who found that tourism infrastructure positively relate social and environmental development. In terms of the technological environment, KPK should expand and deepen the scope and depth of high-tech applications such as mobile Internet, big data, and artificial intelligence in the health and tourism industry as Ivanov and Webster's study discussed similar aspects. In terms of the policy environment, KPK should improve the policy system for the innovation and the development of the health and wellness tourism industry, increase support for essential health and wellness tourism enterprises, and give more preferential treatment and critical support to health and wellness tourism companies in terms of investment, approval, and taxation. Qualified

health and wellness tourism companies should be listed. Voigt and Laing [83] discuss this developmental aspect in their book for developed country Australia.

The second is to tap the potential of market demand, KPK should further expand the youth sports tourism market, the middle-aged health care tourism market, and the elderly pension tourism market and further develop the scale of the health tourism market. KPK should promote the sharing economy model of health tourism, increase the relative purchasing power of tourists by reducing costs, and innovate profit-sharing promotion methods to encourage tourists to purchase high-quality health tourism products and services to optimize the market consumption structure. For the youth sports tourism market, health tourism companies can cooperate with schools, public sports venues, etc. to build research and study tourism bases to win government policy support or financial support; For the middle-aged health tourism market, health tourism companies can cooperate with nursing homes (institutions) and medical institutions cooperate to operate to save site construction and fixed asset investment. In the recent literature review Streimikiene, Svagzdiene [99] highlighted these factors and suggested the strengthening of competitiveness of sustainable tourism. For the elderly care tourism market, health care tourism companies can collaborate with nursing homes (institutions) and related companies to innovate tourism elderly care products, innovative hospitals, elderly tourism, scenic spots, hotels and resorts, senior tourism, towns senior tourism, tourism real estate senior tourism, and other diversified product formats. Hjalager [67] discussed these factors in his study.

The third is to optimize the industrial supply system. KPK should cultivate a health tourism industry ecosystem that adapts to the characteristics of the sharing economy, and form a multi-dimensional industry supply network system centered on the core industry of health tourism and supported by related industries and derivative industries. According to Selen and Ogulin [100], it is also important to optimize the internal connection mechanism of the industry supply network system. To achieve a win-win situation through sharing and to improve the overall productivity and efficiency of the industrial network. In the light of the sustainable development of UNWTO [101], KPK should focus on constructing a health and health tourism sharing economic platform and establishing cross-industry, cross-regional, and cross-ownership health and health tourism enterprise groups, tourism clusters, tourism complexes, and alliances, relying on the sharing economy platform to establish a sharing and win-win benefit distribution mechanism. Use the Internet technology of the sharing economy platform to realize information transparency and open transactions among alliance members, coordinate the division of labor and cooperation among members and share benefits under the unified platform rules; for members who violate the rules, disciplinary measures are used to restrain them from creating an excellent industrial ecological environment [31].

The fourth is to improve infrastructure construction. Based on the standards of building an internationally renowned health and wellness tourism destination by the Organization [102], KPK should strengthen public infrastructures such as medical institutions, public transportation, and sports venues. According to Li and Akintoye [103] government departments can improve public infrastructure construction through innovative purchases, joint ventures, joint construction, lease use rights, etc.; at the same time, government officials can attract them through service outsourcing, BOT model (build-operate-transfer), and incentive systems. Social capital participates in the construction of health tourism infrastructure. As Macbeth, Carson [104] discussed Social capital in the light of these findings. The current study suggests focusing on infrastructure construction mainly involves the following areas. First, extraordinary health and tourism facilities, including new or expanded treatment centers, tourism hospitals, health care centers, medical tourism institutions, etc., and additional medical and health care facilities in A-level scenic spots, PTDCS, and star-rated hotels, health care facilities, leisure facilities, etc. The second is barrier-free facilities. The construction level of barrier-free facilities will be comprehensively improved in A-level scenic spots, star hotels, tourist vehicles, and public restrooms. The third is the KPK tourism information system, which can provide services such as information retrieval

and consultation, booking payment, electronic tickets, sharing comments, complaints, and customer service for KPK Tourism; at the same time, the system should have a mobile APP version, an online version, and a simplified version of the information system for the elderly.

