




Perceived Impact of Tourism: A Scale Adaptation Study¹

Turizmin Algılanan Etkileri: Bir Ölçek Uyarlama Çalışması

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ABSTRACT

The perceived impacts of tourism have been a topic of interest for researchers and policymakers for many years. One of the main reasons for this interest is the desire of countries to identify the positive and negative effects of tourism when determining their tourism policies. Although these impacts have been examined in the literature from various perspectives, it is observed that studies focusing on the local population remain quite limited. The primary aim of this study is to adapt the "Perceived Impacts of Tourism" scale developed by Godovykh et al. (2023) into the Turkish language. For this purpose, data were collected from 201 participants (Female: 54,2%, Male: 45,8%) of various professions and age groups using a convenience sampling method to measure the tourism impacts perceived by the local population. In the process of adapting the scale, the steps recommended by the widely accepted International Test Committee (ITC) were followed meticulously. Necessary permissions for adapting the scale were first obtained from the authors of the original article and then from the ethics committee (E-34183927-000-0000903388). At the next stage, the scale was translated and back-translated by language experts, expert opinions were obtained from academicians in the field of tourism, and exploratory and confirmatory factor analyses were conducted. As a result of these analyses, it was revealed that the scale, just like its original version, consists of eight items and two dimensions (positive impacts and negative impacts). For the Turkish-adapted scale, the Cronbach's Alpha values for each dimension were calculated as .82, and the goodness-of-fit values were found to be above the accepted thresholds (CMIN/DF: 1.850, NFI: .95, IFI: .97, CFI: .97, SRMR: .06, RMSEA: .05, TLI (NNFI): .96). Through discriminant and convergent validity tests, it was demonstrated that the scale is a valid and reliable measurement tool. The results obtained for this scale make it ready to measure the impacts of tourism on the local population in Turkey, a country with significant tourism potential. At the same time, the adapted scale offers opportunities to compare tourism impacts in Turkey with those in different cultures and to produce sustainable tourism policies for national tourism strategies.

Keywords: Tourism Impact, Negative Impacts, Positive Impacts, Residents, Scale Adaptation.

ÖZ

Turizmin etkileri uzun yıllardır araştırmacıların ve politika yapıcıların ilgisini çeken bir konu olmuştur. Bunun en büyük sebeplerinden biri, ülkelerin turizm politikalarını belirlerken öncelikle bu alandaki pozitif ve negatif etkileri tespit etmek istemeleridir. Bu etkiler literatürde birçok farklı perspektifle incelenmiş olup, yerel halkı gözeten araştırmaların oldukça sınırlı kaldığı görülmüştür. Bu araştırmanın temel amacı, Godovykh vd. (2023) tarafından geliştirilen "Turizmin Algılanan Etkileri (Perceived Impacts of Tourism)" ölçeğinin Türkçe diline uyarlanmasıdır. Bu amaç doğrultusunda araştırmada, yerel halkın algıladığı turizm etkilerini ölçmek için çeşitli meslek ve yaş grubundan kolayda örnekleme yöntemiyle 201 kişiden (Kadın: %54,2, Erkek: %45,8) veri toplanmıştır. Ölçeğin uyarlanması sürecinde sıkça kabul gören International Test Comitee (ITC) tarafından önerilen adımlar eksiksiz olarak uygulanmıştır. Araştırma kapsamında ölçeğin uyarlanması için önce yazarlardan ardından da Etik Kurul'dan (E-34183927-000-0000903388) gerekli izinler alınmıştır. Bir sonraki aşamada; dil uzmanları tarafından ölçeğin çeviri ve geri çevirisi yapılmış, turizm alanındaki akademisyenlerden uzman görüşü alınmış, son olarak da keşfedici ve doğrulayıcı faktör analizleri gerçekleştirilmiştir. Bu analizler sonucunda ölçeğin orijinal versiyonunda olduğu gibi sekiz maddeden ve iki

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boyuttan oluştuğu ortaya konmuştur (pozitif etkiler ve negatif etkiler). Türkçe diline uyarlanan ölçeğin her boyutu için Chronbach's Alpha değerinin .82, uyum iyiliği değerlerinin ise (CMIN/DF: 1.850, NFI: .95, IFI: .97, CFI: .97, SRMR: .06, RMSEA: .05, TLI (NNFI): .96) kabul edilen eşliğin üzerinde olduğu tespit edilmiştir. Yapılan iraksak ve yakınsak geçerlilik testleriyle birlikte söz konusu ölçeğin geçerli ve güvenilir bir ölçüm aracı olduğu ortaya konmuştur. Ölçeğe dair elde edilen bu sonuç, büyük bir turizm potansiyeline sahip olan Türkiye'deki turizmin etkilerini yerel halk bazında ölçümlenmeye hazır hale getirmektedir. Aynı zamanda uyarlanan bu ölçek ile farklı kültürler ile Türkiye'deki turizm etkilerinin kıyaslanabileceği, ülke turizm politikaları için sürdürülebilir politikalar üretebileceği düşünülmektedir.

