Testing the Differences between International and Domestic Tourists of Jordan: The Issue of Behavior Determinanats

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Abstract

The main objective of this paper is to measure and test the differences between the groups of international and domestic tourist markets in terms of behavioral determinants, a random sample of 286 tourists visiting different tourism sites in Jordan filled a survey during or after their visit, a t-test analysis was conducted, significant differences were found between these two groups, mainly for what concerns the determinants of ascription of responsibility, value orientation, and behavioral intentions. Such results initiate the necessity to increase the awareness among visitors of archaeological sites (particularly international tourists) about the archaeological and historical significance of these sites and consequences of their behavior so that they become more willing to take positive actions while navigating in them.

Keywords: Archaeological Sites, Tourist Behavior, Value Orientation, Awareness of Consequences, Ascription of Responsibility, Social Norms, Behavioral Intention, Jordan.

1. Introduction

Archaeological sites form an integral part of cultural resources and tourism attractions (Richards 1996); the importance of such resources comes from the fact that they have an interpretive and an educational value (Henry 1993). From a social perspective, they create the personal and collective identity of the society; they also create a vital source of economy seen in the expenditures of visitors to these sites through the business of tourism (Timothy & Boyd 2003). Considering tourism; it is among the main helping factors to conserve the cultural heritage, since it provides with the source of fund used to provide the minimum level of maintenance and conservation (Yunis 2000). Though, tourism development in some cases causes an actual problem, which is basically the physical damage and destruction of monuments and their surroundings caused by the unrestricted and excessive tourists' activities and navigation within the archaeological sites (Herrmann 1989). In most cases, the change or the damage of archaeological sites is due to the excessive visitors' pressure, especially during peak seasons; such impacts take the forms of wear and tear, littering, and vandalism.

The wear and tear problems are the consequences of thousands of feet climbing and stepping on the architectural features of the sites, such as stairs, paving stones and memorials (Evans &Fielding 1998; Timothy & Boyd 2003; Merhav & Killebrew 1998). There is also the slow disappearance of decorative motifs and carvings, which is caused by thousands of hands touching these works of art. When such behavior takes place, the oils on hands hasten the erosion (Ryan 1992). Littering is a big problem as well; especially the food wastes and some other materials that are carried by visitors to these sites as cigarette butts, food containers, cans and bottles; such materials ruin the ambiance of the site, and usually are expensive to clean up (Evans &Fielding 1998; Timothy & Boyd 2003; Merhav & Killebrew 1998). For vandalism, it takes different forms, some of them are direct and immediate as cutting pieces of monuments, picking up artifacts as souvenirs, graffiti and using paint on monuments' surfaces in these sites. Others are indirect and their effect occurs as a cumulative process, as in the case of the moisture and condensation created by breathing, sweating and touching; these especially cause negative impacts on the dialect surfaces and paintings (Shackely 1998). Crowding is a serious problem as well, since people jostle to get a better view, or to take a good photograph, and in some cases, to get closer to touch the feature (Shackely 2001).

The question now is: Why would we give concern to such impacts on archaeological sites? We have mentioned earlier that there is an interpretative and an educational value of the archaeological site, this value helps in understanding and reconstructing the history of the humans and places; though, it depends on the intact form of the site and its components. Such intact value is characterized by spatial and temporal relations among the soil layers, artifacts or finds, features and ecological evidence; all these help the archaeologist to identify the patterns related to human behavior and social activities (Henry 1993).

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Consequently, it is recognized that any change that occurs in the archaeological site will affect the interpretation of its features, and that is how the impacts become a serious issue, especially those caused by human behavior, since they disturb such intact units, and cause the loss of valuable materials that help us in reconstructing the past (Ryan 1992). It becomes important then to explore the determinants of human behavior in archaeological sites.

2. Understanding Human Behavior

According to Hines et al (1986/87), proenvironmental behavior is determined and affected by a number of variables which can be grouped as: cognitive variables, psycho-social variables, demographic variables, experimental studies, class rooms strategies and situational factors. For this study, our focus will be on the first 3 groups of variables since these are more related to the case of archaeological sites. Hines et al (1986/87) stated that cognitive variables are the factors pertaining to the knowledge of the environmental or to some aspect of an environmental issue, this is characterised by the knowledge or awareness of environmental problems and their consequences, also of how to take action on a particular environmental problem. Generally, individuals who have such knowledge are more willing to engage in responsible environmental behaviors than those who do not possess this knowledge.