Limitation

There are some limitations to this study. These limitations can lead to further research. First, the present study is conducted in the context of KPK Pakistan; future research studies should be carried out in other developing countries in terms of generalizability of the findings. Second, future research should encourage examining other dependent variables, specifically revenue and foreign exchange earnings. Finally, cross culture comparative study needed. Furthermore, future research is needed to additionally recognize the short-term relationship between the variables through the Johansen Cointegration and Vector Error Correction Model (VECM).

5. Conclusions

Based on the above analysis, the following research conclusions are drawn. First, the driving factors for the innovation and development of the health tourism industry in the sharing economy environment. The framework consists of four parts: market demand power, industry supply power, infrastructure power, and external environmental power; each power system and its internal power factors complement each other and interact with each other, the scale of market demand, market consumption structure, external industry competition, and internal industry. Upgrades in medical facilities, transportation facilities, sports facilities, commercial service facilities, policy environment, economic environment, humanities environment, and technological environment all affect the innovation and development of the health and wellness tourism industry.

Second, the empirical results show that the innovative development of the health and wellness tourism industry in KPK in the past ten years has shown a rapid growth trend, and industrial development has significant innovation-driven characteristics. The scale of market demand, commercial service facilities, economic environment, technological environment, and medical facilities, sports facilities, transportation facilities, etc., have a more significant impact on the innovation and development of KPK tourism industry, while the human environment, market consumption structure, internal industrial upgrading, external industrial competition, and policy environment have a significant impact on the innovation and development of the KPK tourism industry. The degree of influence is relatively small.

