

The Perceptions of Local Community about Tourism in the New World Wonders: The Case of Petra in Jordan

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ABSTRACT

Objectives: This study aims at exploring the different perceptions held by local community in Petra about tourism impacts; especially that it is a main source of development in that region with the lack of other sources of economy. In addition, the effect of some factors related to the residents on the way they perceive tourism impacts were also tested. These factors were particularly chosen as they are expected to affect hosts perceptions on tourism more than any other variables.

Methodology: Two groups were targeted in this study: people working inside the archaeological park of Petra, and the community living in Wadi Musa Village. In order to measure their perceptions about tourism impacts, a survey was designed containing 19 questions regarding the main impacts of tourism. These questions were measured on a dichotomous scale (yes, no, & I do not know). The sample was gathered in 2008 and 2009, and it has a size of 156 individuals willing to participate in the survey.

Major Findings: The majority of respondents perceive that tourism does not contribute to the environmental pollution. They positively evaluate its role in establishing and enhancing services in the region, increasing residents' income level, and sustaining traditional arts and crafts, on the other hand they see tourism as a main contributor to increasing prices of properties and goods in the area. Individuals who work in tourism are more likely to perceive the different benefits of tourism.

Conclusions: Local communities in Petra are attracted by the economic role of tourism in enhancing their levels of income and creating job opportunities. However they do not appreciate the role tourism plays in increasing the prices of goods and property. Respondents are less aware of the environmental dimensions of tourism and the necessity of sustaining this fragile site in a systematic way. In addition, they highly appreciate the socio-cultural impacts of tourism in Petra.

Implications: In order to sustain tourism in and its role in Petra, more awareness programs are necessary to help people understand the potential positive and negative impact of tourism and their implications. Government plans should not focus on increasing economic gains and ignore the physical carrying capacity of the site.

Target Audience: Tourism planners and marketers, tourism investors, tourism managers, academics, researchers, and students could benefit from the main findings of this research project in maximizing the positive benefits of tourism and involving local communities in its activities in a sustainable manner.

INTRODUCTION

Since its rediscovery on August 22nd 1812 by the Swiss traveler J. Burckhardt, who disguised himself as a pilgrim seeking to make a sacrifice at the tomb of Aaron (Burckhardt 1822); explorers and tourists were attracted to the red rose city of Petra. The great Nabataean capital and commercial center is carved in the red sandstone. It is located just outside the town of Wadi Musa in southern Jordan, with a distance of 260 kilometers from Amman via the Desert Highway and 280 kilometers via the King's Highway. In July 7, 2007, Petra won the contest and became as one of the new seven world wonders.

The archaeological park which includes the ancient city is accessed through an outer Siq (path) in which significant features as Obelisk tombs and Djen Blocks can be seen, then a natural gorge known as Siq with a length of 1200 m with the water channels system still existing, as well as niches and the two statues of Dushara and al-Uzza

gods. The Siq then widens upon the most magnificent of all Petra's monuments al-Khazneh (Treasury), which is carved out of solid rock with a height of 40 m. the Siq continues through the ancient city where different features can be observed; these include the Street of Facades, the Amphitheater which can accommodate more than 6000 spectators, the Royal tombs (Urn Tomb, silk tomb, Corinthian Tomb and Palace Tomb), also the Mausoleum of Sextus Florentinius; that is in addition to the colonnaded street leading to triple-arched Temenos Gateway which marked the entrance into the courtyard or "temenos" of the Qasr al-Bint, one of the main Nabataean temples in the city. Other remains include Nymphaeum, the Great Temple Complex, Temple of the Winged Lions, Petra Church, Blue Church, a number of high places (with their platforms for the purposes of giving animal sacrifices), Al-Deir (the Monastery) with its huge façade (50 meters wide and 45 meters high), big number of tombs as the Lion tomb, Garden

Tomb, Tomb of the Roman Soldier, Triclinium (Feast Hall), as well as many other features. In general, the remains of the city are dated to different periods within 2nd century B.C. to Late Byzantine Period (6th century A.D.), such archaeological remains made Petra one of the most significant tourism attractions in Jordan.

