# Residents' Attitudes Toward Supporting the Heritage Sites Using the Structural Equation Modeling (Sem), Case Study: Mansoura Culture Palace, Egypt.

Ghada A. Ragheb<sup>1\*</sup>, Rasha El-Ashmawy <sup>2</sup>

<sup>1</sup>Architectural Engineering Department, Pharos University in Alexandria, Egypt

<sup>2</sup>Architectural Engineering Department, Delta University for Science and Technology,

Gamas, Mansoura, Egypt

\*Corresponding author, Email: ghada.ragheb@pua.edu.eg

#### **Abstract**

Supporting heritage sites through local communities to protect and develop them is one of the most complex issues due to the multiplicity and overlapping of its variables. To improve the performance of the population in supporting heritage sites, the research discusses a methodology to discover the relationships and correlations between the extent to which the local population is affected by the heritage site and their participation in decision-making, and their negative or positive attitude toward the site, which ultimately affects their support for the survival and development of the heritage site or its disposal. The study was conducted by adopting a theoretical model for the components of population support for the site and development of Mansoura Culture Palace in Egypt. A questionnaire survey was conducted and the structural equation modeling (SEM) was used to check the validity of the relationships and discover the correlation between the elements of the model that included dimensions (population's satisfaction with the way of dealing with heritage sites and their sense of place, and the involvement of community members in the decision-making action), and between the two variables of the positive or negative attitude of the population, as well as support the heritage site. The methodology was clarified and its statistical indicators were presented using CFA, SPSS, and AMOS software, with the aim of determining the extent to which theoretical models of measurement match with field data, to reach a real development to support heritage sites through the local community. The paper concluded that the residents' support for the survival and development of the heritage site was positively affected by the residents' positive attitudes toward the site, vice versa. Both positive and negative attitudes were affected by residents' satisfaction and their sense of place, while positive attitudes were affected only by participation. These results can be considered a catalyst for the sustainable development of heritage sites.

**Keywords:** Heritage site, Participation, Resident's attitudes, SEM, Sense of place.

## 1. INTRODUCTION

Heritage is a witness to the history and civilization of peoples and a legacy that brings together the thought of the ancestors, including the material components represented by the facilities, the ethical components represented by culture, and the thought contained in this heritage. Given that the architectural heritage does not represent an artistic heritage only, and is considered the documentation of the life of society in its various intellectual, cultural, social, and religious aspects, the interest in architectural heritage supporting is a source of identity concern. The supporting, continuity, the sustainability of heritage is evidence of the authenticity of peoples and the strength of their cultural roots, that is, it is a language of understanding and dialog that addresses the mind and conscience of man. Cultural heritage support (tangible and intangible) plays a more important role in sustainable urban development, as emphasized by the New Urban Agenda (2016) in points (10, 26, 38, 45, 60) of the document, which highlights the role of cultural heritage. The roles they can play in the humanization of cities (point 26) and in the development of a vibrant, sustainable, and inclusive urban economy (point 45) are also emphasized [1].

Policies for dealing with urban heritage spaces of high privacy must differ from policies for dealing with modern development sites, whether in building systems, property, investment, or basic infrastructure projects considering the radical difference in functional, architectural, and urban characteristics, and the variation in the pattern of ownership and the formation of the urban space for those sites. When development occurs in a harmonious sequence between new and heritage buildings considering historical and architectural characteristics, an aesthetically attractive urban environment is provided. Urban harmony and balance are lost by destroying or discarding the past. The continuation of architectural traditions is an important criterion for ensuring the psychological and emotional comfort of the city's residents. The preservation and proper maintenance of historical buildings is also important for the aesthetic aspect of humanizing the heritage urban environment [2,3]. Supporting the urban identity and humanization of the city does not conflict with its being a modern city with modern requirements, which requires concerted efforts and continuous coordination between the parties concerned with development projects, bearing in mind the city's rich cultural and urban heritage. The relationship between a human and a place is never limited to creating a connection between them alone, but rather requires a close connection to increase belonging with it, and thus the person clings to his place as a real part of his identity. The lifestyle is shaped, by creating an architectural and urban setting for the daily and direct space of the human being, the path and movement within human spaces are determined. Therefore, the issue of humanizing current and expected urban heritage is a necessary issue to support the preservation and harmonious integration of different architectural entities into the urban heritage.

# 1.1Sense of heritage place

Supporting the environmental status of heritage places is linked to the establishment of green spaces to improve the aesthetic image, and to solve architecturally aesthetic problems that improve the psychological state of the population. Thus, the humanization of the urban heritage environment has aesthetic components beside the utilitarianism. "Architecture is often read by people of consciousness. City dwellers are aware of the processes that occur inside or near buildings in their daily lives and do not notice the surroundings, but breathe it" [4]. Architecture is a powerful tool capable of manipulating people's moods and behavior. As happened by the political system in Germany in the Nazi period that used architecture as propaganda, as it brought out certain systems for "precisely planned political goals aimed at creating a desirable social response" [5].

Also find that the criminal situation increases in deserted areas with buildings that are not distinguished from an aesthetic vision. Through the environment of architectural heritage, the mental form and human psychology are determined. The buildings illustrate the relationship between society's behavior and people's practical skills and embody ethical and aesthetic ideals. Thus, the architectural heritage environment is an important part of humanity's collective memory and the link between different generations and eras. The heritage buildings bear the imprint - visible and invisible - for local communities, manner of living, and values [4]. Through some international experiences, it becomes clear the effective methodology toward the architectural heritage, in terms of preserving and protecting the buildings as close to the original as possible. Thus, residents feel an emotion of relationship to their heritage, and cities never lose out on their originality. To improve comfort and the heritage urban environment, in parallel with the preservation approach, it is possible to humanize using multiple techniques and the placement of new architectural elements in the historical environment. As well as increasing the walking areas in cities as several European cities.