Psycho-social variables include attitude-behavior relationship and locus of control-behavior relationship; for verbal commitment-behavior relationship: this can be defined as the intention to act upon a specific matter, in this instance, an environmental problem; it was found that those individuals who expressed an intention to perform some action related to the environment were more likely to have reported engaging in environmental behaviors than those without it. On the other hand, personal responsibility-behavior relationship reflects the individual's feelings of duty or obligation, such obligation can be expressed in reference to the environment as a whole, as in the case of social or personal responsibility to help the environment; people who have some degree of personal responsibility toward the environment are more likely to engage in the responsible environmental behavior. For demographic variables as education, age and gender; it was generally found that the more individuals are educated, the more they are likely to have a responsible environmental behavior. For age, it was found that younger individuals were slightly more likely to have reported engaging in environmental behaviors than older individuals. Gender was found to have no relationship with engaging in environmental behavior.

All these previously mentioned variables are basic components of the cognitive hierarchy model. It was assumed that human cognitions range from general broad concepts (e.g. values / value orientations) to specific concepts (e.g., norms, attitudes) and behaviors. These cognitions reflect the processes individuals use in perceiving, remembering, thinking and understanding (Homer & Kahle 1988; Eagly & Chaiken 1993; Fulton et al 1996). Major concepts in the cognitive hierarchy used in this study are value orientation, norms, behavioral intentions; also two additional concepts of awareness of consequences and ascription of responsibility that affect the work of cognitive hierarchy concepts as determinants of behavior; this paper will measure the degree of holding these determinants by individuals visiting these sites (international and domestic tourists), also it will test if there are any significant differences between these two groups in regard to this matter, especially that the effect of such variable was not widely tested in literature, more concern was given to cross-cultural differences among tourists nationalities. Such approach will help to suggest appropriate solutions and management implications, which will minimize the negative impacts of tourism on archaeological sites.

3. Theoritical Concepts

3.1 Values/Value Orientations:

Values are defined as modes of conduct or desirable end states of existence (Rokeach 1973). Others defined values as concepts that focus entirely on abstract ideals as freedom, helpfulness and equality (Maio et al 2003). Another definition says that value is a general idea that people share about what is good or bad, desirable or undesirable (Light et al 1989). Values are theorized to be widely held and shared among people within a culture, consequently they do not explain much of the variability among the specific attitudes and behaviors of individuals (Fulton et al 1996). This requires then a new concept in order to understand the effect of general values on the more specific behaviors; this new concept is the cognition of basic beliefs, it serves to strengthen and gives meaning to the fundamental values (Vaske & Donnelly 1999). These basic beliefs differ in their patterns of direction and intensity, such patterns are known as value orientations (Fulton et al 1996).There were several studies that classified value orientations into groups according to the environmental concern involved; Stern et al (1993) suggested three categories of value orientations, these were Social-Altruistic: the concern for welfare of other human beings, Biospheric: the concern with non-human species or the biosphere, and Egoism: the self interest.

It was suggested in this study that if each value orientation is present in a pure form, then it will produce an environmental concern under different conditions. For example, if environmental concerns were based on self-interest, an individual would favor positive actions toward the environment only if doing so would gain expected benefits, such benefits would outweigh the expected costs. If the individual concern was based entirely on the social value orientation, then an individual would bear personal costs to act in a good manner, this is only when doing so would protect other human beings. If the environmental concern is based entirely on the biospheric values, an individual would act with concerns about other species and natural environment. Someone motivated purely by the biospherical values would become involved in environmental issues when species extinction or habit destruction is at stake, but would be relatively unconcerned when the effects are only on people. Of course, the egoistic, humanistic and biospheric value orientations toward the environments are not incompatible; they are more to be related to each other, it is supposed that many environmental attitudes of people reflect some combination of the of the three value orientations presented above.

Based on this, a continuum of value orientations was created to include different kinds of basic beliefs that might be applied to the relationship between individuals and archaeological sites; these value orientations ranged from the economic value of archaeological sites for generating incomes and jobs, moving then to being valuable in terms of creating a source of information to the two different groups of archaeologists and the public, that is in addition to the values regarding the rights of future generations to benefit from such resources. The other end of the continuum considered the right of existence and protection of these sites, especially if such rights are to be violated by tourism.