The benefits of tourism to the city of Petra were recognized since the early decades of the 20th century A.D. Before that, tourism in North Africa and Middle East was restricted by the Western imperialism that extended its influence over these regions, thus movement of travelers and tourists was mainly confined to the major cities and pilgrimage centers as Cairo and Jerusalem, traveling to Petra was difficult at that time, the area in which it was located was still difficult to access to many travelers, of who some could reach the city by horse or camel from either Jerusalem or Aqaba, Moreover, some hostility by local tribes against foreigners was recorded, this situation was to end when Transjordan government of Amir Abdullah extended its authority through the southern areas and ended raiding among the tribes, which resulted in more security, also the pavement of roads and the installation of electric and telephone lines, for Wadi Musa the nearest village to Petra, it was linked to the city of Ma'an by telephone in 1926. The first hotel in Petra was built in the early 1920's by Thomas Cook Travel Company near the Nabataean Temple of Qasr el-Bint, which became later in the 1940's known as Nasal's Camp. In the 1950's, the Jordanian government opened a rest house between Wadi Musa and Petra, members of the Liyathnah tribe living there were employed there and later were contracted to offer horses to transport tourists into Petra. Moreover, they started to sell post cards, tour books, and souvenirs. On the other hand, the Bedul tribe who were living in Petra itself began to sell real and fake antiquities, post cards, and souvenirs, some of them could establish refreshments stands, and register their horses with the government as the Liyathnah did (Shoup, 1985). The Bedul's involvement in tourism was traditional and stable, it was limited to selling souvenirs and refreshments besides providing guide services for extended trips, and a limited participation in the horse rental for tourists, which both were dominated by the Liyathnah (Koorring and Simms 1996).

When Petra was listed as a World Heritage Site in 1985, the Bedouin tribes who had settled in the area were forced to leave the caves they used as homes in the archaeological site (Lubick 2004), even with the growth of tourism, the Bedul continued goat pastoralism and rainfall farming of wheat and barley, their residence included black tents of woven goat hair, numerous masonry structures in natural rock shelters, as well as empty Nabataean tombs. Umm Siehoun was built as the village outside the archaeological park for the occupation the Bedul, providing better education and health care, but decreasing their

access to traditional pastoral and agricultural lands and the cash economy of tourism, consequently, many of them refused to move out of the caves and rock shelters, more efforts were done by the Jordanian governments to move them by 1990, only a very few tent camps remained in remote locations. A road to Petra from Umm Siehoun has re-established their access to tourists; the relocation process had also its negative consequences. The Bedul were concentrated in a very density settlement, their goat herding from the village increases the pressure on the already-depleted rangelands immediately around Petra, and so more people got involved in the tourist trade to compensate for economic losses in other areas and to support a growing population. Many of these people realize the advantages of Umm Siehoun settlement, but they want to keep settling in their tribal lands and to have more involvement in tourism development (Koorring and Simms 1996).

In the 1980's and 1990's , tourism and associated development has greatly increased in Petra, as well as the number of visitors to the site. According to the statistics of the Ministry of Tourism and Antiquities in Jordan (MOTA), the numbers of tourists visiting Petra kept increasing yearly on high rates, to start from 120,338 visitors in 1989, to reach 766,938 tourists in 2009, of which 105,582 were Jordanians,. Table-1 shows the increase in the number of tourists during the period between 1989 and 2009.

Table 1: Numbers of Visitors to the Site of Petra (1989-2009); (MOTA, Department of Statistics 2010).

Year	No. of Visitors	Year	No. er of Visitors
1989	120,338	2000	481,198
1990	102,151	2001	231,203
1991	40,889	2002	158,837
1992	117,347	2003	160,658
1993	138,559	2004	310,271
1994	200,505	2005	393,186
1995	337,221	2006	359,366
1996	414,448	2007	581,145
1997	380,527	2008	813,267
1998	347,109	2009	766,938
1999	429,644		

Petra receives the largest number of visitors among all other tourist attractions in Jordan. Despite the great economic benefits gained by tourism to the site, the fact that great pressure and negative impacts caused by the increasing influxes of tourists since its discovery was not to be ignored by UNESCO, which considered it as an endangered site (UNESCO 1993). Different management plans were proposed by the World Bank, UNESCO, and MOTA. However, mere ignorance of the local community and their interests in the

planning and management of the site was common among all these plans, which finally leads to the failure of sustaining the site as a unique touristic attraction.