## 1.2 Local People Participation

The urban form expresses the cultural aspects of society and represents a cultural value for it and for successive generations. The cultural value of urbanization reaches its highest levels when it is linked to the heritage content. Therefore, neglect with regard to cultural heritage that enriches urbanization is considered an absence of national awareness of cultural values, a waste of national wealth,

and a decline in the cultural dimension of society. The local people can be considered the chief participants, the true holders of the heritage site, and they cannot be ignored.

Since the Venice Charter (1964), the involvement of the community in the preservation of cultural heritage has been highlighted [6]. The Faroese Convention (2005) also adopted a focus on the value of the cultural heritage of society rather than the preservation of cultural heritage values. It is essential to involve the local population in all phases of the preservation and management in culture and tourism [7–9]. Historic sites are places of daily life and activities of the residents. Certainly, living in heritage sites is different from living in other sites, where heritage conservation and management can be enhanced with the participation of the local population. It is possible that the heritage site affects all aspects of the life of the local community in these areas [10].

Studying the example of the local population in the Dresden Elbe Valley, inscribed on the World Heritage List, and the willingness of the population to live on the site. The decision to build a bridge vital to the city was placed in front of the residents to vote on whether to build the bridge (meaning excluded from the Heritage List) or continue to be included in the World Heritage List. Surprisingly, 67.92% of the population voted to build the bridge [11]. Also find that the local residents of the historic city of Yazd in Iran, which was included in the World Heritage List, are happy with this decision to inscribe before it is implemented. But then, concerns arose about the benefits of living in such locations. Because of the possibility that the inscription on the World Heritage List may not be aimed at improving the preservation and protection of cultural heritage and providing benefits to the local population, but rather to modify the international status [12].

Heritage tourism has become an important tool of community development, which residents often resort to as an alternative to many fields and industries on which the local population relied [13].

Recently, finding previously unknown heritage resources in the heritage market, and rebuilding the urban landscape has become a contemporary phenomenon in developed cities [15] [14], due to the rapid growth of heritage tourism [16] and the possibility of using it in a contemporary way for cultural and economic goals [17,18].

Now, besides the common and recognized conservation issues in heritage tourism traditions, There is a clear tendency to examine the positive and negative aspects of the culture of the local population [10]. We find that many attempts to revive cities and villages using unique cultural and natural resources for each [20]. Any advantages exclusive to the area are being commodified and exploited to attract tourists. Also, some local homeowners who live in heritage areas open some parts of their homes to the public with an entrance fee, due to the owners needing additional revenue for maintenance.

# 1.3 Residents' Attitudes on the impact of tourism on heritage sites

Heritage tourism greatly affects and leads to many changes in the heritage site. The opinion of the community is one of the most important factors in identifying, measuring, and analyzing these changes [21]. Previous studies on the views of local communities toward heritage tourism show that examining and paying attention to it has many advantages and benefits, which help in the success of tourism development [22]. As well as through it, local policies, planning and administrative responses to the development of the heritage site and its tourism can be deterred, as well as determining the extent of public support for it [23]. The attitudes of the local population are also useful guides for predicting what will happen, given their strength, the negative attitudes of the local population toward the heritage site be an obstacle to the development of tourism [24].

Constant examination and review of the attitudes of residents are vital for the development, due to the constant change in the views of the population toward heritage tourism during the various stages of development [25]. This importance stems from the fact that the final decision and acceptance of changes resulting from tourism is for the local population. Heritage tourism derives its positives from the population, thanks to its ability to create job opportunities, increase income and improve community infrastructure. But due to the social, cultural, and environmental costs, the residents may see heritage tourism negatively. According to Andriotis, "Most, locals are aware of the positive and negative effects of tourism and draw their conclusions based on the relative weights they attach to benefits and costs. Also, community opinions on tourism always reveal both positive and negative aspects at the same time." Although the opinions of local residents toward tourism can have their pros and cons, most studies have revealed that locals, in general, have positive support for tourism development. [25,26].

Previous studies confirm many harmonious relationships between different variables and native residents' opinions toward tourism. As a variable, the relationship between the proximity of the heritage site or its distance from the residence of the participating community, or the level of communication with tourism activities, and thus the population's reaction to tourism. It was found that people who live near heritage sites are more positive toward it and in a few cases may have a more negative viewpoint than those far away. It was found that the most influential variable is the economic dependence of the heritage site on tourism, and the most stable relationship is the population's view of tourism activities and economic dependence. The resident population that benefits from tourism are to perceive the tourism effects as positive changes.

# 1.4 The effect of including buildings and sites in the Heritage List

Recently, the competition between different countries has increased to clarify their buildings and sites in the heritage lists, whether local or international, which can be considered a double-edged sword. Previous researches indicated that many positive and negative changes occurred directly or indirectly for local communities in heritage sites. The classification of buildings or sites in heritage lists makes them more popular with the public [27]. When classification happens, it is meant to enhance the image of the site and an indicator of its authenticity and quality for tourists [28]. It can affect the local planning process, because of its cultural and heritage value at all levels [29]. This classification represents an additional pressure and a negative aspect on the environment and population, given the possibility of conflict between local links and global ownership of the site [14].

It is UNESCO's policy "to preserve heritage sites in good condition for future generations and to make them available to the public as much as possible". However, some heritage environments con damaged by frequent visits, especially those that be fragile or poorly managed [27]. Thus, those sites face increasing problems such as overcrowding [30]. Some other cases of heritage sites do not invite growth in tourist numbers [31]. According to "Rodwell", there is no consistent relationship between the status of a heritage site and the number of [32]. And the heritage site, unknown to visitors classification, witness significant growth in tourism after classification [29]. Unless the planners carefully consider the presence of the locals, the locals will regard the heritage sites as a nuisance that disturb their formerly peaceful way of life [33]. There must be a strong detailed administrative and legal plan for any heritage site on the Heritage List. Due to the strengthening of the classification process for management and maintenance plans and the need for continuity [27]. Also, encouraging the sharing of residents in promoting their heritage is an important part of the success of the management and conservation plan [34], which can increase the population's interest in their city, and eventually lead to local pride in their culture [35]. The historic urban area can also become a magnet for the locals who live around the site, and a center of nationalism by strengthening identity, as well as strengthening links between different agencies.