3.2 Norms and Behavioral Intentions

The normative approach has proved to be useful in understanding the activities and behaviors in the different recreational settings and situations. The main objective was in the first place to create and develop some evaluative standards for management; such practice is based on knowing to which degree some norms about activities and behaviors are shared among the group or even the society, and then predicting the acceptability toward management procedures (Kim & Shelby 1998). Many definitions were given to the cognition of norm; norms were defined as the statement or rule within the group that specifies how members are expected to behave under some circumstances (Michener et al 1986). Another definition was given by (Light et al 1989), a norm is a specific guideline for an action, it is a rule that says how people should behave in particular situations. It is made explicit as in written laws in some cases, but it is characterized most of the time by unspoken customs that people implicitly know and follow.

There are two distinguished kinds of norms that are shared among the members of any group; the injunctive norms involve perceptions of which behaviors are socially approved or disapproved, they can suppress the undesirable action by describing what most people disapprove, specify what is aught to be done, constitute the moral rules of a group, and they motivate to take actions by the promising social rewards and punishment (informal sanctions) for them (Cialdini et al 1991). The descriptive norms focus on the perceptions of behaviors that are typically and already performed, they provide the evidence as to what will likely be effective and adaptive action, that is if everyone is doing or thinking or believing it, then it must be a sensible thing to do or think or believe (Cialdini 1996).

Since norms are shared by society members, and strongly influence their behavior, it might be difficult then to distinguish them from values. The individuals assess their behavior according to a broad abstract concept representing the value; the norms come as the rules that govern the behavior in particular contexts, which indicate that most of the norms are situational; they apply to specific circumstances and settings (Light et al 1989). İn this study, social norms were measured as a main determinant of tourist behavior; there were four statements expressing the acceptable and expected behavior by guides, locals, school students and tourists. The two other statements were considering the role of the Department of Antiquities in promoting for the importance and protection of archaeological sites. The personal norms/commitment toward antiquities items were also present in this study, and were focusing on the willingness of individuals to take some positive actions while visiting the archaeological sites.

3.3 Awareness of Consequences

The verbal and overt behavior of an individual might be influenced by what that individual believes about the consequences following his actions or what has resulted or followed some particular actions in the past (Gross & Niman 1975). Sometimes, individuals do not go through the process of assessing behavioral consequences as much as using the normative influence of a significant group or authority (Fishbein & Manfredo 1997).

Awareness of consequences (AC) is defined as a disposition to become aware of the potential consequences of one's acts for the welfare of others during the decision making process (Schwartz 1968a, 1977). İn this study, the variable was measured through testing the recognition of respondents of impacts caused by their behavior while navigating in the archaeological sites.

3.4 Ascription of Responsibility

Ascription of responsibility (AR) was defined as the disposition to accept or deny one's own responsibility for the interpersonal consequences of his actions (Schwartz 1974). There were different ways to measure this concept in previous studies; in (Schwartz 1968a) for example, that AR was measured through opinions and self descriptive items, which allude to actions with interpersonal consequences, and provide an explicit or implicit rationale for ascribing responsibility to actions away from the actor.

4. Methodology and Research Instrument

A random sample of 286 tourists was gathered in a number of archaeological sites in Jordan. These sites differ in terms of their location from urban centers, size, facilities and amenities provided in them. Respondents were asked to fill a survey after their visit, whether within the sites or in rest houses and visitors' centers close to them, Table 1 shows the sites of the study and numbers of respondents in each.

Insert table (1) about here

The survey of this study included groups of questions and items that represented the theoretical concepts discussed previously, as well as demographic information. The first group is the one of Awareness of Consequences concept; the items forming this index represent a number of actions that might occur in archaeological sites and their consequences, some of them represent problems with a slight effect when compared to the other ones, such as littering. The other items are forming sever problems, which will leave their (hard if not impossible) effects to cure on the archaeological site and its features, these consist of problems as stepping on sensitive areas, picking artifacts, digging, painting and climbing. This index was measured on a five-point scale (1 Strongly Disagree to 5 Strongly Agree), there were 11 items that included: *Littering has a negative effect on archaeological sites, Littering has a negative effect on the aesthetic value of archaeological sites, Stepping on sensitive areas as floors and loose parts in archaeological sites will cause damage to them, Picking up artifacts (like pottery pieces) hinders archaeological information, Digging (even the first centimeters) of the archaeological site's surface will damage its archaeological value, Climbing on monuments causes damage to archaeological site, Touching decorative elements as carvings and inscriptions will ultimately cause them to disappear overtime Painting destroys monuments' surfaces in archaeological sites, Having residential areas around archaeological sites has a negative effect on them*, and finally *Having shops close to archaeological sites has a negative effect on them.*