TOURISM IMPACTS ON PETRA

There are potential economic, socio-cultural and environmental impacts that influence the current attractiveness and future sustainability of Petra. The current situation of the site calls for an urgent need to involve the local community as a main stakeholder in the development and management of the site, thus realizing their role and perceptions to how the site should be managed, which is the main focus of this research.

ECONOMIC IMPACTS

Tourism as a main source of income to Jordan contributes to the GDP with a percentage of 14% (2009). MOTA statistics shows that tourism receipts had reached \$ 2.953 billions in the year 2009.

Petra received 766,938 tourists out of 3.7 million tourists visited Jordan in the same year. Tourists in Petra spent 577,888 nights (forming 25.3% share of tourist nights in Jordan), with an average length of stay of 1.93 nights. Tourism is considered as a main contributor to the economy of tribes living around Petra. The attraction creates 1,657 direct jobs in the tourism business. These are distributed as follows: 1,088 in hotels, 118 in travel agencies, 31 in tourist restaurants, 18 in car renting offices, 59 in souvenirs shops, and 343 as horse guides. However many of these jobs, especially in the hospitality sector are occupied by non locals.

ENVIRONMENTAL IMPACTS

Petra is considered as a fragile site. The nature of its sand stone brings a challenge to the management of the site. In addition to the potential floods in and the impact of natural factors like wind on the sustainability of the site, the main negative environmental impact taking place in Petra is characterized by the consequences of tourists' behavior while navigating in the site (Lubick 2004). The random climbing and movement on site's rock-cut features is leaving drastic effects. Another threat facing Petra is the rising level of humidity resulted by the crowds of the tourists present at the site, which is an obstacle facing the preservation of sandstone. This mainly relates to the increasing number of visitors that exceed the physical carrying capacity of the site (Alshorman and Magablih 2009). One of the activities causing deterioration of site features is the "animal rides", the hooves of these animals are causing erosion of sandstone, though, it can not be ignored that these are forming an important source of income to locals (PNT 2010). The stalls selling souvenirs and refreshments to the tourists are many in numbers, and rudimentary in away that disturbs the harmony of the site

(UNESCO 1993). Some of the locals in Petra used to break apart the sandstone from the site to grind it and fill sand bottles with it, these sand bottles are one of the distinguished souvenirs sold to tourists (PNT 2010). The area adjacent to the site is full at present with hotels and residential units, an area that was not fully survey or excavated by the archaeologists, there is a possibility that more remains of the ancient site are to be uncovered in the area stretching from the existing site up to and including parts of the village of Wadi Musa (UNESCO 1993).

SOCIO-CULTURAL IMPACTS

Commercialization of Bedouin culture was one of the results caused by the great interest of tourists in Petra region; this was to affect both Bedul tribe in Petra as well as 'Ammarin tribe in Baidah (5 km to the north of Petra), tribesmen were aware of the tourist appeal of the traditional Bedouin tent as a symbol of local culture and hospitality, and so they started to set their own camps where they built refreshments stands, women also started to sell different Bedouin items to tourists. Another impact is seen in the change of values, the young Bedul try to imitate Westerners in dress and manners, though, these Westerners are seen by some locals as corrupt with negative values as alcoholism and illegal relationships, which indicates a kind of confusion over the values of the West and the strengths of ties to Bedouin culture by some of the locals. A cultural change that took place after expansion of tourism development can be seen clearly in the decline in traditional handicrafts, since the 1950's, few women have woven carpets or even their own tents, tourists' interest in the in such items helped in the revival of these arts, consequently, some women started to make small bags, carpets, miniature looms with partially finished panels still on them, and spindle whorls in order to help in supporting their families (Shoup, 1985). Lured with the fast and easy income, some students started withdrawal from schools at an early age and getting involved in selling of simple items like beads, postcards, and colored sand stones to tourists (Magablih and Naamneh 2010)

LITERATURE REVIEW

The growth of tourism in any area or region can not be achieved without the support of its residents; consequently, the issue of perceived impacts of tourism was to have its significance in empirical literature since 1970's (Ap & Crompton 1989).