Anahtar Kelimeler: Turizmin Etkileri, Negatif Etkiler, Pozitif Etkiler, Yerel Halk, Ölçek Uyarlama.

INTRODUCTION

Tourism is an activity that has both positive and negative effects on a destination. In addition, the visible impacts of tourism and its effects on the local population are different from each other (Godovykh et al., 2023). Past studies have generally focused on the economic impacts of tourism. (Adams & Parmenter, 1995; Costa, 1984; Maude & Vanrest, 1985). However, in the following years, the focus shifted more towards the social impacts created by the increasing number of tourists and issues of sustainability. (Lin, 2014; Bu et al., 2021; Eslami & Namdar, 2022). Considering that millions of people travel each year and leave billions of dollars in foreign exchange, it is impossible not to research and address the economic relief brought by tourism to countries. However, more aware destinations and researchers have started to investigate that this is not sustainable and what needs to be done to make it sustainable. According to the latest data from the United Nations World Tourism Organization (UNWTO), in 2022, the number of people participating in global tourism activities increased by 111% compared to the previous year, reaching 963 million, and international total expenditure rose by 61.6% to 1 trillion 31 billion dollars (TÜRSAB, n.d.). Considering these statistics, the local population is the most affected group, both positively and negatively, by the influx of tourists. Therefore, it is crucial to assess the impact of tourism from the perspective of the local community. Despite the fact that previous studies have developed measurement tools for this topic (Lankford & Howard, 1994; Ap & Crompton, 1998; Tomljenovic & Faulkner, 2000) their objectives are somewhat at odds. Ap & Crompton (1998), although one of the pioneers of this field, considered only the local people in one dimension in the 7-dimensional scale. Those who came after him identified the deficiencies here and introduced new scales with adjustments (Lankford & Howard, 1994; Tomljenovic & Faulkner, 2000). Although each scale developed subsequently measured the concept a little better, an up-to-date scale appropriate to the requirements of the age was needed.

In this context, the study titled "Measuring the perceived impacts of tourism: a scale development study", published in recent years, has filled a considerable gap in the literature (Godovykh et al., 2023). Therefore, adapting the most current and comprehensive scale to Turkish culture and language is a crucial matter. The primary aim of this study is to translate the scale in question into Turkish, allowing researchers to easily measure the impacts of tourism from the perspective of the local population in Turkey, the 4th most visited country in the world (Taşkın, Tuna, & Birkan, 2024). For a country exposed to such a touristic influx, it is necessary to analyze well how much the local people benefit from this tourism and how many problems they experience. Positive effects include strengthening the local economy with increased tourism revenues, increasing employment opportunities and introducing cultural values to a wider audience. However, negative effects cannot be ignored; excessive tourist density can lead to depletion of natural resources, environmental pollution and a decrease in the quality of life of local people. In addition, problems such as cultural erosion and changes in local identities according to tourist expectations can also occur. Therefore, sustainable management of tourism is of critical importance. The main objective of this study is to contribute a ready-to-use scale to the literature through the qualitative and quantitative analyses to be conducted within this scope.

1. Literature Review

For tourism to fully develop in a destination, the support of the local community is extremely important (Ap & Crompton, 1998). At first glance, tourism may seem like a very positive aspect for the local population. While some members of the community see the influx of tourists to their area as an opportunity, others may perceive it as a threat. The effects of tourism can generally be understood more clearly as positive and negative in economic terms. Just as the government provides you with free health services and receives a similar amount from taxes, as in Milton Friedman's positive economic theory, in tourism, the flow of tourists not only increases the welfare of the local people, but also means making the city more expensive and increasing rents (Fontinelle, 2024). It is necessary to transform the relationship here into a win-win situation and to achieve this not only economically but also socially, culturally and environmentally. The hospitality shown by the local community to incoming tourists is crucial for ensuring that tourists leave the destination satisfied. In this regard, over the past 30 years, researchers have conducted various studies involving scale development, model proposals, and literature reviews to thoroughly examine the impacts of tourism (Lankford & Howard, 1994; Jurowski, Uysal, & Williams, 1997; Gursoy & Rutherford, 2004; Deery, Jago, & Fredline, 2012; Sharpley, 2014). In this context, summarizing previous studies, Godovykh et al. (2023) presented the impacts of tourism under the following subheadings:

