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An investigation into the effect of Coronavirus-2019 (SARS-CoV-2) on active transportation as an opportunity to develop a sustainable tourist destination in the post-pandemic era with an emphasis on the local community (Case study: Dorood City, Lorestan Province, Iran)

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Abstract
The aim of this study is structural modeling of the impact of the coronavirus pandemic on active post-pandemic transport in Dorood City, Iran, emphasising both tourism and development of a long-term tourist market through the promotion of low-carbon travel markets.

The research tool was a researcher-made questionnaire randomly distributed among citizens of Dorood City. The impact of various factors, including economic, social, medical, and accessibility, on active transportation during the pandemic and its impact on transportation in the post-COVID-19 era has been investigated.

The social factor has the highest factor load with a weight of 0.94. In contrast, with the lowest factor load i.e., 0.60, the economic factor proved to have the least impact on the choice of active transportation. It was found that the variable of active transport use in the post-pandemic era with a factor load of 0.66 is the most influential factor, while the social consequences of the pandemic in the post-pandemic era with a factor load of 0.49 turned out to be the most significant. The least effective variable was found to occur in the post-pandemic era.

Active transport links during the pandemic in Dorood City with a regression coefficient of 0.77 had a statistically significant impact on the use of this type of transport in the post-pandemic period. This data can be incorporated in the transport development plan with an emphasis on active transfer as an effective option for the development of sustainable tourism.

Key Words
Coronavirus, pandemic, active transportation, post-pandemic, sustainable tourism, structural modelling.

Исследование влияния коронавируса на активный транспорт как возможности для устойчивого развития туристического направления в эпоху после COVID-19 с акцентом на местное сообщество (на примере города Доруд провинции Лорестан, Иран)

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Резюме

Целью данного исследования является структурное моделирование влияния коронавируса на активный транспорт в посткоронавирусный период в городе Доруд в Иране, с акцентом как на туризм, так и на развитие долгосрочного туристического рынка путем продвижения низкоуглеродных туристических рынков.

Исследование проводилось с использованием аналитико-описательного метода. Инструментом исследования была анкета, составленная исследователем и случайным образом распределенная среди жителей города Доруд. Было исследовано влияние различных факторов, включая экономические, социальные, медицинские и доступность, на активный транспорт во время этой эпидемии и его влияние на транспорт в эпоху после COVID-19. Кроме того, был разработан проект развития устойчивого туризма с акцентом на местное сообщество.

Социальный фактор имеет наибольшую факторную нагрузку с весовым показателем 0,94. Напротив, при наименьшей факторной нагрузке, т.е. 0,60, экономический фактор оказал наименьшее влияние на выбор активного вида транспорта. Было установлено, что переменная использования активного транспорта в эпоху после коронавируса с факторной нагрузкой 0,66 является наиболее влиятельным фактором, в то время как социальные последствия коронавируса с факторной нагрузкой 0,49 оказались наиболее значимыми. Наименее эффективная переменная приходится на период после коронавируса.

Активное транспортное сообщение во время эпидемии коронавируса в городе Доруд с коэффициентом регрессии 0,77 оказало статистически значимое влияние на использование этого вида транспорта в период после коронавируса. Это может быть включено в план развития транспорта с акцентом на активный трансфер как эффективный вариант развития устойчивого туризма.

Ключевые слова
Корона, активный транспорт, посткороновирусный период, устойчивый туризм, структурное моделирование.

INTRODUCTION

COVID-19 the severe acute respiratory disease caused by the Coronavirus 2 (SARS-CoV-2) [1]. Due to its high infectivity, it has affected communities and activities in a range of aspects, such as lifestyle and global travel. There has also been a sharp decrease in the demand for public transportation due to compliance with new standards of hygiene and cleanliness, accompanied by an increase in costs of construction of infrastructure. Within a few weeks, the emerging pandemic caused the biggest economic crisis in public transport services of the last few decades. On the other hand, the guidelines of the World Health Organisation encouraged active transportation for commuting during the pandemic [2], advising 'considering cycling or walking whenever possible' [3].

From the point of view of planning and transportation, walking and cycling (often called "non-motorized transportation" or "active transportation"), can be regarded as an important means of sustainability while providing various social, environmental, and economic benefits [4] for the local community. By reducing carbon emissions and congestion from the transportation sector and economic benefits such as saving fuel consumption and other costs related to transportation, walking and cycling provides a sustainable factor in destination tourism. Therefore, a focus on investment and the development of appropriate policies and programs are very important to in encouraging tourists and the local community towards active transportation [5].