The impacts of tourism that are perceived by and affecting residents of any destination take many forms. The economic impacts of tourism are seen through enhancing income and living standards (Pizam 1978), providing jobs opportunities (Liu & Var 1986; Milman & Pizam 1988), increasing investment, increasing tax revenues, and improving the infrastructure (Milman & Pizam 1988), though, tourism contributes to the increase of prices of

lands and properties as well as the prices of goods and services (Liu & Var 1986; Pizam 1978).

Environment wise, tourism supports the protection of natural areas as well as the preservation of historic heritage and buildings (Liu & Var 1987, Sethna & Richmond 1978), on the other hand, tourism can increase congestion and crowding, besides contributing to different types of pollution (Pizam 1978).

Sociocultural impacts of tourism are characterized by the improvement of life quality (Pizam 1978), contribution to cultural exchange and understanding among different committees and their meeting together; moreover, it helps in preserving the cultural identity of host culture. In some cases, tourism contributed to the spread of some negative values as prostitution, smuggling, alcoholism (Liu & Var 1987). The assessment of tourism impacts in different studies was achieved by examining the perceptions of local communities (Cordero 2008). Perceptions were defined as 'process which an individual selects, organizes and interprets stimuli into a meaning full and coherent picture of the world' (Schiffman & Kanuk, 1987, 174). When positive economic tourism impacts take place in a community, and then its residents will see these new opportunities and become motivated to explore them, they also recognize the different negative impacts that might emerge with tourism development, based on that, residents develop different attitude toward changes that might take place in their life, they put limits for change which should not be exceeded, consequently, their beliefs become the most reliable indicator of the limits to the growth of tourism (Ambro 2008). Directing tourism growth toward local needs, interests, and limits can greatly enhance its value to the community, and help create a sustainable industry of a significant economic value that will affect the lives of local residents; on the other hand, their attitudes and behavior can clearly influence the satisfaction and overall experience of tourists (Chen & Raab 2009). In general, local empowerment became one of the basic aims of sustainable tourism, it is based on engaging local communities in planning and decision making about the management and future development of tourism in their area, in consultation with other stakeholders (WTO & UNEP 2005). Environmentally, conservation and development projects view local people's support for protected areas management as an important element of biodiversity conservation. Finding common goals between conservation of natural resources and the development needs of local people is an essential part of understanding sustainable protected areas management (Dolisca et al 2007). Also, without the knowledge of opinions of stakeholders (including residents), it is not possible to manage nature conservation and development in the protected area properly (Cihar & Stankova 2006). Sustainable tourism also consider social and cultural dimensions of destinations, different studies

since 1980's have made the case that local residents must be involved in tourism development decisions if support for, and thereby sustainability of, the industry is to be maintained (Andereck 2007). Tourism can have both positive and negative outcomes for residents in communities where sharing and preserving their culture could be seen as conflicting goals (Besculides et al 2002), which indicates the significance of understanding the perceptions of residents toward tourism in any region as a precondition to any development that might take place in the future.

It was found that different factors affect the perceptions and attitudes of residents toward tourism development and its impacts; these include: perceived positive economic impact of tourism by locals (Dyera et al 2007), the extent to which tourism can support other economic activities (as in the case of tourism and tree planting activities that promote forestry programs inside protected areas through actions as soil protection) (Dolisca 2007), the level of community concern, ecocentric values, and perceived costs (Gursoy & Rutherford 2004; Gursoy & Kendall 2006), community attachment (Williams et al 1995), the ethnic characteristics of residents group (being a majority or a minority) (Andereck et al 2005; Besculides et al 2002), the state of the local economy, economic benefits, social benefits, social costs, and cultural benefits (Gursoy & Rutherford 2004), utilization of resource base (Gursoy et al 2002), social interaction with tourists, welfare impacts, negative interference in daily life, sexual permissiveness, and perception of crowding (Teye et al 2002), living in areas with more mature tourist industry and so becoming more aware of both positive and negative impacts (Liu et al 1987), length of residence (Liu & Var 1986), perceived future of the community (Perdue 1990), distance between living place and attraction site (Jurowski & Gursoy 2004), perceived friendliness of local residents (Ross 1992), density of tourism facilities and services (Bestard & Nadal 2007), as well as other different factors. It can be seen from these factors that residents are both affecting and being affected by the development of tourism, such finding makes the consideration of their perceptions and characteristics necessary in different development stages to guarantee their support to the sustainability of tourism. This study aims at exploring the different perceptions held by local community in Petra about tourism impacts; especially that it is a main source of development in that region with the lack of other sources of economy. In addition, the effect of some factors related to the residents on the way they perceive tourism impacts were also to be tested, these include working in tourism, gender, and educational level. These factors were particularly chosen as they are expected to affect hosts perceptions on tourism more than any other variables considering the background of tourism development mentioned in previous sections.