The second index is related to the concept of Ascription of Responsibility, this one also was measured on a five-point scale (1 Strongly Disagree *to* 5 Strongly Agree), there were 4 items representing this concept and they were showing different ways of feeling responsible toward archaeological sites, these were: *I feel a strong responsibility toward protecting archaeological sites, I am responsible for protecting archaeological sites for future generations, I feel an obligation to educate others about the importance of archaeological sites* and *Protecting archaeological sites is the responsibility of every individual.*

The third concept group in the survey is of Social Norms; in this part, a number of items representing cases that are preferred to occur in archaeological sites, these variables were measured on a five-point scale (1 Should Never *to* 5 Should Always), these variables ranged from norms concerning individuals to those related to authorities, these variables are as follows: *Guides should be more aware about the protection of archaeological sites, Tourists should be careful about their behavior within archaeological sites, Locals should be careful about their behavior within archaeological sites, The Dept. of Antiquities should promote more for protecting archaeological sites,* and *Schools' students should be aware of appropriate behavior in archaeological sites while visiting them.*

The concept of Value Orientation was measured through an index of 7 variables which formed a continuum including different ways in which people evaluate the significance of archaeological sites; the variables were measured on a five-point scale (1 Strongly Disagree *to* 5 Strongly Agree), the items of this index include: *Archaeological sites are valuable only if they produce jobs for people, Archaeological sites are valuable only if they produce income for people, The real value of archaeological sites comes from creating a source of information to archaeologists, The real value of archaeological sites comes from creating places for education, Archaeological sites should be preserved for future generations, We should regulate tourism if it affects archaeological sites negatively,* and *We should spend money to protect archaeological sites.*

For the group of variables composing the concept of Behavior Intentions, eight items were used here and they were measured on a five-point scale (1 I will never do it *to* 5 I will do it all the times); this part asked respondents about actions they are willing to take when they visit archaeological sites. The items were as follows: *Willingness to avoid littering, Willingness to walk in designated accesses, Willingness to leave artifacts and archaeological finds without picking them up, Willingness to avoid climbing on monuments and features of the archaeological sites, Willingness to avoid painting in archaeological sites, Willingness to touch inscriptions and decorative elements in archaeological sites, Willingness to participate as a volunteer in archaeological sites' excavations,* and *Willingness to become a member in any organization or society that aims at protecting archaeological sites & heritage.*

Demographic variables are forming the last section in the survey, they include: *Country of Origin, Age, Sex, Level of Education, Income, Occupation and Level of Living Place*.The survey was written in two languages (Arabic and English), locals and tourists from Arab countries used the Arabic version, while the one in English was used by non- Arabic speaking international tourists.

5. Analysis, Results and Conclusions

126 domestic and 160 intenrational tourists filled the survey; of these 136 (47.6%) were males and 135 (47.2%) were females, most of the respondents were 21 to 40 years old (66%), most of them also are of a high educational level (22% have a college or a technical school degree and 37.1% have a post graduate school degree). Table 2 shows the demographic characteristics of the resopondents in more details.

Insert table (2) about here

A t-test was conducted to test the differences between international and domestic tourists considering behavioral determinants. In general, it can be noticed that domestic tourists had higher scores for the means of measured variables; Tables (3-7) show the comparisons between these two groups.