Evidence shows that changing from passive to active transportation increases physical activity and reduces obesity, noise and air pollution, traffic injuries and social isolation [6]. The use of these active modes not only leads to health benefits such as higher heart and breathing fitness and other improved heart health indicators but also to other benefits including better mental health [7] for both tourists and local society. People should be encouraged to walk to strengthen health and mind [8]. Considering the social and environmental benefits of active transportation, one of the sustainable development goals of the United Nations until 2030 is to encourage this as an important element in establishing "safe, affordable, accessible and sustainable transportation systems for all" [9].

Due to the rapid spread of the pandemic and various measures to control it, transportation options changed with the use of a range of transportation modes with people becoming more inclined towards cycling and walking. Taking the above into account, the present study made an effort to investigate the effects of the coronavirus epidemic on the active transportation system in general and as an opportunity for the development of sustainable tourism in particular. On the other hand, in the case of Dorood City and environs, where the importance of development prospects in mountainous areas is a major consideration, a transportation system based on active modes can be considered the growing heart of strategic planning. On this basis, it is important to study the effects of the pandemic on active transportation in the post-pandemic era as guidance in the development of sustainable tourism strategies, with a particular focus on the mountainous environs of Dorood – an important Iranian natural attraction. Another objective is to investigate whether an active transportation system should contribute to the sustainability of active transportation in the long term or not.

LITERATURE REVIEW

Sustainable development became publicised in the late 1980s after the concept was presented at the Common Future Conference, which resulted in the Brightland Report. Although this approach entered the tourism literature a little late, experts have paid this a lot of attention and have since acknowledged the role of sustainability factors in the tourism sector. Basic needs, improvement of living standards and better management of ecosystems are among the main goals of development [10]. Therefore, in sustainable development, the health of human and ecological systems has equal importance, which implies that both are dependent on each other [11]. In this regard, in 2016, the World Health Organization announced in the Shanghai Declaration that health is one of the most important factors and one of the most effective indicators of the successful sustainable development of any city as a tourist destination [12].

That is why focusing only on economic development has been seen to cause urban problems such as environmental pollution, traffic congestion, etc. [13], which have thus become one of the chief concerns in public health policies. In this context, sustainable urban mobility policies help considerably in the creation of healthy cities [14].

Transportation networks are one of the main components of urban communities [15]. As complex and important systems, they contribute to the proper functioning of societies and strengthen economic growth [16].

Hence, there is an inseparable relationship between transportation and tourism. Being of fundamental importance to the infrastructure of tourism, transportation always reflects the economic and spatial evolution of tourist destinations. It is also considered one of the main elements in promoting sustainability around the world [17].

Success in public transportation also depends on public understanding and support for viability in cities [18]. Globally, transportation systems are heavily dependent on private cars. Numerous studies by economists have shown that private car owners are highly dependent on their vehicles for journeys of any length [19].

Transportation activities are the second largest source of carbon dioxide emissions, thus improving sustainability in the transportation sector is crucial [20]. Proper transportation can contribute to urban residents' satisfaction with their urban environment by enabling high mobility and saving a much time for passengers [21]. With the worldwide spread of the coronavirus pandemic, transportation in small and medium cities has increasingly been drawn to active transportation.

Active transportation (AT) refers to all forms of human-powered transportation, such as walking and cycling [22]. Open-air, non-motorised transportation is inherently resistant to epidemic infectivity. Greater investment in such modes not only helps contain the spread of a virus which is aerosol-transmitted, but can also increase access to services and reduce pressure on overcrowded transportation systems in emergency scenarios [23]. To address the strategic goals of tourism destinations for the health of both tourists and residents, planners should pay attention to active transportation networks with special emphasis on cycling facilities and interconnection between existing infrastructures [24]. The promotion of active or manpower transportation through

appropriate policies, systems and environmental change is one of the main successful evidence-based strategies for increasing physical activity regardless of people's age, income, racial/ethnic background, ability or disability [25]. In particular, the potential of active transportation methods such as cycling and bicycling to reduce mortality and morbidity is now well established. However, these benefits have not yet been quantified in the context of a transition scenario articulating accurate and credible societal transitions towards carbon neutrality [26].