METHODOLOGY

Two groups were targeted in this study; the first group is composed of the people working inside the archaeological park of Petra. The other group is selected from the community living in Wadi Musa Village; the members of this group are enrolled in public sector jobs that are not directly related to tourism. In order to measure their perceptions about tourism impacts, a survey was designed containing 19 questions regarding the main impacts of tourism. These questions were measured on a dichotomous scale (yes, no, & I do not know). The sample was gathered in 2008 and 2009, and it has a size of 156 individuals willing to participate in the survey. Such way of measuring responses with this small number of items was recommended because of the fact that this community individuals are not very willing to fill long surveys with Likert scale, actually, a pilot study was conducted prior to this study and it has shown a very low response rate when such scale was used. The survey included items regarding the different types of impacts caused by tourism. For the environmental impacts, respondents were asked if tourism contributes to the conservation and protection of archaeological sites, if tourism contributes to the environmental pollution, and if tourism contributes to increasing the awareness about environment. For the socio-cultural impacts; questions like if tourism contributes to enhancing services in the region in which it exists, if tourism contributes to increasing social bonds, and if tourism contributes to inducing pride and self respect by individuals were presented. Economic impacts were also considered in this study, the items questioned if tourism contributes to enhancing the level of income, if tourism contributes to establishing tourism services and hotels in region, if tourism contributes to increasing prices of goods during tourism high seasons, and if tourism contributes to increasing the price of lands and properties. A demographic section was also added including age, gender, education, and occupation.

ANALYSES AND RESULTS

The group of the 156 respondents who filled the survey consisted of 2 subgroups, 91 individuals who work in tourism sector, and 65 who work in other sectors (147 valid responses). In job sectors, these were distributed as follows: 36 students, 28 in public sector, 24 in private establishments, 43 in trade and 17 in other sectors. Among these 23 respondents finished their elementary school education, 65 finished high school level, 12 got their community college certificate, and 4 were holding a Bachelor degree and 4 had a graduate level degree. Male respondents were 121 as compared to 27 females; for the ages of these individuals, 20 were of an age below 20 years old, 68 between the ages of 20 and 29, 49 between the ages of 30 and 39, 19 were 40 and above.

In general, the different benefits of tourism development were clearly perceived by the residents in the sample. Table- 2 shows these responses, some variables have shown a stronger agreement by residents of Petra more than others; 149 respondents agreed that tourism contributed to the increase and enhancement of hotels and other tourism establishments in the area, 147 agreed that tourism had an important role in introducing people to the new cultures and civilizations of visitors, 140 of them perceived tourism as main factor in sustaining traditional handcrafts and arts, 139 could see tourism as a mean of increasing the knowledge of locals about the history and the heritage of their region, the same number of individuals see tourism as a main contributor to the level of income. It can be noticed though that tourism was not seen as a strong factor in increasing social bonds, a response given by 64 of these residents.