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References

1. Lea, J. *Tourism and Development in the Third World*; Routledge: Abingdon, UK, 2006. [\[CrossRef\]](#)
2. Scheyvens, R.; Russell, M. Tourism and poverty alleviation in Fiji: Comparing the impacts of small- and large-scale tourism enterprises. *J. Sustain. Tour.* **2012**, *20*, 417–436. [\[CrossRef\]](#)
3. Cukier, J. Tourism employment and shifts in the determination of social status in Bali. In *Destinations: Cultural Landscapes of Tourism*; Routledge: London, UK, 1998; pp. 63–79.
4. Zada, M.; Zada, S.; Ali, M.; Zhang, Y.; Begum, A.; Han, H.; Ariza-Montes, A.; Vega-Muñoz, A. Development of Local Economy through the Strengthening of Small-Medium-Sized Forest Enterprises in KPK, Pakistan. *Sustainability* **2021**, *13*, 10502. [\[CrossRef\]](#)
5. Zhuo, L.; Guan, X.; Ye, S. Quantitative Evaluation and Prediction Analysis of the Healthy and Sustainable Development of China's Sports Industry. *Sustainability* **2020**, *12*, 2184. [\[CrossRef\]](#)
6. Manzoor, F.; Wei, L.; Asif, M.; Haq, M.Z.U.; Rehman, H.U. The Contribution of Sustainable Tourism to Economic Growth and Employment in Pakistan. *Int. J. Environ. Res. Public Health* **2019**, *16*, 3785. [\[CrossRef\]](#)
7. Caballero-Danell, S.; Mugomba, C. Medical Tourism and its Entrepreneurial Opportunities-A Conceptual Framework for Entry into the Industry. Master's Thesis, Gothenburg University, Gothenburg, Sweden, 2007.
8. Zhang, X. Characteristics of mountain climate change and optimization of agricultural tourism management based on satellite Internet of Things. *Arab. J. Geosci.* **2021**, *14*, 1–14. [\[CrossRef\]](#)
9. Fang, B.; Ye, Q.; Law, C.H.R. Effect of sharing economy on tourism industry employment. *Ann. Tour. Res.* **2016**, *57*, 264–267. [\[CrossRef\]](#)
10. Bakker, M.; Twining-Ward, L. *Tourism and the Sharing Economy*; World Bank: Washington, DC, USA, 2018. [\[CrossRef\]](#)
11. Mamirkulova, G.; Mi, J.; Abbas, J.; Mahmood, S.; Mubeen, R.; Ziapour, A. New Silk Road infrastructure opportunities in developing tourism environment for residents better quality of life. *Glob. Ecol. Conserv.* **2020**, *24*, e01194. [\[CrossRef\]](#)
12. Schwalm, C.R.; Huntinzger, D.N.; Michalak, A.M.; Fisher, J.; Kimball, J.S.; Mueller, B.; Zhang, K.; Zhang, Y. Sensitivity of inferred climate model skill to evaluation decisions: A case study using CMIP5 evapotranspiration. *Environ. Res. Lett.* **2013**, *8*, 024028. [\[CrossRef\]](#)
13. Andreu, M.; Font-Barnet, A.; Roca, M. Wellness Tourism—New Challenges and Opportunities for Tourism in Salou. *Sustainability* **2021**, *13*, 8246. [\[CrossRef\]](#)
14. Smith, M.; Puczko, L. *Health and Wellness Tourism*; World Bank: Washington, DC, USA, 2008. [\[CrossRef\]](#)
15. Aydin, G.; Karamahmet, B. Factors affecting health tourism and international health-care facility choice. *Int. J. Pharm. Heal. Mark.* **2017**, *11*, 16–36. [\[CrossRef\]](#)
16. Bushell, R.; Staiff, R. Rethinking relationships: World heritage, communities and tourism: Robyn Bushell And Russell Staiff. In *Routledge Handbook of Heritage in Asia*; Routledge: London, UK, 2012; pp. 259–277.
17. Han, J.-S.; Lee, T.J.; Ryu, K. The promotion of health tourism products for domestic tourists. *Int. J. Tour. Res.* **2017**, *20*, 137–146. [\[CrossRef\]](#)
18. Lee, T.J.; Han, J.-S.; Ko, T.-G. Health-Oriented Tourists and Sustainable Domestic Tourism. *Sustainability* **2020**, *12*, 4988. [\[CrossRef\]](#)
19. Dryglas, D.; Salamaga, M. Segmentation by push motives in health tourism destinations: A case study of Polish spa resorts. *J. Destin. Mark. Manag.* **2018**, *9*, 234–246. [\[CrossRef\]](#)
20. Barkauskas, V.; Barkauskienė, K.; Jasinskas, E. Analysis of Macro Environmental Factors Influencing the Development of Rural Tourism: Lithuanian Case. *Procedia Soc. Behav. Sci.* **2015**, *213*, 167–172. [\[CrossRef\]](#)
21. Song, H.; Dwyer, L.; Li, G.; Cao, Z. Tourism economics research: A review and assessment. *Ann. Tour. Res.* **2012**, *39*, 1653–1682. [\[CrossRef\]](#)
22. Warnes, A.M.; Williams, A. Older Migrants in Europe: A New Focus for Migration Studies. *J. Ethn. Migr. Stud.* **2006**, *32*, 1257–1281. [\[CrossRef\]](#)
23. Tan, G.W.-H.; Lee, V.H.; Lin, B.; Ooi, K.-B. Mobile applications in tourism: The future of the tourism industry? *Ind. Manag. Data Syst.* **2017**, *117*, 560–581. [\[CrossRef\]](#)
24. Pigato, M. *Information and Communication Technology, Poverty, And Development In Sub-Saharan Africa And South Asia*; World Bank: Washington, DC, USA, 2001.
25. Cascetta, E.; Carteni, A.; Henke, I.; Pagliara, F. Economic growth, transport accessibility and regional equity impacts of high-speed railways in Italy: Ten years ex post evaluation and future perspectives. *Transp. Res. Part A Policy Pract.* **2020**, *139*, 412–428. [\[CrossRef\]](#)
26. Yu, K.; Gong, R.; Xu, F.; Jiang, C.; Luo, Y. Key success factors in healthcare ecology integrated tourism development. *Ekoloji* **2018**, *27*, 351–355.
27. Alén, E.; Losada, N.; Domínguez, T. The Impact of Ageing on the Tourism Industry: An Approach to the Senior Tourist Profile. *Soc. Indic. Res.* **2015**, *127*, 303–322. [\[CrossRef\]](#)
28. Bakkal, E.; Serener, B.; Myrvang, N.A. Toxic leadership and turnover intention: Mediating role of job satisfaction. *Rev. Cercet. Interv. Soc.* **2019**, *66*, 88.
29. Thirumoorthi, T.; Wong, K.M.; Musa, G. *Scuba Diving Satisfaction, in Scuba Diving Tourism*; Routledge: London, UK, 2013; pp. 170–176.