Significant differences were found in most items of the index of value orientations; these were for the items stating that: Archaeological sites are valuable only if they produce jobs for people: international tourists (M = 2.36), local tourists (M = 3.20), t (279) =-5.042, p = .001; Archaeological sites are valuable only if they produce income for people: international tourists (M = 2.14), local tourists (M = 3.02), t (279) =-5.401, p = .001; Real value of archaeological sites comes from creating places for education: international tourists (M = 4.00) , local tourists (M = 4.34), t (275) = -2.947, p=.001; Archaeological sites should be preserved for future generations: international tourists (M = 4.21), local tourists (M = 4.50), t (276) = -2.947, p = .003; and that we should spend money to protect archaeological sites: international tourists (M = 3.87), local tourists (M = 4.20), t (278) = -2.64, p = .009. The item "the real value of archaeological sites comes from creating a source of information to archaeologists" did not show any significant differences: international tourists: (M = 4.05), local tourists (M = 4.18), t (275) = -1015, p = .311.

Insert table (3) about here

For the awareness of the consequences, we notice that local tourists reported more awareness of impacts that might be caused by their behavior; most of the comparisons between the two groups for this variable have not shown significant differences, which can be seen as follows: littering has a negative effect on archaeological sites: international tourists (M = 4.66), local tourists (M = 4.69), t (283) = -.355, p = .723; littering has a negative effect on the aesthetic value of archaeological sites: international tourists (M = 4.53), local tourists (M = 4.73), t (282) = -2.457, p = .015; stepping on sensitive areas as floors and loose parts in archaeological sites will cause damage to them: international tourists (M = 4.49), local tourists (M = 4.49), t (281) = -.003, p = .998; picking up artifacts (like pottery pieces) hinders archaeological information: international tourists (M = 4.13), local tourists (M = 4.34), t (283) =-1.880, p = .061; digging (even the first centimeters) of the archaeological site's surface will damageits archaeological value: international tourists (M = 3.96), local tourists (M = 4.16), t (280) = -1.446, p = .149; climbing on monuments causes damage to archaeological sites: international tourists (M = 4.04), local tourists (M = 4.36), t (281) = -2.5530, p = .021; touching decorative elements as carvings and inscriptions will ultimately cause them to disappear overtime: international tourists (M = 4.05), local tourists (M = 4.16), t (278) = -.700, p = .436; painting destroys monuments' surfaces in archaeological sites: international tourists (M = 3.99), local tourists (M = 4.18), t (280) = -1.458, p =.146; having residential areas around archaeological sites has a negative effect on them (M = 3.70), local tourists (M = 4.06), t (283) = 2.41, p = .017; having parking areas around archaeological sites has a negative effect on them: international tourists (M = 3.10), local tourists (M = 3.56), t (283) = -2.55, p =.100; & having shops close to archaeological sites has a negative effect on them: international tourists (M = 3.144), local tourists (M = 3.55), t (283) = -2.46, p =.140.

Insert table (4) about here

All of the items in the ascription of responsibility index gave significant differences between the international and local tourists; the local tourists were to show higher levels of responsibility toward the archaeological sites; for feeling strong responsibility toward protecting archaeological sites the result was: international tourist (M = 3.85), local tourists (M = 4.52), t (280) =-5.83, p = .001; for being responsible for protecting archaeological sites for future generations: international tourists (M = 3.89), local tourists (M = 4.42), t (280) = -4.77, p = .001; for feeling an obligation to educate others about the importance of archaeological sites: international tourists (M = 3.73), local tourists (M = 4.39), t (280) = -5.851, p = .001; and for protecting archaeological sites as being the responsibility of every individual: international tourists (M = 3.99), local tourists (M = 4.34), t (280) = -2.91, p = .004.

Insert table (5) about here

Most of the items in the social norms index did not have significant differences between international and local tourists. This was as follows: guides should be more aware about the protection of archaeological sites: international tourists (M = 4.52), local tourists (M = 4.50), t (277) = .156, p = .876; tourists should be careful about their behavior within archaeological sites: international tourists (M = 4.17), local tourists (M = 4.21), t (276) = -.348, p = .728; and locals should be careful about their behavior within archaeological sites: international tourists (M = 4.17), local tourists (M = 4.40), t (275) = .82, p = .41; the significant differences were for the items: the Dept. of Antiquities (DOA) should promote more for protecting archaeological sites (M = 4.40), local tourists (M = 4.63), t (277) = -2.68, p = .008; and schools' students should be aware of appropriate behavior in archaeological sites while visiting them: international tourists (M = 4.57), locals (M = 4.78), t (277) = -2.43, p = .016.

It is logical to have such results since local/domestic tourists have more opportunity to see and judge both the performance of the DOA and behavior of schools' students.