Table 2: Responses of Local Residents in Petra on Tourism Impacts

Item	Valid No.	Yes	%	No	%	Don't know	%
Tourism contributes to the environmental pollution	156	44	28	109	70	3	2
Tourism contributes to increasing the awareness about environment	156	111	71	25	16	20	13
Tourism contributes to enhancing services in the region in which it exists	156	120	77	32	20	4	3
Tourism contributes to increasing social bonds	156	77	49	64	41	15	10
Tourism contributes to inducing pride and self respect by individuals	156	107	69	33	21	16	10
Tourism contributes to sustaining traditional arts and handcrafts	156	140	90	12	7	4	3
Tourism contributes to introducing people to new cultures and civilizations	156	147	94	4	3	5	3
Tourism contributes to the imitation of international tourists by locals	156	108	69	44	28	4	3
Tourism contributes to increasing divorce and family disruption	153	51	33	85	56	17	11
Tourism contributes to increasing the marriage chances between locals and foreigners	155	131	85	14	9	10	6
Tourism contributes to dismissing schools by children in order to work in tourism	152	130	86	17	11	5	3
Tourism contributes to increasing the knowledge of individuals about history and heritage	156	139	89	14	9	3	2
Tourism contributes to enhancing cultural knowledge of local community	155	122	79	22	14	11	7
Tourism contributes to creating friendship relation between locals and international visitors	156	110	70	29	19	17	11
Tourism contributes to the conservation and protection of archaeological sites	156	137	87	15	10	4	3
Tourism contributes to enhancing the level of income	153	139	91	9	6	5	3
Tourism contributes to establishing tourism services and hotels in region	155	149	97	5	3	1	00
Tourism contributes to increasing prices of goods during tourism high seasons	156	136	87	15	10	5	3
Tourism contributes to increasing the price of lands and properties	156	122	78	26	17	8	5

When it comes to tourism impacts in Petra, some issues might become important to be discussed, these include the effect of being directly benefiting from tourism on the way

such impacts are perceived. A chi-square test was performed to examine the relation between working in tourism and perceptions of locals about tourism impacts. In general, individuals who work in tourism are more likely to perceive the different benefits of tourism. Three variables have shown a significant relation (with a p value as a significance criterion of .05), these were: tourism contributes to enhancing health services in the region in which it exists: $X^2(2, N = 147) = 7.46, p = .024$; tourism contributes to sustaining traditional arts and handicrafts: $X^2(2, N = 147) = 6.74, p = .034$; and tourism contributes to creating friendship relation between locals and international visitors: $X^2(2, N = 147) = 8.74, p = .013$. Petra as a core tourism attraction has witnessed great development in health services triggered by the need of the increasing number of tourist visiting the site. No doubt, the local community benefits from such services that probably could not be available in the absence of tourism. Even for animals a clinic was established to cater for the needs of animals that are used intensively in the area as the only transport media in the archaeological site. Handicraft development and promotion in Petra is a mainly a result of the tourism market and its demand. This has helped local communities to establish cooperative societies to enhance souvenir development and promotion and ensure mutual benefits for the majority in the area. Handicraft production and marketing has become as a main source of income for local people, especially sand bottles, beads and rugs. Being the most visited tourist attraction in Jordan; Local residents have developed a friendly positive attitude towards tourists, particularly when talking about tourism as the main and probably the only source of income in the area for the majority. Therefore, the economic gains have induced cooperative and warm relations by local residents towards visitors. This has developed to a greater extent where many marriage relations have occurred in Petra between residents and visitors. Foreign language fluency has helped developing such a relation. Many small kids are capable of speak more than three languages for commercial uses.

Another issue to be discussed is the effect of gender on the perceptions toward tourism impacts. As mentioned above, the conservative Bedouin culture of residents, will accept only few kinds of work in tourism to be occupied by women, mainly, making handicrafts and selling them. Although of the significant development that took place in Wadi Musa and its continuous expansion, few women are involved in tourism sector. According to the last available data of MOTA, the employees in different accommodations in Petra had a total of 981, of these: 898 were Jordanian males, 20 were Jordanian females, 60 were non Jordanian males and 3 were non Jordanian females. Such numbers indicate the weak involvement of women in tourism sector. A chi-square test was performed to examine the relation between gender and perceptions of locals about tourism

impacts. Only two variables have shown a significant relation (with a p value as a significance criterion of .05), these were: tourism contributes to increasing divorce and family disruption: $(2, N = 145) = 10.94, p = .004$; tourism contributes to the conservation and protection of archaeological sites: $X^2(2, N = 148) = 5.93, p = .052$. Of course, and as previously mentioned there has been many marriage cases in Petra and the surrounding villages between residents and visitors, besides the illegal relations that may exist between hosts and guests in any site like Petra. In many case, this results in disrupting the tact family ties and may lead to divorce or separation cases. Being declares as a world heritage site, and a world new wonder, and as a fragile threatened unique attraction, Petra has attracted the attention of international and local authorities and institutions to preserve the site and sustain it for the generations to come.