The movement towards "healthy cities" was first promoted in 1984 at the 2000 Toronto Health Summit. This meeting which was organised by the World Health Organization defined a healthy city as follows: a city that continuously expands popular policies and provides the physical and social environment should take steps that enable its people to mutually support each other to achieve all the goals of life and realize their potential [27]. A healthy city is, therefore, a sustainable city that interacts with its environment, economy, population, services, and space and realises prosperity and the expansion of those community resources that enable people to support each other in doing all things [28]. A healthy city is constantly creating and improving physical and social environments while expanding resources. The community enables people to support each other [29]. Healthy urban design is recognized as an essential issue that includes designing urban places to address health inequalities in society [30–32]. The agenda of healthy cities is better combined by relying on a wide spectrum of fields such as care, improvement of social inequalities and environmental justice, within the context of sustainable development [33]. The healthy city approach continuously endeavours to create or improve social and physical conditions and development of resources, and provides the possibility of correct and complete functioning for the maximum utilisation of human potential [34]. The concept of a healthy city in regard to post-epidemic city planning considers human health as the major priority. As a comprehensive issue, it depends on the increasing awareness of the impact of the global climate crisis on human destiny in the post-carbon future [35]. Active urban spaces and increased public spaces are part of the form and concept of a healthy city. Wider sidewalks and larger bicycle paths are characteristic of the need to pay more attention to the increase of public spaces by providing "green space" and "wide sidewalks" with the goal of maintaining physical distance. These are concepts that have been proposed in the theoretical literature and reliable sources [36; 37]. The idea of a healthy city in Iran was raised for the first time in November 1990 at the World Health Organisation conference in the Eastern Mediterranean region. This conference focused on the experiences of European regions and three cities, including Lahore, Alexandria, and Tehran were selected on a case-by-case basis. Finally, the idea of a healthy city which promotes health, urban planning, and decentralisation of governmental sectors towards inter-sectoral activity and social participation became transformed into the global movement of a healthy city [38].

There is prolific research documenting active transportation in combination with other forms of public transportation. In this regard, several research studies have also investigated the carbon emissions produced by tourism activities.

Glazener and Khreis [39] in their research refer to planning policies of the cities of Oslo, Paris, and Madrid directed at the reduction of the impacts of climate change. To reduce vehicle emissions and encourage walking and cycling, these cities ban cars from their city centres. In another study, Teuber and Sudeck [40] also showed the relationship between cycling and the perceived environment (for example, high traffic) as well as personal motivations and obstacles (for example, time-effort or weather conditions). In another article, Jamal et al. [41] analysed data from a survey of travelers in the city of Rajshahi, Bangladesh.

As these researchers have argued, it is important that the infrastructure of transportation services matches the convenience of people using a given type of transportation, although according to some other researchers, the expansion of active transportation requires some effort in building comprehensive monitoring systems [42]. Others believe that public resource assessment is a method for public participation in transport planning which can provide a fair scale from local and regional to multi-regional contexts using local planning evidence [43]. Some researchers have investigated the implementation and public reactions to active transportation programs in response to the coronavirus pandemic [44].

Buehler and Pucher [45] have investigated the impact of the pandemic on cycling using social, economic, and environmental indicators and have presented five reasons supporting the continued use of this type of transportation. In this regard, Nian et al. [46] also examined the impact of the pandemic on urban mobility during the post-pandemic period in large cities from the perspective of taxi travel and social vitality. The results showed that the number of taxi trips decreased drastically and that travel speed, travel time, and spatial distribution of taxi trips were significantly affected during the pandemic period.

MATERIALS AND METHODS

The present research is descriptive-analytical in terms of method and applied in terms of purpose. Data collection has been done using field research and one questionnaire which was randomly distributed in the areas of Dorood City. The statistical population of this research covers the city of Dorood, which had a population of 121,638 according to the 2015 census. The sample size was calculated using sample power software with a confidence level of 95 % and with a 5 % margin of error rate and by administering one-tailed test to 180 subjects. To explain and model the effects of structural equation modeling (SEM), which is a multivariate statistical analysis technique and a combination of factor analysis and multiple regression analysis, and to analyse structural relationships and the structural relationship between measured variables and the latent structures used, Amos software have been exploited. Cronbach's alpha test was used to measure the reliability of the research tool, which was taken separately for each main indicator.

As a measure of internal consistency, Cronbach alpha values of 0.7 or higher are considered as acceptable. In this research, in obtaining a Cronbach's alpha above 0.7, three indicators have acceptable internal consistency. In contrast, the other two indicators have a Cronbach's alpha less than 0.7 which are almost acceptable. This is because sometimes the large size of the sample decreases Cronbach's alpha value (Table 1).