Heritage sites also have positive effects on the population, as well as negative ones [36,37]. By reviewing the previous literature, three types of heritage site impacts can be summarized: economic, sociocultural, and environmental [38,39]. Given the difficulty of assessing many of these effects, the population's attitude toward them can be examined by giving a number of questions bonded to the effects [40], to give perception for different behaviors toward it as evidence for the same concept [37]. Many studies have found that the general attitude of the population was positive toward heritage tourism. Although

there is a general estimate of the economic benefit of a heritage site, they refer to one or some specific elements of negative impacts [38,39]. These negative effects were social, cultural, and environmental effects. It was found that when residents were asked to weigh the benefits and negative consequences of developing heritage sites, they were less aware of the negative in the presence of the positive [37].

The social exchange theory is one of the most popular theories, which can be used to explain the population's attitude toward the heritage sites. It is a general social theory that gives different opinions based on empirical and psychological findings [41]. This theory is concerned with social mutual actions, an interchange of resources to obtain advantages without unsuitable expense. The negative or positive attitude of the population toward the saving and development of heritage sites depends on the evaluation of the interrelationship in terms of the expected benefits and costs, which is reflected in the extent to which the residents support the survival and development of the heritage site [42].

Thus, two hypotheses can be discussed, the correlation of a positive attitude towards heritage sites with the population's support for the survival and development of the heritage sites, and the negative attitude towards heritage sites which is related to the population's lack of support of heritage sites. Due to the changing attitudes of the population according to different factors and levels [43]. the socio-economic and demographic features of the population were surveyed, Some studies showed that the population's attitude toward heritage sites was affected by gender [44,45], and education level [46]. Knowing that some other studies indicated to the contrary, that the social and economic characteristics of the population do not explain the effectiveness of their position.

Given the awareness of the need for heritage sites to develop within specific spatial groups and not in a vacuum[43], interest has increased in studying the attitudes of the population toward the development of heritage sites and their tourism [47]. In this context, this study examines two factors related to the destination, namely local residents' satisfaction with the way heritage sites are treated and their sense of place, and participation in decision-making, which are important in influencing the action of residents' attitudes [48]. The heritage place is not only a geographical space, but a spatial environment that has data that depends on reciprocal relations, human experiences and multiple ideas [49]. Any space can become a place when you get to know it better and develop a relationship with it and give it value.

## 1.5 Structural Equation Modeling (SEM)

The structural equation modeling methodology represents a modern method in research, as it is described as being the closest to mathematical modeling based on statistical analysis of data. Where modeling enables the testing of measurement models and tools that include a set of quantitatively measured indicators, through a set of advanced statistical methods based on the confirmatory factor analysis (CFA), to test the structural validity of the measurement tools included in the theoretical models "where each variable has an independent model to measure it, and the process of determining the relationships of influence and vulnerability between multiple variables, leading to an explanation that simulates the reality of the phenomenon or problem under study."

SEM modeling also illustrates a modern method for testing hypothetical models of theoretical structures represented by factors and variables that can be measured indirectly through a set of indicators (latent variables). Thus, the modeling methodology represents a multi-stage system that includes Path Analysis (PA), Confirmatory Factorial Analysis (CFA), multiple regression analysis ANOVA, and the integrated model (AMOS).

The objective of this method is to determine the suitability and conformity of the theoretical model that is assumed with the field data and the ability of the latter to support and match the theoretical model of the relationships between the variables, and items. Verify the validity of the structure of the subject elements, as it was assumed. Study the relationships and interconnections between the various components. The possibility of studying the effect of the mediating role variable between the dependent and independent variables in the assumed model. In addition to the possibility of modifying the assumed model according to need. The methodology used thus represents a research method for selecting theoretical models quantitatively using the scientific method based on testing research hypotheses, to reach better values for complex relationships and correlations between variables.

#### 2. RESEARCH METHODOLOGY

The study used the descriptive approach and adopted modeling with structural equations, which are used to describe a study phenomenon quantitatively and qualitatively by collecting and classifying information, and then analyzing and revealing the relationship between its various dimensions to adequately explain it and reach general conclusions that contribute to understanding the present and diagnosing reality and its causes [50].

A theoretical model has been developed for a practical path to the local population's attitudes to support and develop the heritage sites by defining the basic components on which the negative or positive attitudes of the population may be based, to reach a real supporting system through the population's attitudes. To meeting the study theoretical model with the data of the study and researching its conformity to reality. The study resorted to collect primary data with the aim of developing a theoretical model to support population attitudes and trying to

verify its structural validity through structural equation modeling (SEM) methodology, and using confirmatory factor analysis using AMOS software. Papers and references were selected from the obtainable databases of Scopus, ScienceDirect, Google Scholar, Scopus, Francis, and Sage. most of them were recalled from highly ranked magazines and journals. As an international habitat, social and behavioral sciences, sustainability, cities, as well as conference articles, and official reports.

The deductive and inductive approach was used through a questionnaire survey of local residents and interviews with local academics, specialists, and heritage managers, who are familiar with tourism and heritage preservation issues. The local residents were surveyed about their satisfaction with the way of dealing with heritage sites and their sense of place, the change of the life's quality, the significance of community members in the decision-making process. Respondents were given an opportunity to add a comment to the questionnaire to expand the range of views and perspectives on the heritage sites [52]. Therefore, qualitative and quantitative methods were combined and the best possible method has been tested, within the limits of work and time available [51].

In addition to the different levels of comprehensive knowledge of the local population about the issues mentioned in the questionnaire [10]. It is also possible that these methods are not suitable for accessing relatively simple data from the population to examine general trends in local communities [54].