The variable of educational level was recorded into two levels, school level (including elementary and high school) and university level (including community college, Bachelor degree and graduate studies). A chi-square test was performed to examine the relation between education level and perceptions of locals about tourism impacts. Three variables have shown a significant relation (with a p value as a significance criterion of .05), these were: tourism contributes to introducing people to new cultures and civilizations: $X^2(2, N = 145) = 6.22, p = .045$; the imitation of international tourists by locals (mainly customs): $X^2(2, N = 145) = 6.76, p = .034$; and tourism contributes to increasing divorce and family disruption: $X^2(2, N = 142) = 6.052, p = .049$.

CONCLUSION

In general, the different benefits of tourism development were clearly perceived by the residents in the sample. Some variables have shown a stronger agreement by residents of Petra more than others. The majority of respondents agreed that tourism contributed to the increase and enhancement of hotels and other tourism establishments in the area, that tourism had an important role in introducing people to the new cultures and civilizations of visitors, that tourism is a main factor in sustaining traditional handicrafts and arts, as a mean of increasing the knowledge of locals about the history and the heritage of their region, and as a main contributor to the level of income.

Individuals who work in tourism are more likely to perceive the different benefits of tourism. Only three variables have shown a significant relation (with a p value as a significance criterion of .05), these were: tourism contributes to enhancing services in the region in which it exists, tourism contributes to sustaining traditional arts and handicrafts, and tourism contributes to creating friendship relation between locals and international visitors.

Environmentally, the majority of respondents perceive that tourism does not contribute to the environmental

pollution, which contradicts the results obtained by Pizam, 1978). On the contrary it contributes to increasing environmental awareness and the conservation and protection of the archaeological site, as concluded by Sethna and Richmond (1978).

Economically, the majority of respondents realize the positive as well as the negative impacts of tourism in Petra. They positively evaluate its role in establishing and enhancing services in the region, and increasing residents' income level. On the other hand they see tourism as a main contributor to increasing prices of properties and goods in the area. This agrees with the research results of Pizam(1993),Liu and Var (1986),and Milam and Pizam (1988).

Considering the socio- cultural impacts of tourism in Petra, local community were divided on the role of tourism in increasing social bonds, and role of tourism in increasing divorce and family disruption. While the majority perceive that tourism contributes to the imitation of international tourists by locals, more than a quarter of them disagree on the statement. The majority of the study sample appreciate the role of tourism in sustaining traditional arts and crafts, introducing people to new cultures and civilizations, increasing the knowledge of people about history and culture and heritage, creating friendship relations between hosts and guests, and inducing self pride and respect among individuals. They also feel that tourism contributes to children withdrawal from schools and increasing marriage chances between locals and visitors. Imitation of residents to the international diverse cultures and behaviors is a threat to the sustainability and attractiveness of the local culture, which is a main factor that attracts people to visit Petra as a symbol of genuine Bedouin life. The main responsibility lies on the Ministry of Tourism and Antiquity and local administration to enhance the cultural aspects and pride in the local culture. This supports the research results of Liu& Var (1987).

Local people are attracted by international cultures and ways of life. They see that tourism increases the marriage chances between locals and foreign visitors, and that tourism contributes to increasing divorce and social disruption. This is a real threat to the social bond and ties in Petra. This is a joint responsibility of all stakeholders to work altogether and coordinate their efforts to enhance the sustainability of tourism through establishing and implementing strategic social awareness and development programs.

Local communities in Petra are attracted by the economic role of tourism in enhancing their levels of income and creating job opportunities. However they do not appreciate the role tourism plays in increasing the prices of goods and property.

Respondents are less aware of the environmental dimensions of tourism and the necessity of sustaining this

fragile site in a systematic way. This needs more awareness programs to help people understand the potential environmental threats tourism could create and how to avoid them and their possible influences.

Government plans should not focus on increasing the number of visitors and the resulting economic gains in the site. They must not be lured by the economic gains in the short run as a marketing myopia and ignore the economic as well as the socio- cultural and environmental costs of tourism in Petra as a brand name for marketing Jordanian tourism. This may create a state of chaos and uncertainty in the long run, especially when ignoring the physical and social carrying capacity of the site. In order to enhance the positive benefits of tourism and reduce its negative potential benefits, the study suggests the necessity of involving local people in the planning, development and marketing of tourism business in a systematic manner, as proposed by Andereck (2007).

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