30. Tampakis, S.; Andrea, V.; Karanikola, P.; Giottis, S. The growth of nature based tourism: Investigation of the locals' views in the Northern Pindos National Park (Valia Kalda). In Proceedings of the 6th International Conference on Contemporary Marketing Issues (ICCMII) 6th International Conference on Contemporary Marketing Issues (ICCMII), Athens, Greece, 27–29 June 2018; p. 446, Co-Organized by Alexander Technological Educational Institute (ATEI) of Thessaloniki.
31. Kumar, V.; Pandita, S.; Sharma, A.; Bakshi, P.; Sharma, P.; Karaouzas, I.; Bhardwaj, R.; Thukral, A.K.; Cerda, A. Ecological and human health risks appraisal of metal(loid)s in agricultural soils: A review. *Geol. Ecol. Landsc.* **2021**, *5*, 173–185. [\[CrossRef\]](#)
32. Rop, W.C. Modelling the impact of geo-tourism on geo-conservation of Hell's Gate National Park in Kenya. *Ecofeminism Clim. Chang.* **2020**, *2*, 17–25. [\[CrossRef\]](#)
33. Sayili, M.; Akca, H.; Duman, T.; Esengun, K. Psoriasis treatment via doctor fishes as part of health tourism: A case study of Kangal Fish Spring, Turkey. *Tour. Manag.* **2007**, *28*, 625–629. [\[CrossRef\]](#)
34. Aguilar-Becerra, C.D.; Frausto-Martínez, O.; Avilés-Pineda, H.; Pineda-Pineda, J.J.; Soares, J.C.; Umaña, M.R. Path Dependence and Social Network Analysis on Evolutionary Dynamics of Tourism in Coastal Rural Communities. *Sustainability* **2019**, *11*, 4854. [\[CrossRef\]](#)
35. Joppe, M. One country's transformation to spa destination: The case of Canada. *J. Hosp. Tour. Manag.* **2010**, *17*, 117–126. [\[CrossRef\]](#)
36. Băneș, A.; Raicov, M.; Goșa, V.; Constantinescu, S.; Orboi, M.D. Analysis of the influence of holiday vouchers on tourism in Romania. *Lucrări Științifice, Universitatea de Științe Agricole Și Medicină Veterinară a Banatului, Timisoara, Seria I. Manag. Agricol.* **2019**, *21*, 103–107.
37. Gundersen, V.; Vistad, O.I.; Panzacchi, M.; Strand, O.; van Moorter, B. Large-scale segregation of tourists and wild reindeer in three Norwegian national parks: Management implications. *Tour. Manag.* **2019**, *75*, 22–33. [\[CrossRef\]](#)
38. Zhang, K.; Wang, S.; Bao, H.; Zhao, X. Characteristics and influencing factors of rainfall-induced landslide and debris flow hazards in Shaanxi Province, China. *Nat. Hazards Earth Syst. Sci.* **2019**, *19*, 93–105. [\[CrossRef\]](#)
39. Kim, E.; Chiang, L.; Tang, L. Investigating wellness tourists' motivation, engagement, and loyalty: In search of the missing link. *J. Travel Tour. Mark.* **2017**, *34*, 867–879. [\[CrossRef\]](#)
40. Zhuang, M.; Zhu, W.; Huang, L.; Pan, W.-T. Research of influence mechanism of corporate social responsibility for smart cities on consumers' purchasing intention. *Libr. Hi Tech.* **2021**. [\[CrossRef\]](#)
41. Grzeskowiak, S.; Sirgy, M.J. Consumer Well-Being (CWB): The Effects of Self-Image Congruence, Brand-Community Belongingness, Brand Loyalty, and Consumption Recency. *Appl. Res. Qual. Life* **2007**, *2*, 289–304. [\[CrossRef\]](#)
42. Jónás-Berki, M.; Csapó, J.; Pálfi, A.; Aubert, A. A Market and Spatial Perspective of Health Tourism Destinations: The Hungarian Experience. *Int. J. Tour. Res.* **2014**, *17*, 602–612. [\[CrossRef\]](#)