Table 1. Cronbach's Alpha Reliability Test
Таблица 1. Альфа-тест надежности Кронбаха

Quest Questionnaire Reliability Надежность анкеты для проведения квеста надежности		
Name of variable Наименование переменной	**Number of variables** Количество переменных	**Cronbach's alpha** Альфа Кронбаха
Economical / Экономический	5	0/620
Social / Социальный	4	0/720
Health / Медицинский	4	0/664
Availability / Доступность	5	0/728
Post-corona / Посткороновирусный период	4	0/779

Some 1,450 metres above sea level, the tourist city of Dorood is located in the Silakhor plain in the central Zagros mountain region. Dorood district lies in the east of Lorestan province with Dorood City its capital at its centre. With an area of 1326 square kilometres, the city occupies 4.7 % of the province. It is geographically located between 33°28'N 49°41'E. It is situated 86 km from Khorramabad. Dorood's population is 9.3 % of the total population of the province. With an average annual rainfall of 670 mm, Dorood City has a temperate mountainous climate. In terms of tourism potential, this destination has unique natural attractions in its environs such as Gohar Lake and the Tut and Gorkesh recreation areas, Ty and Emarat recreation areas, the waterfall of Esper Valley and the Sarab Rudak promenade, among many other natural attractions.

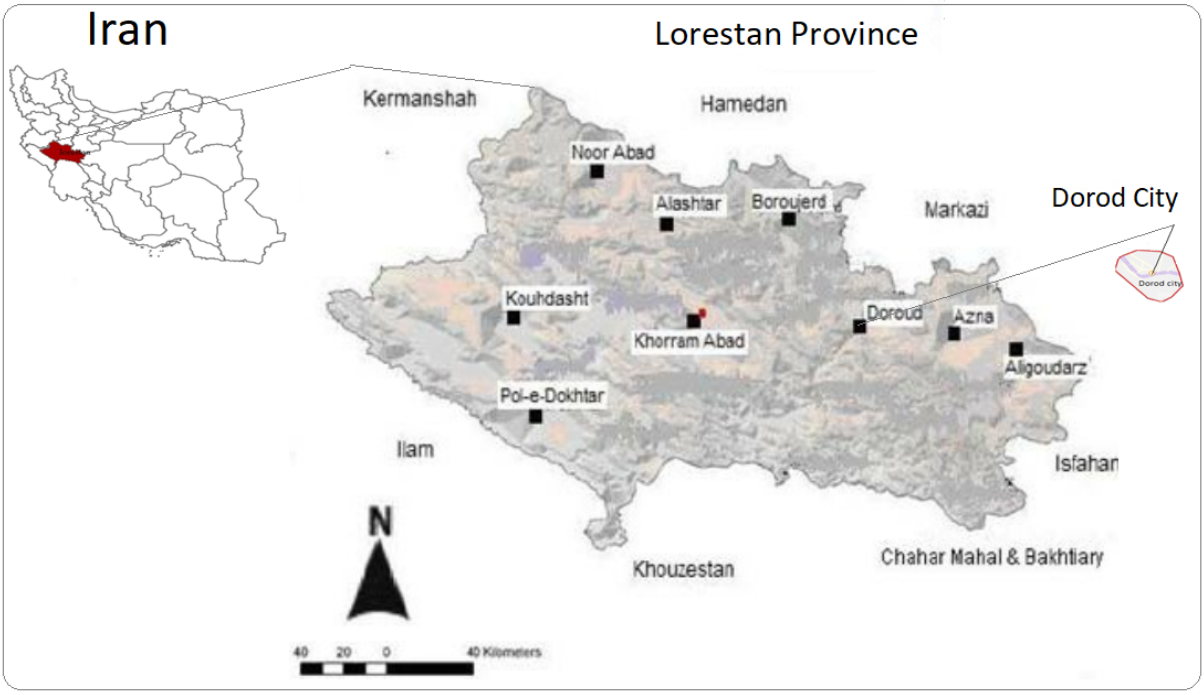

Figure 1. Geographical Map of Lorestan Province in Iran and Dorod City
Рисунок 1. Географическая карта провинции Лорестан в Иране и города Доруд

RESULTS & DISCUSSION

Based on the findings of the questionnaire, out of 180 respondents, 81 were male and 99 were female. Further, in terms of marital status, 114 respondents (i.e. 63.3 %) and 66 (i.e. 36.7 %) were married and single, respectively. By education status, a primary education up to a bachelor's degree with a frequency of 12 (i.e., 7.3 %) had the lowest frequency while a bachelor's degree with a frequency of 67 (i.e., 37.2 %) had the highest frequency. A diploma degree with a frequency percentage of 26.7 %, a bachelor's degree with a frequency percentage of 18.3 %, and a master's degree with a frequency percentage of 11.1 % occupied the next ranks, in order.