Insert table (6) about here

In the index of behavioral intention, the local tourists were scoring higher means than international tourists for the willingness to do the positive actions when visiting the archaeological sites. It was noticed also that most of the items had significant differences between these two groups. These items had the following results: the willingness to avoid littering: international tourists (M = 2.50), local tourists (M = 4.28), t (267) = -8.74, p = .001; to leave artifacts and archaeological finds without picking them up: international tourists (M = 3.62), local tourists (M = 4.07), t (258) = -2.34, p = .020; to avoid climbing on monuments and features of the archaeological sites: international tourists (M = 1.86), local tourists (M = 2.45), t (263) = -3.20, p = .002; willingness to walk in designated accesses: international tourists (M = 3.60), local tourists (M = 4.28), t (267) = -3.98, p = .001; Willingness to participate as a volunteer in archaeological sites' excavations (M = 2.34), local tourists (M = 2.84), t (262) = -3.329, p = .001.

Only one item had no significant differences between these two groups, that was for avoiding painting in archaeological sites: international tourists (M =1.38), local tourists (M = 2.20), t (283) = -1.918, p = .056

Insert table (7) about here

Although of the high degree of awareness both international and domestic tourists as seen from results, it can be clearly observed that most archaeological sites in Jordan lack behavioral signage and the necessary facilities which will prevent inappropriate behavior, as in the case of littering caused by the absence of trash cans, or uncontrolled movement because of having no definite paths or trails. A vital procedure will be providing these sites as possible with orientation system, also maps and signage that include both the navigation routes, and instructions about kinds of behaviors to be avoided. It was noticed though that there were significant differences between these groups for ascription of responsibility, value orientations and willingness to take positive actions while being in archaeological sites. It is expected to have such results since archaeological sites are part of the heritage and the identity of domestic/local tourists, the significant differences between international and domestic tourists regarding value orientations and behavior intentions (with having higher scores for domestic tourists) can be possibly explained by the fact that international tourists spend less time in archaeological sites, thus, see that they do not cause any harm or major problems to the site. It is important then to educate tourists and guides that even behaviors with slight effect might become serious with the great influxes of tourists coming to the site during peak season. One of the important implications as well is directing the attention of tourists from areas and features of fragile or sensitive nature; this might be done by guidance or even by fences and roping around these portions of the site, or if necessary, closing these areas temporarily or permanently. And most important of all, the establishment of well enforced laws and policies regarding prohibited actions inside and around archaeological sites, this will decrease any violations by individuals, whether living in the surrounding areas or visiting these sites.

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Table 1: Sites of the study and numbers of respondents

Site	Frequency	Percent
Amman Citadel	46	16.1
Roman Theater in Amman	79	27.6
Jerash	81	28.3
Karak	38	13.3
Other sites (Dead Sea, Madaba, Petra, Salt, Zarqa…etc)	45	15.7
Total	286	100.0

Table 2: Demographic characteristics of respondents in the sample of the study

Characteristics	Percentage	Number Cases
Sex		
Male	47.6	136
Female	47.2	135
Total of Valid Cases	94.8	271
Age		
20 or less	10.8	31
21-40	66.4	190
41 and above	22.7	65
Total of Valid Cases	100.0	286
Educational Level		
Elementary	7.0	20
High School/Vocational School	21.3	61
College or Technical School	22.0	63
Post graduate School	37.1	106
Other	12.2	35
Total of Valid Cases	99.7	285
Occupation		
Student	12.9	37
Public sector	26.6	76
Private sector	35.7	102
Other	22.0	63
Total of Valid Cases	97.6	279
Marital Status		
Single	35.7	102
Married	57.7	165
Other	6.6	19
Total of Valid Cases	100.0	286

Table 3: Comparisons between international and local tourists for Value Orientation

	International		Local			
	Mean	**SD**	**Mean**	**SD**		
The Item					**t**	**p**
Archaeological sites are valuable only if they produce income for people	2.14	1.184	3.02	1.710	-5.042	.001
Archaeological sites are valuable only if they produce jobs for people	2.36	1.075	3.20	1.525	-5.401	.001
The real value of archaeological sites comes from creating a source of information to archaeologists	4.05	.926	4.18	1.167	-1.015	.311
The real value of archaeological sites comes from creating places for education	4.00	.917	4.34	1.008	-2.947	.003
Archaeological sites should be preserved for future generations	4.21	1.043	4.50	.950	-2.394	.017
We should regulate tourism if it affects archaeological sites negatively	3.72	1.097	4.01	1.199	-2.077	.039
We should spend money to protect archaeological sites	3.87	1.008	4.20	1.083	-2.642	.009