43. Barykin, S.Y.; Kapustina, I.V.; Kalinina, O.V.; Dubolazov, V.A.; Esquivel, C.A.N.; Alyarovna, N.E.; Sharapaev, P. The sharing economy and digital logistics in retail chains: Opportunities and threats. *Acad. Strateg. Manag. J.* **2021**, *20*, 1–14.
44. Shi, X.; Liu, S.; Wang, F.; Lv, T.; Zhang, W. Research on the Innovation of Poverty Alleviation Model from the Perspective of Sports Tourism. Available online: https://webofproceedings.org/proceedings_series/ESSP/ICEMEET%202019/ICEMEET19135.pdf (accessed on 28 November 2021).
45. Fields, K. *Demand for The Gastronomy Tourism Product: Motivational Factors*; Routledge: London, UK, 2003; pp. 50–64. [\[CrossRef\]](#)
46. Dwyer, L.; Edwards, D.; Mistilis, N.; Roman, C.; Scott, N. Destination and enterprise management for a tourism future. *Tour. Manag.* **2009**, *30*, 63–74. [\[CrossRef\]](#)
47. Smith, M.; Puczkó, L. *Health, Tourism and Hospitality: Spas, Wellness And Medical Travel*; Routledge: London, UK, 2014.
48. Parente, R.C.; Geleilate, J.-M.G.; Rong, K. The Sharing Economy Globalization Phenomenon: A Research Agenda. *J. Int. Manag.* **2018**, *24*, 52–64. [\[CrossRef\]](#)
49. Khazami, N.; Lakner, Z. Influence of Experiential Consumption and Social Environment of Local Tourists on the Intention to Revisit Tunisian Guesthouses: Mediating Role of Involvement in the Experience. *Sustainability* **2021**, *13*, 6584. [\[CrossRef\]](#)
50. Lv, X.; Wu, A. The role of extraordinary sensory experiences in shaping destination brand love: An empirical study. *J. Travel Tour. Mark.* **2021**, *38*, 179–193. [\[CrossRef\]](#)
51. Liu, Y.; Zhang, L. Transformation and Upgrading of Tourism Consumption Structure in Guangdong Province. *Am. J. Ind. Bus. Manag.* **2018**, *08*, 1229–1238. [\[CrossRef\]](#)
52. Li, R. Consumption effect of an aging population—Taking Hangzhou as an example. In *Proceedings of the 2016 2nd International Conference on Economics, Management Engineering and Education Technology (ICEMEET 2016)*; Springer: Berlin/Heidelberg, Germany, 2017. [\[CrossRef\]](#)
53. Tong, Y. Analysis of Consumption Structure Featured by Inbound Tourists in Shandong Province. *DEStech Trans. Environ. Energy Earth Sci.* **2017**. [\[CrossRef\]](#)
54. Jadhav, S.; Yeravdekar, R.; Kulkarni, M. Cross-border Healthcare Access in South Asian Countries: Learnings for Sustainable Healthcare Tourism in India. *Procedia Soc. Behav. Sci.* **2014**, *157*, 109–117. [\[CrossRef\]](#)
55. Alam, M.; Ahmad, R.; Nargiza, M. Pakistan-CPEC and Tourism Vinculum: A Corridor of Tourism Opportunities in Pakistan. *Glob. Sociol. Rev.* **2020**, *V*, 65–71. [\[CrossRef\]](#)
56. Rauf, T.; Yukan, C.; Zada, M.; Khan, N.; Shah, S.J. Impact of Saiful Malook national park on the sustainable livelihood of Naran and Kaghan communities, Pakistan. *GeoJournal* **2019**, 1–13. [\[CrossRef\]](#)
57. Zada, M.; Shah, S.J.; Yukun, C.; Rauf, T.; Khan, N. Impact of Small-to-Medium Size Forest Enterprises on Rural Livelihood: Evidence from Khyber-Pakhtunkhwa, Pakistan. *Sustainability* **2019**, *11*, 2989. [\[CrossRef\]](#)