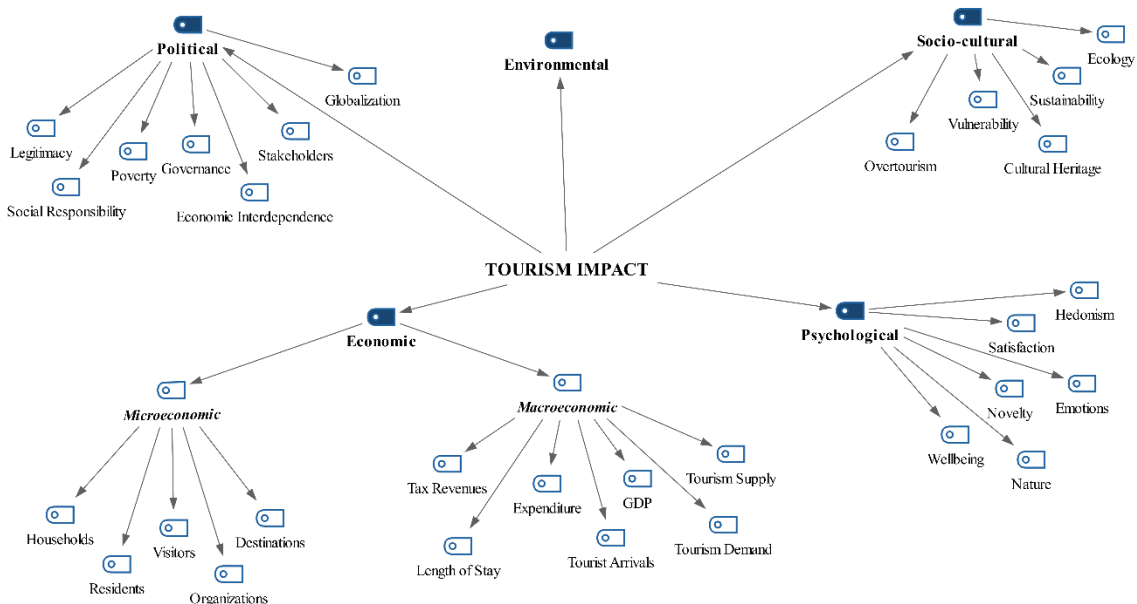


Figure 1. Tourism Impact

Source: Godovykh et al. (2023).

At the same time, it is also possible to categorize these subheadings as the positive and negative impacts of tourism. Based on past literature, the positive impacts of tourism include economic growth, revenue generation, tourism receipts, poverty reduction, rise in employment opportunities, income levels, the standard of living, satisfaction, happiness, resident-tourist value co-creation, heritage management, and quality of life. On the other hand, the negative impacts include the displacement of traditional markets, cost of living, tourism infrastructure without economic return, economic inequality, income inequality, poverty gap, housing affordability, and seasonality, overcrowding, crime, drug trafficking, alcoholism, vandalism, traffic, lessened life satisfaction during tourist season, and diminishing local traditions (Godovykh et al., 2023). Although studies on the perceived impacts of tourism have been conducted for many years, each new study expands upon the previous one, adapting it to the realities of the time. Within this context, in this study the most

up-to-date "perceived impacts of tourism" scale has been adapted into the Turkish language with contemporary additions based on previous studies. The items of the Turkish version of the scale are as follows.

Table 1. Translated Scale Items

Turkish Translation of the Items
Turizm, yaşadığım toplumda yerel halkın gelirini artırır.
Turizm, yaşadığım toplumda iş olanakları sağlar.
Turizm, yerel altyapıyı, yani yolları, ulaşım sistemlerini, iletişim ağlarını vb. geliştirir.
Turizm, yaşadığım topluma yatırım yapılmasını sağlar.
Turizm yaşadığım topluma hava ve su kirliliği getirir.
Turizm yaşadığım toplumdaki yerel kültürü olumsuz etkiler.
Turizm, yaşadığım toplumdaki yerel halkta daha çok strese neden olur.
Turizm toplumumdaki mal ve hizmet fiyatlarının artmasına yol açar.

2. Methodology

In this study, both quantitative and qualitative research methods were utilized. The Turkish adaptation of the scale developed in the study titled 'Measuring the Perceived Impacts of Tourism: A Scale Development Study,' which was published in the Social Sciences Citation Index (SSCI) and proven to be valid and reliable, was conducted. Before beginning the scale adaptation process, the necessary ethical committee approval document for collecting the data used in this research was obtained from the Aksaray University Human Research Ethics Committee on 23.12.2023, with the decision/number E-34183927-000-00000903388.