By employment or occupation, housewives with a total frequency of 61 (i.e., 33.9 %) enjoyed the first rank while retirees had the lowest rank with a frequency of 11 (i.e., 6.1 %).

A structural equation modeling has been used for the coronavirus pandemic for active transport in the post-epidemic period in Dorood. The purpose of this study was to identify the most important variables that are effective in creating a relationship between two indicators. Therefore, according to the theoretical foundations of the research, the second-order factor model of the pandemic was adjusted based on four hidden factors, including economic, social, health, access, and the first-order post-pandemic model. Fig. 2 shows the final model of the effect of the pandemic on active post-pandemic transport in Dorood neighborhoods. Findings from structural equation modeling clarified which indicator is more significant and entails more obvious effects than the other specified indicators. In the structural model of research, the pandemic as an independent variable affects post-pandemic as a dependent variable. The second-order

model of the pandemic consisted of 18 overt variables and 4 latent variables. The findings of the second-order factor model showed that with a weight of 0.94, the social factor had the highest factor load compared to other indicators. After that, the health factor with a factor loading of 0.93, the access factor with a factor loading of 0.92, and the economic factor with a factor loading of 0.60 occupied the next ranks. It has also been found that among the economic factor variables during the coronavirus epidemic, the impact of personal constraints (lack of access to a car, financial issues, etc.) on the decision to use the type of transportation had the highest factor loading with a factor loading of 0.63. Among the social variables, the impact of corona prevalence on social activities with a factor loading of 0.60 had the highest factor weight and among the access variables, the importance of short travel routes in choosing the type of transport with a factor loading of 0.63 had the highest factor load. Finally, among the variables of health practice, the degree of avoidance of the risk of coronavirus infection through using active transport had the greatest impact on the model with a factor load of 0.71. Findings of the post-pandemic model, which were developed based on 4 variables, indicated that the variable rate of active transport use in the post-pandemic period was the most effective factor with a factor load of 0.66. With a factor loading of 0.49, the amount of the pandemic's social effects in the post-pandemic period was proved to be the least effective variable.