58. Chen, Y.; Kumara, E.K.; Sivakumar, V. Investigation of finance industry on risk awareness model and digital economic growth. *Ann. Oper. Res.* **2021**, 1–22. [\[CrossRef\]](#)
59. Mohammadi, M.; Khalifah, Z.; Hosseini, H. Local people perceptions toward social, economic and environmental impacts of tourism in Kermanshah (Iran). *Asian Soc. Sci.* **2010**, 6, 220. [\[CrossRef\]](#)
60. Zhen, S.; Gao, W. Geological tourist route planning of Henan province based on geological relics zoning. *Geol. Ecol. Landsc.* **2017**, 1, 66–69. [\[CrossRef\]](#)
61. Kanwal, S.; Rasheed, M.I.; Pitafi, A.H.; Pitafi, A.; Ren, M. Road and transport infrastructure development and community support for tourism: The role of perceived benefits, and community satisfaction. *Tour. Manag.* **2019**, 77, 104014. [\[CrossRef\]](#)
62. Zmysłony, P.; Leszczyński, G.; Waligóra, A.; Alejziak, W. The Sharing Economy and Sustainability of Urban Destinations in the (Over)tourism Context: The Social Capital Theory Perspective. *Sustainability* **2020**, 12, 2310. [\[CrossRef\]](#)
63. Qiao, G.; Ding, L.; Zhang, L.; Yan, H. Accessible tourism: A bibliometric review (2008–2020). *Tour. Rev.* **2021**. [\[CrossRef\]](#)
64. Salvioni, D.M. Hotel Chains and the Sharing Economy in Global Tourism. *Symph. Emerg. Issues Manag.* **2016**, 31–44. [\[CrossRef\]](#)
65. Pan, S.-Y.; Gao, M.; Kim, H.; Shah, K.; Pei, S.-L.; Chiang, P.-C. Advances and challenges in sustainable tourism toward a green economy. *Sci. Total Environ.* **2018**, 635, 452–469. [\[CrossRef\]](#) [\[PubMed\]](#)
66. Kilavuz, E. Medical tourism competition: The case of Turkey. *Int. J. Health Manag. Tour.* **2018**, 3, 42–58. [\[CrossRef\]](#)
67. Hjalager, A.-M. The marriage between welfare services and tourism—A driving force for innovation? *J. Qual. Assur. Hosp. Tour.* **2006**, 6, 7–29. [\[CrossRef\]](#)
68. Lim, Y.-J.; Kim, H.-K.; Lee, T.J. Visitor Motivational Factors and Level of Satisfaction in Wellness Tourism: Comparison Between First-Time Visitors and Repeat Visitors. *Asia Pac. J. Tour. Res.* **2015**, 21, 137–156. [\[CrossRef\]](#)
69. Medhekar, A. Public-private Partnerships for Inclusive Development: Role of Private Corporate Sector in Provision of Healthcare Services. *Procedia—Soc. Behav. Sci.* **2014**, 157, 33–44. [\[CrossRef\]](#)
70. Booyens, I.; Rogerson, C.M. Tourism Innovation in the Global South: Evidence from the Western Cape, South Africa. *Int. J. Tour. Res.* **2016**, 18, 515–524. [\[CrossRef\]](#)
71. Yin, L.; Li, S. The Challenge of The Sharing Economy to The Traditional Labor Relationship. The Reference to The U.S. Uber Case. *China Labor* **2016**, 7. Available online: https://en.cnki.com.cn/Article_en/CJFDTotat-LDKX201616007.htm (accessed on 26 November 2021).
72. Robinson, R.N. Tourism, health and the pharmacy: Towards a critical understanding of health and wellness tourism. *Tourism* **2005**, 53, 335–346.
73. Liu, Y.; Dong, E.; Li, S.; Jie, X. Cruise Tourism for Sustainability: An Exploration of Value Chain in Shenzhen Shekou Port. *Sustainability* **2020**, 12, 3054. [\[CrossRef\]](#)