#### 2.1 A Theoretical Structural Model

Variables in the designed models (figure 1) are classified according to their nature to latent variables, which are the unobserved (hypothetical) variables that are inferred by measured or watched indicators, which are:

- Residents' satisfaction with the heritage site and their sense of place, which is a latent variable inferred by two indicators (the first if they have a good understanding of the cultural heritage introduced by Mansoura Culture building, and the second if they are adoring to the culture introduced by it).
- Residents' participation in decision-making related to the development, preservation, and tourism of heritage sites, is a latent variable inferred by two indicators (the first whether they participate in decision-making related to the heritage site and its development, and the second whether they will participate in the development of tourism-related works).
- Residents' attitude toward the heritage site and its tourism is a latent variable that we infer in the study through 3 indicators of positive effects (improved economic development, improved quality of life, and a compatible community relationship) and 3 indicators of negative effects (overcrowding, power struggle, and alienation).

- Support and development of the heritage site: a latent variable that is inferred by two indicators (the first is whether they participate in supporting development activities and local tourism, and the second is whether they will support the development of the site and tourism in the future).

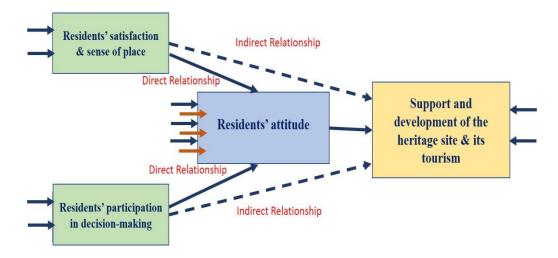


Fig 1. A theoretical structural model and it's relationships (Researchers)

## 3. CASE STUDY: MANSOURA CULTURE PALACE, EGYPT.

Mansoura Culture Palace (formerly Umm Kulthum Theater) is located in Dakahlia Governorate (figure 2). It was designed in the sixties of the last century. It is considered one of the largest cultural palaces in Egypt. Given the value and importance of this building, it has been added to the register of buildings with distinguished architectural style. According to the decision of the Minister of Housing No. 236 of 2016 within the category (A), which prohibits demolition or modification completely inside and outside the building, as well as gardens attached to it. The Mansoura Culture Palace building is among the national buildings with a distinguished architectural style, and its most prominent feature is its design, both in terms of the architect who designed this building or in terms of the cultural history of the building itself.

The palace building is associated with the personality of the historical architect, Dr. Syed Abdul Karim (1911 - 2005), who designed it. He is the first Egyptian to be appointed by the United Nations as a city planning consultant. He was contracted by the International Urban Planning Commission of the United Nations Technical Aid in the fifties to plan cities of the Arab world in Saudi Arabia, Jordan, Kuwait, Algeria, Morocco, and other Arab and foreign cities. He received many national and international honors and awards. Owner of the first specialized magazine for architecture in Egypt in 1939, as well as the Greater

Cairo Planning Project in 1952. The first to introduce high-rise architecture to Egypt. He issued the famous Encyclopedia of the Egyptian Civilization, which is in thirty parts. He played a prominent role in the field of tourism and tourism planning in Egypt and a number of Arab and European countries. He has many contributions in the field of culture, antiquities, and art. He set up several projects for culture palaces, where he implemented and designed the culture palaces of Mansoura, Aswan, Assiut, Suez, and Ismailia, which contributed to the dissemination of regional culture. He was credited with transforming the Culture Palaces Authority into a "Ministry of Culture." From the foregoing, it is clearly evident that this international engineer designed the Mansoura Culture Palace as a distinctive design.



Fig 2. Mansoura Culture Palace, Dakahlia, Egypt

The Mansoura Cultural Palace building is distinguished culturally, as Dakahlia contributed to an enlightened and prominent intellectual movement, the center of which was this cultural palace to be demolished and removed, although it was presented by many writers and plastic artists and many people of art, poetry and literature, and each stone in it represents part of the memories of the people of Dakahlia, which is present for the life of Egypt. The decision to demolish the palace and transform it and the surrounding gardens for an investment project came in violation of the ban contained in Article Two of Law 144 of 2006, as amended by Law No. 3 of 2020, and Article Seven of the Executive Regulations of Law 144 of 2006 issued by the Minister of Housing Resolution No. 266 of 2006, which prohibits licensing by demolishing or adding buildings and facilities of a distinguished architectural style associated with national history or a historical figure, or that are considered a tourist attraction. As well as violating the ban decision contained in the Class A property registration sheet, which prohibits demolition or modification completely inside and outside the building. Because the demolition of the building is tantamount to killing the vibrant life between its walls, which is characterized by a historical, symbolic, architectural, artistic, urban, and social value.

In this context, the paper develops a hypothetical outline by merging two factors linked to the destination, residents' satisfaction with the way heritage sites is approached and their sense of place as well as their participation in decision-making (figure 1), with the aim of understanding how local people shape their attitude to support the protection and development of the heritage site. A questionnaire was administered to collect information previously mentioned. According to Wolf (2013), "a meaningful range of sample size for SEM that should range from 30 to 460 cases" [55]. Accordingly, 350 questionnaires were collected from residents and specialists. The respondent demographic features are shown in table 1.

Table 1. Outcomes of Socio-demographic features in the survey (N = 350)

Demographic features	N	(%)
Gender:		
Male	110	31.4%
Female	240	68.6%
Age:		
15 - 30 years	120	34.3%
31-45 years	130	37.1%
46-60 years	75	21.4%
60+ years	25	7.2%
<b>Highest level of education:</b>		
Bachelor's degree	149	42.6%
Diploma	13	3.7%
Master's degree	65	18.6%
PhD	123	35.1%

#### 3.1 Measurement scales

The questionnaire is divided into six parts. A Residents' satisfaction of local residents with the way of dealing with heritage sites and their sense of place, participant in decision making, positive attitude toward the heritage site, negative attitude toward the heritage site, support the saving, development and tourism of heritage site, and demographic characteristics of respondents.