2.1. Scale Adaptation Process

At this stage, all procedures were carried out within the framework of the criteria set forth by the International Test Commission (ITC). In this context, the following steps are recommended when adapting a scale:

- Obtaining the necessary permissions from the authors of the article to be adapted,
- Consulting with the right experts, taking into account linguistic, psychological, and cultural differences,
- Conducting the translation process in a manner suitable for the target population,
- Conducting a pilot study to make necessary revisions to the survey,
- Carrying out the study on an appropriate sample size,
- Performing analyses in a systematic plan and proving validity and reliability.

(International Test Commission, 2017).

After obtaining the necessary ethical approvals to conduct the study, permission was obtained from the authors who developed the original scale, as specified in the first step by the ITC. In this context, the corresponding author was contacted via email on November 7, 2023, to obtain the necessary permission to adapt the scale. As the second step, considering cultural differences, support was sought from three academic experts in the field for translation, and a back-translation was

performed. Following this, a pilot study was conducted on a sample of 50 people. A 5-point Likert scale was used in the study, and the final version of the scale was determined after the pilot study, which was conducted following the translation, back-translation, and expert opinions.

2.2. Data Collection

When the data collection process began, an appropriate number of surveys were administered to the sample by averaging several accepted views in the literature. Among these views, Gorsuch (1983) suggests collecting five times the number of items, while Everitt (1975) argues for ten times the number. In our study, the total number of items is 8, and it was decided to exceed these threshold values, as collecting data above these limits was believed to positively impact the reliability and validity of the study. In this setting, data were collected from 208 people using the convenience sampling method. The reason for using this sampling method is that there is no need for a specific participant group. To elaborate further, the effects of tourism are tried to be understood through the eyes of the local people in this study and almost everyone is local. Surveys that were incomplete or incorrectly filled out were excluded from the study, leaving 201 data points for consideration.

2.3. Data Analysis

SPSS 27 and SPSS AMOS 24 software packages were used for data analysis. The scale, which was linguistically and culturally adapted, was first subjected to exploratory factor analysis (EFA), followed by confirmatory factor analysis (CFA). To measure the reliability of the study, Cronbach's Alpha coefficient and Composite Reliability tests were conducted. The validity of the scale was established and presented through convergent validity and discriminant validity tests.

3. RESULTS

3.1. Sampling

Care was taken to select the sample group for the study in a way that does not segregate by profession. Considering that individuals from the local population may have various occupations in their normal lives, it was anticipated that applying the principle of maximum diversity would positively impact the research results. Similarly, efforts were made to ensure that the number of male and female participants was as equal as possible, and since the local population does not segregate by age as young or old, the study was not limited to a specific age range. In this context, 54.2% of the 201 participants in the study were women, and 45.8% were men. The participants' ages ranged from 18 to 62, with 21.9% of them being married and 78.1% being single.

3.2. Psychometric Properties of the Scale

3.2.1. Reliability analysis

To guarantee the unwavering quality of the scale, Chronbach's Alpha coefficient was analyzed. As a result of the analysis, it was found that the Alpha coefficient was .82 for the 'Positive Impacts' dimension and .82 for the 'Negative Impacts' dimension. In addition, the Alpha coefficient for the whole scale was found to be .70. According to the results given in Table 2, the scale was found to be reliable. In addition, the analysis needed to be further deepened.

Table 2. Reliability Analysis Results

Reliability Analysis	
Tests	Results
<i>Chronbach's Alpha for the total scale</i>	.70
<i>Chronbach's Alpha for the Positive Impacts Dimension</i>	.82
<i>Chronbach's Alpha for the Negative Impacts Dimension</i>	.82

3.2.2. Validity

In order to ensure the validity of the scale, analyses were made by applying various stages and presented in this section.

Translation validity:

The original scale was developed in English language and the translation of the items was carried out by three experts who have language proficiency and work in the field. At this stage, translation and back translation techniques were used and the items were organized in a way to give the closest meaning to the original language and to reflect the culture to be applied.

Construct validity:

It is known that the scale theoretically consists of two dimensions. EFA was applied in order to determine whether these dimensions were differentiated in the same way after the translation process. Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity test results revealed that the data set was suitable for factor analysis for both scales (KMO: .76, Bartlett's Test of Sphericity: <.001). Communalities values are between .59 and .74 and Total Variance Explained value is 66%. The scale consists of two dimensions as in the original and all the items belonging to the dimension are above the threshold value of .50 as seen in Table 3.