74. Hall, J.; Matos, S.; Sheehan, L.; Silvestre, B. Entrepreneurship and innovation at the base of the pyramid: A recipe for inclusive growth or social exclusion? *J. Manag. Stud.* **2012**, 49, 785–812. [\[CrossRef\]](#)
75. Ateljevic, J. Tourism entrepreneurship and regional development: Example from New Zealand. *Int. J. Entrep. Behav. Res.* **2009**, 15, 282–308. [\[CrossRef\]](#)
76. Jovanović, S.; Ivana, I. Infrastructure as important determinant of tourism development in the countries of Southeast Europe. *Ecoforum J.* **2016**, 5. Available online: <http://www.ecoforumjournal.ro/index.php/eco/article/view/329> (accessed on 28 November 2021).
77. Ma, Y.; Bennett, D. The relationship between higher education students' perceived employability, academic engagement and stress among students in China. *Educ. Train.* **2021**, 63, 744–762. [\[CrossRef\]](#)
78. Skoultos, S.; Kontis, A.-P.; Sarantakou, E. Conceptualization of changes in tourism industry's distribution channels: The case of peer-to-peer business models and sharing economy platforms. *J. Tour. Res.* **2017**, 16, 292–303.
79. Ahmed, M.; Anwar, M.A. The nexus between terrorism, infrastructure and tourism industry in Pakistan. *Int. J. Econ. Empir. Res.* **2016**, 4, 25–31.
80. Mishra, P.; Rout, H.B. Economic impact of tourism: A case study of Jharkhand. *Int. J. Econ. Manag. Thoughts* **2012**, 3, 130–139.
81. Spanou, E. The impact of tourism on the sociocultural structure of Cyprus. *Tour. Int. Multidiscip. J. Tour.* **2006**, 2, 145–162.
82. Barua, P.; Rahman, S.H. Aquatic Health Index of Coastal Aquaculture Activities At South-Eastern Coast Of Bangladesh. *Water Conserv. Manag.* **2020**, 4, 61–67. [\[CrossRef\]](#)
83. Täuscher, K.; Kietzmann, J. Learning from failures in the sharing economy. *MIS Q. Exec.* **2017**, 16, 253–263.
84. Babu, N.; Hossain, Z.; Morales, J.E.; Vij, S. Grandparents in Bangladesh, India, and Pakistan: A way forward with traditions and changes in south Asia. In *Grandparents in Cultural Context*; Routledge: London, UK, 2017; pp. 159–186.
85. Whitlatch, C.J.; Orsulic-Jeras, S. Meeting the Informational, Educational, and Psychosocial Support Needs of Persons Living With Dementia and Their Family Caregivers. *Gerontologist* **2017**, 58, S58–S73. [\[CrossRef\]](#)
86. Go, H.; Kang, M.; Suh, S.C. Machine learning of robots in tourism and hospitality: Interactive technology acceptance model (iTAM)—Cutting edge. *Tour. Rev.* **2020**, 75, 625–636. [\[CrossRef\]](#)
87. Wong, B.K.M. and S.A.S.a. Hazley, The future of health tourism in the industrial revolution 4.0 era. *J. Tour. Futures* **2020**, 7. [\[CrossRef\]](#)
88. Khudoyberdievich, A.O. Innovation technologies on the tourism. *Academy* **2020**, 3, 54.
89. Hu, J. Technological Innovation Problems and Countermeasures of Rural Tourism in Zhejiang: A Case Study of Tengtou Village, Ningbo City. *Int. J. E-Educ. E-Bus. E-Manag. E-Learn.* **2012**. [\[CrossRef\]](#)