Table 4: Comparisons between international and local tourists for items of Awareness of Consequences

	International		Local			
	Mean	**SD**	**Mean**	**SD**		
The Item					**t**	**p**
Littering has a negative effect on archaeological sites	4.66	.615	4.69	.893	-.355	.723
Littering has a negative effect on the aesthetic value of archaeological sites	4.53	.614	4.73	.711	-2.457	.015
Stepping on sensitive areas as floors and loose parts in archaeological sites will cause damage to them	4.49	.634	4.49	1.003	-.003	.998
Picking up artifacts (like pottery pieces) hinders archaeological information	4.13	.905	4.34	1.001	-1.88	.061
Digging (even the first centimeters) of the archaeological site's surface will damage its archaeological value	3.96	1.095	4.16	1.213	-1.446	.149
Climbing on monuments causes damage to archaeological site	4.04	.999	4.36	1.080	-2.530	.012
Touching decorative elements as carvings and inscriptions will ultimately cause them to disappear overtime	4.05	1.033	4.16	1.22	-.700	.436
Painting destroys monuments' surfaces in archaeological sites	3.99	1.016	4.18	1.109	-1.458	.146
Having residential areas around archaeological sites has a negative effect on them	3.70	1.326	4.06	1.18	-2.41	.017
Having parking areas around archaeological sites has a negative effect on them	3.10	1.279	3.56	1.72	-2.59	.010
Having shops close to archaeological sites has a negative effect on them	3.14	1.17	3.55	1.63	-2.46	.014

Table 5: Comparisons between international and local tourists for items of Ascription of Responsibility

The Item	International		Local		t	p
	Mean	SD	Mean	SD		
I feel a strong responsibility toward protecting archaeological sites	3.85	1.004	4.52	.888	-5.83	.001
I am responsible for protecting archaeological sites for future generations	3.89	.921	4.42	.920	-4.77	.001
I feel an obligation to educate others about the importance of archaeological sites	3.73	.906	4.39	.960	-5.85	.001
Protecting archaeological sites is the responsibility of every individual	3.99	.931	4.34	1.096	-2.91	.004

Table 6: Comparisons between international and local tourists for items of Social Norms

The Item	International		Local		t	p
	Mean	SD	Mean	SD		
Guides should be more aware about the protection of archaeological sites	4.52	.762	4.50	.917	0.156	.876
Tourists should be careful about their behavior within archaeological sites	4.17	.995	4.17	1.11	.025	.980
Locals should be careful about their behavior within archaeological sites	4.17	.955	4.21	1.097	-.348	.728
Schools' students should be aware of appropriate behavior in archaeological sites while visiting them	4.40	.738	4.63	.831	-2.684	.008
The Dept. of Antiquities should promote more for protecting archaeological sites	4.57	.689	4.78	.567	-2.428	.016

Table 7: Comparisons between international and local tourists for items of Behavioral intentions

The Item	International		Local		t	p
	Mean	SD	Mean	SD		
Willingness to avoid littering	2.50	1.852	4.28	1.336	-8.743	.001
Willingness to walk in designated accesses	3.60	1.599	4.28	1.062	-3.983	.001
Willingness to leave artifacts and archaeological finds without picking them up	3.62	1.61	4.07	1.426	-2.343	.020
Willingness to avoid climbing on monuments and features of the archaeological sites	1.86	1.231	2.45	1.79	-3.20	.002
Willingness to avoid painting in archaeological sites	1.38	1.06	2.20	1.74	-1.92	.056
Willingness to touch inscriptions and decorative elements in archaeological sites	2.068	1.795	2.52	1.18	-4.70	.001
Willingness to participate as a volunteer in archaeological sites' excavations	2.34	1.156	2.84	1.29	-3.33	.001
Willingness to become a member in any organization or society that aims at protecting archaeological sites & heritage	2.90	.985	3.46	1.03	-4.54	.001