Table 3. Exploratory Factor Analysis Results

Factor/Item	Factor Loadings		Communalities	Eigenvalues	Variance (%)	α	S	K
	1	2						
<i>Positive Impacts</i>				2.66	33.29	.82		
P1	.80		.65				-1.36	1.68
P2	.80		.66				-1.28	2.10
P3	.78		.62				-1.08	1.07
P4	.83		.69				-1.20	2.11
<i>Negative Impacts</i>				2.60	32.46	.82		
N1		.84	.71				-.10	-.48
N2		.86	.74				-.15	-.32
N3		.75	.59				-.51	-.32
N4		.77	.60				-.82	.36

Kaiser-Meyer-Olkin Measure of Sampling Adequacy: .76
Barlett's Test of Sphericity: <.001

Chronbach's Alpha: α , Skewness: S, Kurtosis: K

CFA was applied to ensure the validity of the scale. In this context, firstly, Goodness of fit Indices data were analysed. As seen in Table 4, most of the values were found to be in the perfect fit range.

Table 4. Goodness of fit Indices

<i>The goodness-of-fit indices</i>	Calculated Values	Threshold (For perfect fit)	Comment
CMIN/DF	1.850	$\leq 0 \text{ } x^2/df \leq 2$	P.F.
NFI	.95	$\leq 0.95 \text{ } NFI \leq 1.00$	P.F.
IFI	.97	$\leq 0.95 \text{ } IFI \leq 1.00$	P.F.
CFI	.97	$\leq 0.95 \text{ } CFI \leq 1.00$	P.F.
SRMR	.06	$\leq 0.00 \text{ } SRMR \leq 0.05$	A.F.
RMSEA	0.05	$\leq 0.05 \text{ } RMSEA \leq 0.08$	A.F.
TLI (NNFI)	.96	$\leq 0.95 \text{ } TLI (NNFI) \leq 1.00$	P.F.

Perfect Fit: P.F., Acceptable Fit: A.F.

Source: (Hu & Bentler, 1999; Hair et al., 2010).

Convergent Validity

According to Fornell & Larcker (1981), for a scale to have convergent validity, the Average Variance Extracted (AVE) value should be above 0.50 for each dimension. The results of the analyses showed that the AVE values were .50 for the first dimension and .53 for the second dimension and the scale was found to have convergent validity.

Discriminant Validity

The generally accepted view in the literature is that $\sqrt{\text{AVE}}$, Maximum Shared Variance (MSV) and Average Squared Shared Variance (ASV) values should be calculated to ensure discriminant validity (Hair, Black, & Babin, 2010). Considering these data, it was revealed that there was no problem in discriminant validity. Recent studies have added the HTMT (heterotrait-monotrait) technique to these tests (Zorlu & Yılmaz, 2022). Henseler, Ringle, & Sarstedt (2015) who introduced this method, stated that the HTMT value in the scale should be below .09. Considering this criterion (HTMT: .01), there is no question about discriminant validity.

Table 5. Confirmatory Factor Analysis Results

Factors/Items	SL	AVE	$\sqrt{\text{AVE}}$	CR	Alpha
<i>Positive impacts</i>		.50	.25	.80	.82
P1	.79				
P2	.77				
P3	.58				
P4	.66				
<i>Negative impacts</i>		.54	.29	.82	.82
N1	.78				
N2	.83				
N3	.65				
N4	.67				

4. CONCLUSION

In this study, the *Perceived Impacts of Tourism* scale, originally developed by Godovykh et al. (2023), was translated and adapted for use in Turkish. The frequently used and recommended steps in the literature regarding the validity and reliability of the culturally adapted scale were applied in detail. The scale in question consists of two dimensions exactly as the original and was translated without the need to delete any item. The results revealed that the scale is a valid and reliable measurement tool and can be used as it is in future studies. The scale will contribute to researchers, policy makers and the understanding of the thoughts of local people. The scale also has many practical benefits. By systematically measuring the perceptions of local people towards tourism, this scale provides municipalities and local governments with the opportunity to evaluate the effects of tourism policies. In this way, it is ensured that the concerns and expectations of local people are taken into account when planning to develop tourism. Since a tourism plan cannot be made without considering the local people, this scale can reveal both the current situation before and the changes over time with the application of the scale. Not only local governments but also private tourism enterprises (hotel chains, restaurants, tour operators) can benefit from this scale, develop public relations strategies and establish healthier communication with local people. In future studies, it is recommended to develop a more detailed and multidimensional scale covering the effects of tourism.

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