90. Yuan, Z.; Zhu, Z.; Yang, H.; Yu, L.; Chen, G. On Development Strategies of TCM Health Tourism. In Proceedings of the Proceedings of the 2017 International Conference on Economic Development and Education Management (ICEDEM 2017), Dalian, China, 16–17 December 2017; Atlantis Press: Paris, France, 2017; pp. 269–271.
91. Xiang, D.; Zhang, Y.; Worthington, A.C. Determinants of the Use of Fintech Finance Among Chinese Small and Medium-Sized Enterprises. *IEEE Trans. Eng. Manag.* **2020**, *68*, 1590–1604. [[CrossRef](#)]
92. Akbar, Y.; Tracogna, A. The sharing economy and the future of the hotel industry: Transaction cost theory and platform economics. *Int. J. Hosp. Manag.* **2018**, *71*, 91–101. [[CrossRef](#)]
93. Huang, C.D.; Goo, J.; Nam, K.; Yoo, C.W. Smart tourism technologies in travel planning: The role of exploration and exploitation. *Inf. Manag.* **2017**, *54*, 757–770. [[CrossRef](#)]
94. Choi, M.; Law, R.; Heo, C.Y. Shopping destinations and trust–Tourist attitudes: Scale development and validation. *Tour. Manag.* **2016**, *54*, 490–501. [[CrossRef](#)]
95. Julong, D. Introduction to grey system theory. *J. Grey Syst.* **1989**, *1*, 1–24.
96. Malek, A.; Ebrahimnejad, S.; Tavakkoli-Moghaddam, R. An Improved Hybrid Grey Relational Analysis Approach for Green Resilient Supply Chain Network Assessment. *Sustainability* **2017**, *9*, 1433. [[CrossRef](#)]
97. Abbas, J. The Impact of Coronavirus (SARS-CoV2) Epidemic On Individuals Mental Health: The Protective Measures Of Pakistan In Managing And Sustaining Transmissible Disease. *Psychiatr. Danub.* **2020**, *32*, 472–477. [[CrossRef](#)] [[PubMed](#)]
98. Jakovljevic, M. COVID-19 crisis as a collective Hero’s journey to better public and global mental health. *Psychiatr. Danub.* **2020**, *32*, 3–5. [[CrossRef](#)] [[PubMed](#)]
99. Streimikiene, D.; Svagzdiene, B.; Jasinskas, E.; Simanavicius, A. Sustainable tourism development and competitiveness: The systematic literature review. *Sustain. Dev.* **2020**, *29*, 259–271. [[CrossRef](#)]
100. Selen, W.; Ogulin, R. Strategic Alignment across a Tourism Business Ecosystem. *Athens J. Tour.* **2015**, *2*, 167–178. [[CrossRef](#)]
101. UNWTO. *Sustainable Development*; Report; UNWTO: Madrid, Spain, 2021.
102. WHO. *Global Action Plan on Physical Activity 2018–2030: More Active People for A Healthier World*; WHO: Geneva, Switzerland, 2019.
103. Li, B.; Akintoye, A. *An Overview of Public-Private Partnership. Public-Private Partnerships: Managing Risks and Opportunities*; Wiley: Hoboken, NJ, USA, 2003; pp. 3–30.
104. Macbeth, J.; Carson, D.; Northcote, J. Social Capital, Tourism and Regional Development: SPCC as a Basis for Innovation and Sustainability. *Curr. Issues Tour.* **2004**, *7*, 502–522. [[CrossRef](#)]