In the section on local residents' satisfaction with the way heritage sites are treated and their sense of place, participants were asked about their feeling of the place [56]: how well they felt the beauty of the built environment, and if they had enough information of the cultural heritage related to the Palace of Culture, and if they were nostalgic for its culture. Population participation in the development of the heritage site was evaluated by two components, which measure the quality and tendency of their participation [57]: if they are involved in making decisions

about heritage site development and tourism, and whether they are involved in tourism-regarding development or business. In the situation part, there are three positive effects (improved economic development, improved quality of life, and a harmonious neighborhood relationship) and three negative effects (overcrowding, power struggle, and alienation). In the section concerned with the support and development of the heritage site, two questions were put forward: the extent to which they participate in the various activities for the development of the site and tourism, as well as the extent to which they support this in the future. A 5-point Likert scale, "ranging from 1 (strongly disagree) to 5 (strongly agree)", was used. Different models of gender, age, and educational level of the population and specialists were covered for their opinion. The target people were the local population in the different neighborhoods around the Palace of Culture.

The results of the application of the model (a measure of the elements of support for the local population of heritage sites and their development using the statistical analysis program (SPSS v.25) were unloaded and analyzed. All formulations had suitable internal consistency, with their Cronbach alpha values above 0.75 table 2.

Table 2. Values of Cronbach's alpha coefficients for stability based on the output of SPSS v.25

Dimension	Number of Indicators	Cronbach alpha values	
Residents' satisfaction with the	2	0.76	
heritage site and their sense of place			
Population participation in	2	0.80	
decision-making			
Attitude of the population toward	6		
the heritage site and its tourism			
Positive Attitude	3	0.76	
Negative Attitude	3	0.83	
support and develop the heritage	2	0.79	
sites			
The scale as a whole		0.80	

According to Table 3, the confirmatory factor analysis (CFA) was used to verify the structural validity of the scale. The factor Loading defines as "a measure of building validity, leading to indicating the extent to which the actual measurement matches the hypothetical concept" [58]. Indicators of factor loading in the research are higher than the acceptance level of 0.6. The average variance extracted is "the average percentage of variance explained by items in the

construct" [58]. It was above the 0.5 acceptance level for all components. Therefore, the assessment indicated the suitability of the measurement model.

Table 3. Assess the outcomes of the measurement model.

Construct	Item	Factor	Average
		loading	variance extracted
Residents'	<b>R1</b> . Good understanding of the cultural	0.76	
satisfaction	heritage presented by Mansoura Culture		
and sense of	Palace		0.62
place	<b>R2.</b> adoring to the culture introduced.	0.68	
Residents'	<b>R3.</b> participate in decision-making	0.71	
participation	related to the heritage site and its		
in decision-	development.		0.66
making	<b>R4.</b> participate in the development of	0.89	
	tourism-related works.		
<b>Positive</b>	<b>S1.</b> improved economic development	0.66	
Attitude	<b>S2.</b> improved quality of life	0.76	0.61
	<b>S3.</b> compatible community relationship	0.67	
Negative	<b>S4.</b> overcrowding	0.9	
Attitude	S5. power struggle 0.71		0.69
	S6. alienation	0.79	
Support and	S7. support current development	0.75	
develop the			0.70
heritage sites	<b>S8.</b> support the development of the site	0.70	
	and tourism in the future		
Accepted		0.6	0.5
values [58]			

Referring to the analysis values extracted by the program, and through various indicators of fitness, the SEM was evaluated. The results showed that all indicators of suitability of the required test were fit. Conformity can be checked by comparing the values of the computed indicators with the good match criteria in table 4

Table 4. Comparison of the calculated value with the Indicators of a good fit for the relationship model

Indicators	Calculated value	Good match criteria to fit [59]
Chi-square or X <sup>2</sup> /df	1.10	1.0-3.0
Goodness of fit index	0.87	GFI > 0.9

Adjusted goodness of fit	0.90	AGFI > 0.9
index		
Root mean square error of	0.03	RMSEA < 0.08
approximation		
Tucker–Lewis index	0.98	TLI > 0.9
Normative fit index	0.85	NFI > 0.9
Comparative fit index	0.91	CFI > 0.9

It is clear from the previous table of the indicators of fit of the goodness of the model of relationships between the five dimensions in the model that it has the best values for all indicators, except for the indicators of the adjusted quality of conformity and the quality of standard conformity, which remained slightly below the required level of conformity. Since all indicators have good conformance values, the model is acceptable as indicated in the previous places. Also, the values of R.C (normal distribution test) of the model are greater than 96.1, and this indicates that the paragraphs (indicators) in the model can measure the relationships between the four variables. Thus, the values of the validity or saturation coefficients for the paragraphs are accepted, as they are acceptable values, as an estimate of the acceptance of the saturation of each indicator with the factor to which it belongs, as the estimates given by the AMOS program indicate good criteria for accepting the model.

Path coefficients between variables were determined by PA (Fig. 3). The standard path factor is "a measure of the association between two latent variables. The value of the standard path factor varies from -1 to 1. The significance of the path factor is indicated by the critical ratio (CR). The path is significant at level 0.05 if CR value > 1.96, and at level 0.01 if the CR value is >2.576"[60].

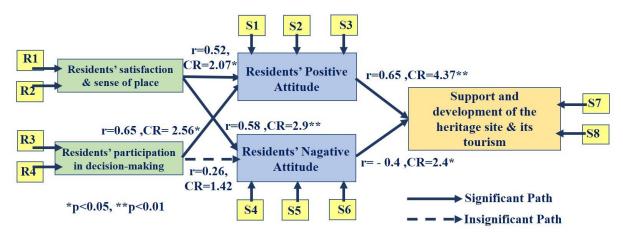


Fig 3. Path coefficients of the (SEM) (Researchers)

Test for the impact of the residents' positive attitude towards supporting the development of the heritage site, and its tourism. Statistics indicated that a positive attitude towards the heritage site had a significant impact on its support (r = 0.65, CR = 4.37, p < 0.01). Therefore, it is considered acceptable. Also, the impact of the negative attitude of the population towards supporting the heritage site was tested. The results indicated that the negative attitude towards the heritage site had a significant negative impact on supporting the development and future tourism (r = -0.40, CR = 2.40, p < 0.05), and it is considered acceptable due to its inverse association with the population's support for the development of the heritage site. from the previous results, the theory for explaining the relationships between residents' attitudes and their support for heritage site protection and development has been confirmed.