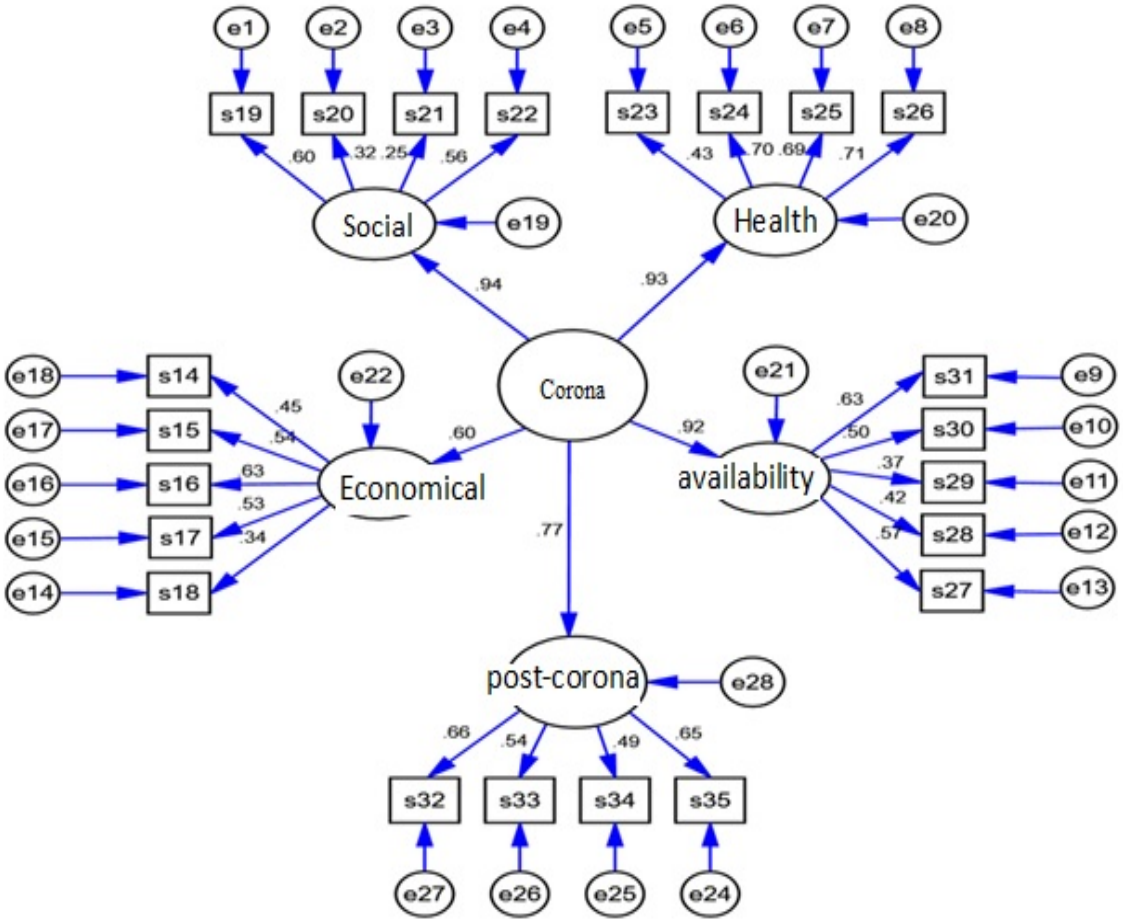

Figure 2. Structural model of the impact of the pandemic on active transport in the post-pandemic period in Dorood City
Рисунок 2. Структурная модель влияния короны на активный транспорт в посткороновирусный период в Доруде

As per Table 2 below, the probability value in all model relationships was found to be zero. The results showed that the available parameters had a significant difference with a value of zero. The level of significance in all relationships was less than 0.05, indicating that the experimental data supported the research model. As a result, according to these two tables, the positive and significant effect of the pandemic provides positive evidence on the confirmation of the research hypothesis and the rejection of the bile hypothesis.

Table 3 presents the results of the evaluation of the research model using the fit indices of structural models. The existence of an appropriate model fit index confirmed a significant and appropriate relationship between the research field data and the existing structural model. The first indicator examined in this model was the NPAR index, whose default model was 49 which showed that the researcher did not easily spend degrees of freedom in developing the model and this situation is acceptable. The chi-square index was found to be 436.916. Due to obtaining a significance level of 0.000, the desirability of the results was confirmed. Further, as the degree of freedom was close to the independent value and away from zero, it can be considered a desirable model. The relative chi-square value, as one of the important indicators of the model, was 0.127, which indicated a good and favorable situation for the model. As the most important index in absolute fit, RMSEA index was found to be 0.079, confirming the desirability of the model.

Table 2. Weighted regression of default model
Таблица 2. Взвешенная регрессия модели по умолчанию

Parameter Параметр	**Code** Код	**Name of variable** Название переменной	**Non-standard estimation** Нестандартная оценка	**The standard error** Стандартная ошибка	**Critical ratio** Критическое соотношение	**The significance level** Уровень значимости
Economical Экономический	14	The impact of covid on economic activities *Влияние covid на экономическую деятельность*	2/420	0/760	3/185	0/001
	15	The impact of using active transportation on the household economy *Влияние использования активного транспорта на экономику домашнего хозяйства*	3/251	0/961	3/382	***
	16	The impact of personal restrictions (lack of access to a car, financial issues, etc.) on the decision to use the type of transport *Влияние личных ограничений (отсутствие доступа к автомобилю, финансовые проблемы и т.д.) на решение воспользоваться данным видом транспорта*	3/760	1/069	3/516	
	17	The probability of using active transportation due to financial problems *Вероятность использования активного транспорта из-за финансовых проблем*	3/178	0/945	3/364	
	18	The extent to which the city has special infrastructure for active transportation *Степень, в которой город располагает специальной инфраструктурой для активного передвижения*	1/000			
Social Социальный	19	The effect of corona outbreak on social activities *Влияние вспышки коронавируса на социальную активность*	1/000			
	20	The effect of friendship and communication with neighbors in choosing the type of transportation *Влияние дружбы и общения с соседями на выбор вида транспорта*	0/643	0/177	3/624	
	21	Environmental safety in cycling or walking *Экологическая безопасность при езде на велосипеде или ходьбе пешком*	0/463	0/158	2/924	0/003

	22	Increased use of active transport after the onset of the corona epidemic *Широкое использование активного транспорта после начала эпидемии коронавируса*	0/892	0/156	5/726	***
Health Медицинский	23	The amount of help to increase health after using active transportation during the coronavirus epidemic *Объем помощи для укрепления здоровья после активного использования транспорта во время эпидемии коронавируса*	1/000			
	24	Prevention of coronary heart disease after the use of active transport during the epidemic *Профилактика ишемической болезни сердца после активного использования транспорта во время эпидемии*	1/620	0/311	5/202	***
	25	The degree of pleasant feeling after using active transport during the coronavirus epidemic *Степень приятных ощущений после активного использования транспорта во время эпидемии коронавируса*	1/738	0/336	5/181	***
	26	The risk of coronavirus infection through active transportation *Риск заражения коронавирусом при активной транспортировке*	1/600	0/306	5/232	***
Availability Доступность	27	Increase travel capacity in required locations using active transportation access *Увеличение пропускной способности в необходимых местах, используя активный транспортный доступ*	0/851	0/142	4/005	***
	28	The ability to move without having GPS technology *Возможность передвижения без использования ГИС-технологии*	0/726	0/154	4/714	***
	29	Access to hiking trails in your neighborhood *Доступ к пешеходным маршрутам в вашем районе*	0/577	0/138	4/175	***
	30	The importance of the purpose of the destination	0/759	0/140	5/427	***

		and its impact on the choice of type of transport *Важность цели назначения и ее влияние на выбор вида транспорта*				
	31	The importance of short travel commissions in choosing the type of transport *Важность коротких командировочных расходов при выборе вида транспорта*	1/000			
Post corona Посткороновирусный период	32	The rate use of active transport in the post-corona era *Уровень использования активного транспорта в эпоху после коронации*	1/031	0/158	6/538	***
	33	The economic impact of the coronavirus in the post-corona period *Экономические последствия коронавируса в посткороновирусный период*	0/906	0/160	5/666	***
	34	The impact of corona social effects in the post-corona period *Социальные последствия коронавируса в посткороновирусный период*	0/761	0/144	5/284	***
	35	The importance of designing active transport routes in the post-corona era *Важность проектирования активных транспортных маршрутов в эпоху после короновируса*	1/000			
		Corona post corona *Короновирусный и посткороновирусный периоды*	1/090	0/243	4/483	***

The modified fit of goodness index was found to be 0.781 that the data which meant that the data had an acceptable fit for the model. The normalized Bentler-Bonett index of 0.627 was also somewhat desirable. The standardized fitting index, which was found to be 0.555, had a favorable status. Also, the probability of fit indices and the economical adaptive fit index had an acceptable status.

The investigation of the effects of the pandemic from different aspects, especially from that of active transportation and its relationship with the sustainability of the tourist destination in the post-pandemic era, which is emphasised in this research, is a new issue. Hence, it was difficult to compare the results of the research with similar studies. However, there are good reasons for governments to promote and support the expansion and improvement of active transportation infrastructure, programs, and policies (cycling and walking) at all levels.

In this regard, cycling is perhaps the most sustainable mode of urban travel, because it is possible not only for short trips but also for medium and very long-distance trips that cannot be covered by walking [47]. According to the results of the research, there has been an increase in active transportation during the pandemic, which will probably continue in the coming years in tourist destinations. Also, in this research, the level of safety in the environment while riding a bike or walking causes some transportation users to turn to cycling and walking as viable mobility alternatives.

As reported in the studies by Buehler and Pucher [47] and Furth [48], this increase is due to reasons such as the expansion and improvement of safer cycling

infrastructures. This increase will probably continue as facilities improve. In this research, the effect of the pandemic on tourism was investigated using four indicators (social, economic, health, and access). The obtained results were found to be similar to the results of Buehler [47] with the health index is also a main pillar in the era.

A pandemic drives society towards the use of active transportation. In the same vein, the results of this research show that active transportation reduces pollution and improves the urban environment, which is in line with the research results. The results of this research overlap because transportation systems designed to accommodate multimodal mobility patterns can potentially improve people's health and well-being both directly (such as increased physical activity) and indirectly (such as better air quality).