In terms of local people's satisfaction with the way heritage sites are treated and their sense of place versus attitude toward supporting the heritage site, local people's satisfaction had a great impact on their attitude, as their satisfaction greatly affected the positive aspect according to the result (r = 0.52, CR = 2.07, p < 0.05), as well as the negative aspect (r = 0.58, CR = 2.90, p < 0.01), both of results were suitable. The strong feeling of satisfaction of the residents to the heritage site is reflected in adopting positive attitudes in favor of the site, where the strength of the sense of place depends on the experience gained from it [49], which is directly proportional to the increased sense of the advantages and costs for supporting the site. The site of the Mansoura Culture Palace contains intangible cultural assets, as well as a tangible structure that serves as a manifestation of culture. due to the usual conservation approach, which tends to tangible elements [61], it is required that cultural heritage preservation initiatives extend to its contextual significance, not just tangible buildings. The concept of population satisfaction can explain the problem of preserving the intangible cultural part associated with the life of the population, given its authenticity [62]. When the conservation approach balances between tangible and intangible elements leads to creating an authentic experience for the long-term survival and sustainability of heritage sites [63].

The results of examining the effects of residents' participation in decision-making on their positive and negative opinions showed that population participating with a higher percentage in decision-making were more inclined to positive attitudes toward supporting the heritage site according to the acceptable result (r = 0.65, CR = 2.56, p < 0.05). This indicates that the level of participation in decision-making influences the change of a person's attitude. When residents participate in decision-making about a site, their connection with it increases. This means that the high level of participation leads to a better view of the benefits of the heritage site, and a more positive conviction in activities related to development, conservation and tourism. [64].

The hypotheses of the association between residents' participation in decision-making and negative attitudes toward the heritage site were rejected (r

= 0.26, CR = 1.42). One possible explanation is that residents' support for the development and preservation of the heritage site is reflected in their deep participation in decision-making. People who are more supportive of heritage sites are more willing to solve problems associated with the development and preservation of the heritage site [65].

Respondents' answers to various survey questions may represent a subject's personal attitude, not objective measures of actual effects. For example, it is possible that the population's support for the heritage site in the answers may not be equal to their actual support at work. This study may differ from one heritage site to another due to the different interactions between the variables according to the change of the site and the stages of its development and preservation.

## 4. CONCLUSIONS

It is essential to involve the local community and private sector in a participatory approach in the context of urban heritage as potential partnerships [13]. The manuscript confirmed the relationships between local residents' satisfaction with the way of dealing with the heritage site, their sense of place, participation in decision-making, and their positive or negative attitudes toward supporting the heritage site and supporting the tourism development of the Mansoura Culture Palace, Egypt. The outcomes showed that the population's attitudes toward the heritage site, in general, had a significant impact on supporting its survival, development, and tourism. Moreover, residents' satisfaction, their sense of place, and their participation in decision-making greatly affected the positive and negative attitudes of the population, but participation in different activities greatly affected only the positive attitudes. These findings provide a catalyst for sustainable development and preservation of heritage sites rather than their disposal.

#### REFERENCES

- [1] Nations, U., (2016). Draft outcome document of the United Nations Conference on Housing and Sustainable Urban Development (Habitat III). United Nations: New York, NY, USA.
- [2] UNESCO., (2015). Cultural Urban Future, Global Report on Cultural for Sustainable Urban Development. Paris (France).
- [3] MBE, V.S., (2012). The Role of Architecture in Humanity's Story Thought Economics. Thought Economics,.
- [4] Day, C., (2004). Places of the Soul Architecture and Environmental Design as a Healing Art. Second edi, Architectural Press.
- [5] Antoszczyszyn, M., (2017). Manipulations of Totalitarian Nazi Architecture. IOP Conference Series: Materials Science and Engineering,

- 245(5): undefined-undefined, https://Doi: 10.1088/1757-899X/245/5/052062.
- [6] Salmela, U., C. of E., (2017). The Faro Convention Action Plan Handbook 2018–2019; Council of Europe Framework Convention on the Value of Cultural Heritage for Society. Council of Europe: Helsinki, Finland.
- [7] Dian, A.M., Abdullah, N.C., (2013). Public Participation in Heritage Sites Conservation in Malaysia: Issues and Challenges. Procedia Social and Behavioral Sciences, 101: 248–55, https://Doi: 10.1016/J.SBSPRO.2013.07.198.
- [8] Kong, L., Yeoh, B.S.A., (2016). Urban Conservation in Singapore: A Survey of State Policies and Popular Attitudes: Http://Dx.Doi.Org/10.1080/00420989420080231, 31(2): 247–65, https://Doi: 10.1080/00420989420080231.
- [9] Steinberg, F., (1996). Conservation and rehabilitation of urban heritage in developing countries. Habitat International, 20(3): 463–75, https://Doi: 10.1016/0197-3975(96)00012-4.
- [10] Jimura, T., (2011). The impact of world heritage site designation on local communities A case study of Ogimachi, Shirakawa-mura, Japan. Tourism Management, 32(2): 288–96, https://Doi: 10.1016/J.TOURMAN.2010.02.005.
- [11] Gaillard, B., (2014). Conflictive delisting process of a World Heritage Site in Germany: the case of the Dresden Elbe Valley. Brandenburg University of Technology, Cottbus, Germany, (2014).
- [12] UNESCO World Heritage Convention., (2017). Historic City of Yazd UNESCO World Heritage Centre.
- [13] MacDonald, R., Jolliffe, L., (2003). Cultural rural tourism: Evidence from Canada. Annals of Tourism Research, 30(2): 307–22, https://Doi: 10.1016/S0160-7383(02)00061-0.
- [14] Orbasli, A., (2002). Tourists in Historic Towns: Urban Conservation and Heritage Management. Tourists in Historic Towns, https://Doi: 10.4324/9780203479001.
- [15] Graham, B., Ashworth, G.J., Tunbridge, J.E., (2016). A Geography of Heritage. Taylor and Francis.
- [16] Herbert, D., (2001). Literary Places, Tourism and the Heritage Experience. Annals of Tourism Research, 28: 312–33, https://Doi: 10.1016/S0160-7383(00)00048-7.
- [17] Lowenthal, D., (1998). The Heritage Crusade and the Spoils of History. The Heritage Crusade and the Spoils of History, https://Doi: 10.1017/CBO9780511523809.
- [18] Peil, T., (2006). Estonian heritage connections—people, past and place: the Pakri Peninsula. International Journal of Heritage Studies, 11(1): 53–65,