Table 3. Status of goodness indicators of research model fit
Таблица 3. Состояние показателей соответствия исследовательской модели

Index name Наименование индекса	**Abbreviation** Сокращение	**Assumption** Предположение	**Saturation** Насыщенность	**Independed** Независимость
Released parameters for model development *Обнародованные параметры для разработки модели*	NPAR	49	353	**22**
Xi Du (Kai Square) *Xi Du (площадь Кай)*	CMIN	916/433	0/000	**832/1164**
Degrees of freedom *Степень свободы*	DF	204	0	**231**
Significance level *Уровень значимости*	P	0/000		**0/000**
Relative chi-square (normalized) *Относительный chi-квадрат (нормализованный)*	CMIN/DF	127/0		**5/043**
Fit goodness index *Индекс соответствия требованиям*	GFI	0/823	1/000	**0/461**
Modified fit goodness index *Модифицированный индекс качества подгонки*	AGFI	0/781		**0/409**
Bentler Boyte Normalized Index *Нормализованный индекс Bentley Boyte*	NFI	0/627	1/000	**0/000**
Adaptive Fit Index *Индекс адаптивной подгонки*	CFI	0/754	1/000	**0/000**
Normalized fitting index *Нормализованный индекс подгонки*	PNFI	0/554	0/000	**0/000**
Affordable Adaptive Fit Index *Доступный индекс адаптивной подгонки*	PCFI	0/666	0/000	**0/000**
The root of the mean squares of the estimation error *Корень из среднеквадратичной ошибки оценки*	RMSEA	0/079		**0/150**
Probability of proximity *Вероятность близости*	PCLOSE	0/000		**0/000**

This is mainly because of the emphasis on strategies to reduce car use for the sake of sustainable development. Therefore, clean air and active transport overlap significantly in the case of simultaneous implementation of integrated policy packages (i.e., reducing climate change, reducing vehicle emissions, and increasing walking and cycling).

CONCLUSION

With the wide ranging outbreak of the pandemic in various countries around the world, patterns of transportation use are changing. These changes have created new challenges; hence, it has drawn the attention of researchers to the field of active transportation, especially in small and medium-sized cities as one of the tourist destinations. The pandemic has raised the need for researchers to study the effects of active post-pandemic transport indicators on people's lives and thus may affect cities in the future.

In the process of concluding this research, the research hypotheses have been confirmed. In the structural equation model that examines the effect of the pandemic on active transport in the post-pandemic period, the results show that the pandemic with a factor of 0.77 will have a large impact on the post-pandemic period in the city of Dorood. Four indicators have been studied in this study with the results showing that all four indicators overlap with active transportation. The social index, which is the most effective index in this research, is of great importance. Due to the sharp decline in social activities during the pandemic, the use of active transportation became an option to reduce the negative effects of the pandemic on social behaviors. As a key element in the epidemic of society, the health index leads to the use of active transportation. The use of this transportation not only contributes to social distancing but also promotes the health of users and ultimately leads cities to healthier

cities. Support for active transport is a clarion call to the need of special dedicated routes in cities,

While creating these routes in small and medium cities without GPS technology is more successful, special transportation routes also ensure the safety of users of such routes in larger urban environments. Finally, the pandemic severely damaged the household economy of Dorood City. Thus active transportation can also be a way to reduce household costs. Support for this type of transportation is subject to decisions made for specific subsystems of this type of transportation.

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AUTHOR CONTRIBUTIONS

Somayeh S. Hosseini defined the idea of the study, built the logic of the study, participated in field research, compiled cartographic material, structured the results of the study and participated in the production of the graphic material of the article. Yones Gholami formulated the problem and defined research methods. Hengame Dolvand participated in field research, structured the text of the article in the logic of research and selected bibliographic sources. Zagir V. Ataev performed an analysis of the existing experience and formulated the conclusions of the study. All authors are equally participated in the writing of the manuscript and are responsible for plagiarism, self-plagiarism and other ethical transgressions.

КРИТЕРИИ АВТОРСТВА

Сомайех С. Хоссейни определил идею исследования, выстроил логику исследования, участвовал в полевых исследованиях, составил картографический материал, структурировал результаты исследования, участвовал в изготовлении графического материала статьи. Йонес Голами сформулировал проблему, определил методы исследования. Хенгейм Долванд участвовал в полевых исследованиях, структурировал текст статьи в логике исследования, подбирал библиографические источники. Загир В. Атаев выполнил анализ имеющегося опыта, сформулировал выводы исследования. Все авторы в равной степени участвовали в написании рукописи и несут ответственность при обнаружении плагиата, самоплагиата или других неэтических проблем.

NO CONFLICT OF INTEREST DECLARATION

The authors declare no conflict of interest.

КОНФЛИКТ ИНТЕРЕСОВ

Авторы заявляют об отсутствии конфликта интересов.

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