- https://Doi: 10.1080/13527250500037021.
- [19] Ashworth, G.J., Tunbridge, J.E., (2011). The Tourist-Historic City (Routledge Advances in Tourism). First edit, Pergamon.
- [20] Moon, O., (2005). The countryside reinvented for urban tourists: Rural transformation in the Japanese muraokoshi movement. Japan at Play: The Ludic and the Logic of Power,: 228–44, https://Doi: 10.4324/9780203996560-22/COUNTRYSIDE-REINVENTED-URBAN-TOURISTS-RURAL-TRANSFORMATION-JAPANESE-MURAOKOSHI-MOVEMENT-OKPYO-MOON.
- [21] Ball, R., (2003). The geography of tourism and recreation: environment, space and place, 2nd Edition,. Tourism Management, 24(2): 233–4, https://Doi: 10.1016/S0261-5177(02)00052-3.
- [22] Ap, J., (1992). Residents' perceptions on tourism impacts. Annals of Tourism Research, 19(4): 665–90, https://Doi: 10.1016/0160-7383(92)90060-3.
- [23] Pearce., J.A., (2016). Host Community Acceptance of Foreign Tourists: Strategic Considerations. Annals of Tourism Research, 19(4): 44–5, https://Doi: 10.1177/004728758101900430.
- [24] Dann, G., Nash, D., Pearce, P., (1988). Methodology in tourism research. Annals of Tourism Research, 15(1): 1–28, https://Doi: 10.1016/0160-7383(88)90068-0.
- [25] Andereck, K.L., Vogt, C.A., (2016). The Relationship between Residents' Attitudes toward Tourism and Tourism Development Options: Journal of Travel Research, 39(1): 27–36, https://Doi: 10.1177/004728750003900104.
- [26] Andriotis, K., Vaughan, R.D., (2003). Urban residents' attitudes toward tourism development: The case of Crete. Journal of Travel Research, 42(2): 172–85, https://Doi: 10.1177/0047287503257488.
- [27] Smith, M., (2002). A critical evaluation of the global accolade: The significance of World Heritage Site status for Maritime Greenwich. International Journal of Heritage Studies, 8(2): 137–51, https://Doi: 10.1080/13527250220143922.
- [28] Bianchi, R. V., (2002). The contested landscapes of world heritage on a tourist Island: The case of Garajonay National Park, la Gomera. International Journal of Heritage Studies, 8(2): 81–97, https://Doi: 10.1080/13527250220143896.
- [29] Shackley, M., (1997). Visitor Management: Case Studies from World Heritage Sites. In M. Shackley (Ed.), Visitor Management: Case Studies from World Heritage Sites (Pp. 194-205). Oxford: Butterworth-Heinemann...
- [30] Bianchi, R., Boniface, P., (2010). Editorial: the politics of World Heritage.

- International Journal of Heritage Studies, 8(2): 79–80, https://Doi: 10.1080/13527250220143887.
- [31] Prideaux, B., Fyall, A., Leask, A., Hall, C.M., Boyd, S., Voase, R., et al., (2012). World Heritage sites: managing the brand. Routledge.
- [32] Rodwell, D., (2002). The world heritage convention and the exemplary management of complex heritage Sites. Journal of Architectural Conservation, 8(3): 40–60, https://Doi: 10.1080/13556207.2002.10785326.
- [33] Pedersen, A., (2002). manuals Managing Tourism at World Heritage Sites: a Practical Manual for World Heritage Site Managers. UNESCO World Heritage Centre,.
- [34] Rasoolimanesh, S.M., Jaafar, M., (2016). Community Participation toward Tourism Development and Conservation Program in Rural World Heritage Sites. Tourism From Empirical Research Towards Practical Application, https://Doi: 10.5772/62293.
- [35] Evans, G., (2010). Living in a World Heritage City: stakeholders in the dialectic of the universal and particular. International Journal of Heritage Studies, 8(2): 117–35, https://Doi: 10.1080/13527250220143913.
- [36] Ko, D.W., Stewart, W.P., (2002). A structural equation model of residents' attitudes for tourism development. Tourism Management, 23(5): 521–30, https://Doi: 10.1016/S0261-5177(02)00006-7.
- [37] Andereck, K.L., Valentine, K.M., Knopf, R.C., Vogt, C.A., (2005). Residents' perceptions of community tourism impacts. Annals of Tourism Research, 32(4): 1056–76, https://Doi: 10.1016/J.ANNALS.2005.03.001.
- [38] Gursoy, D., Jurowski, C., Uysal, M., (2002). Resident attitudes: A Structural Modeling Approach. Annals of Tourism Research, 29(1): 79–105, https://Doi: 10.1016/S0160-7383(01)00028-7.
- [39] Gursoy, D., Rutherford, D.G., (2004). Host attitudes toward tourism: An Improved Structural Model. Annals of Tourism Research, 31(3): 495–516, https://Doi: 10.1016/J.ANNALS.2003.08.008.
- [40] Liu, J.C., Var, T., (1986). Resident attitudes toward tourism impacts in Hawaii. Annals of Tourism Research, 13(2): 193–214, https://Doi: 10.1016/0160-7383(86)90037-X.
- [41] Sharpley, R., (2014). Host perceptions of tourism: A review of the research. Tourism Management, 42: 37–49, https://Doi: 10.1016/J.TOURMAN.2013.10.007.
- [42] Choi, H.C., Murray, I., (2010). Resident attitudes toward sustainable community tourism. Journal of Sustainable Tourism, 18(4): 575–94, https://Doi: 10.1080/09669580903524852.
- [43] Almeida-García, F., Peláez-Fernández, M.Á., Balbuena-Vázquez, A., Cortés-Macias, R., (2016). Residents' perceptions of tourism development in Benalmádena (Spain). Tourism Management, 54: 259–74, https://Doi:

- 10.1016/J.TOURMAN.2015.11.007.
- [44] Mason, P., Cheyne, J., (2000). Residents' attitudes to proposed tourism development. Annals of Tourism Research, 27(2): 391–411, https://Doi: 10.1016/S0160-7383(99)00084-5.
- [45] Huh, C., Vogt, C.A., (2008). Changes in Residents' Attitudes toward Tourism over Time: A Cohort Analytical Approach. Journal of Travel Research, 46(4): 446–55, https://Doi: 10.1177/0047287507308327.
- [46] Kuvan, Y., Akan, P., (2005). Residents' attitudes toward general and forest-related impacts of tourism: The case of Belek, Antalya. Tourism Management, 26(5): 691–706, https://Doi: 10.1016/J.TOURMAN.2004.02.019.
- [47] Gursoy, D., Chi, C.G., Dyer, P., (2010). Locals' attitudes toward mass and alternative tourism: The case of Sunshine Coast, Australia. Journal of Travel Research, 49(3): 381–94, https://Doi: 10.1177/0047287509346853.
- [48] Ramkissoon, H., Nunkoo, R., (2011). City image and perceived tourism impact: Evidence from port Louis, Mauritius. International Journal of Hospitality and Tourism Administration, 12(2): 123–43, https://Doi: 10.1080/15256480.2011.564493.
- [49] Wang, S., Chen, J.S., (2015). The influence of place identity on perceived tourism impacts. Annals of Tourism Research, 52: 16–28, https://Doi: 10.1016/J.ANNALS.2015.02.016.
- [50] Alassaf, S.B.H., (1995). Introduction to research in the behavioral sciences. first, Abican Library.
- [51] Molina-Azorín, J.F., Font, X., (2016). Mixed methods in sustainable tourism research: an analysis of prevalence, designs and application in JOST (2005–2014). Journal of Sustainable Tourism, 24(4): 549–73, https://Doi: 10.1080/09669582.2015.1073739.
- [52] P.L. Pearce, G.M. Moscardo, G.F.R., (1997). Tourism Community Relationships (Tourism Social Science Series). 1st editio, London, United Kingdom: Emerald Publishing Limited.
- [53] Anthony James Veal., (2006). Research Methods for Leisure and Tourism: A Practical Guide. 3rd ed., Financal Times Management.
- [54] Clark, M., Riley, M., Wood, R.C., Wilkie, E., (1997). Researching and Writing Dissertations in Hospitality and Tourism Management (Series in Tourism & Hospitality Management). Cengage Learning.
- [55] Wolf, E.J., Harrington, K.M., Clark, S.L., Miller, M.W., (2013). Sample Size Requirements for Structural Equation Models: An Evaluation of Power, Bias, and Solution Propriety. Educational and Psychological Measurement, 73(6): 913–34, https://Doi: 10.1177/0013164413495237.
- [56] Jorgensen, B.S., Stedman, R.C., (2001). SENSE OF PLACE AS AN ATTITUDE: LAKESHORE OWNERS ATTITUDES TOWARD THEIR

- PROPERTIES. Journal of Environmental Psychology, 21(3): 233–48, https://Doi: 10.1006/JEVP.2001.0226.
- [57] Andrews, J.C., Durvasula, S., Akhter, S.H., (1990). A framework for conceptualizing and measuring the involvement construct in advertising research. Journal of Advertising, 19(4): 27–40, https://Doi: 10.1080/00913367.1990.10673198.
- [58] Ahmad, S., Zulkurnain, N., Khairushalimi, F., (2016). Assessing the Validity and Reliability of a Measurement Model in Structural Equation Modeling (SEM). British Journal of Mathematics & Computer Science, 15(3): 1–8, https://Doi: 10.9734/BJMCS/2016/25183.
- [59] Schreiber, J.B., Stage, F.K., King, J., Nora, A., Barlow, E.A., (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. Journal of Educational Research, 99(6): 323–38, https://Doi: 10.3200/JOER.99.6.323-338.
- [60] Hox, J., Bechger, T., (1999). An Introduction to Structural Equation Modeling. Family Science Review, 11.
- [61] Loulanski, T., (2006). Revising the Concept for Cultural Heritage: The Argument for a Functional Approach. International Journal of Cultural Property, 13(2): 207–33, https://Doi: 10.1017/S0940739106060085.
- [62] Jivén, G., Larkham, P.J., (2003). Sense of place, authenticity and character: A commentary. Journal of Urban Design, 8(1): 67–81, https://Doi: 10.1080/1357480032000064773.
- [63] Gu, H., Ryan, C., (2008). Place attachment, identity and community impacts of tourism—the case of a Beijing hutong. Tourism Management, 29(4): 637–47, https://Doi: 10.1016/J.TOURMAN.2007.06.006.
- [64] Huang, C.Y., Chou, C.J., Lin, P.C., (2010). Involvement theory in constructing bloggers' intention to purchase travel products. Tourism Management, 31(4): 513–26, https://Doi: 10.1016/J.TOURMAN.2009.06.003.
- [65] Broderick, A.J., Mueller, R.D., (2015). A Theoretical and Empirical Exegesis of the Consumer Involvement Construct: The Psychology of the Food Shopper. Journal of Marketing Theory and Practice, 7(4): 97–108, https://Doi: 10.1080/10696679.1999.11501855.
- [66] Thompson, S., Farooq, S., Marie, D., Alcala, P., Lampou, K., (2017). THE EFFECT OF LEVEL OF INVOLVEMENT ON THE CONSUMER AFFINITY.: A case study of Mexican tacos case in Sweden. Master's thesis in Business Administration, Mälardalen University, Sweden. Mälardalen University, Sweden, (2017).