

## Factors Affecting Public Value of Architectural Heritage in Aldarb Alahmar

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### ABSTRACT

Architectural Heritage importance seems to be a non-negotiable fact to some people, mostly specialized personnel who attribute a huge importance to the subject, many times on the expense of human activities and interests. Heritage also seems to another group as a pile of old rocks that takes too much attention and affect their lives negatively. This group is usually living in a historical area and overwhelmed by more conservation projects than it would like. Although it doesn't make a lot of sense, while some professionals are questioning the true value of heritage, some public are fund-raising to save their surrounding heritage.

The perception of urban planners, stake holders, investors, decision-makers, governmental staff and non-governmental personnel vary according to their interest and vision for future development.

This paper raises the following questions:

- What are the factors that form a person's perception towards his heritage?
- Why do professionals favor a building over another and choose to put it as a stumbling block in front of the urban development flow and people's needs?
- Do professional standards meet public standards for announcing a historical building as a valuable one?
- If the public doesn't attribute the same value to a targeted building, should conservation plans proceed?

A field survey will test the research hypotheses in order to get evidence about the real factors that affect the people's perception about architectural heritage in Egypt

**Key words:** Public value, Heritage perception, urban sociology, Egyptian Heritage.

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### Introduction

The research primary case will be in Aldarb alahmar, Bab El Wazir Street. The street holds a lot of historical buildings and is a residential area. It also contains different kinds of small stores, baking store, a factory, some schools, a daycare and many coffee shops. The street is about 2 meters wide, but it becomes wider in front of Khayer Bek complex. Restoration work in the area around this street began in 2003 by the famous Agakhan foundation and ended in 2013 when the Egyptian partners couldn't continue co-funding the ongoing projects. After that the Agakhan team left the area, many things changed in the street. The research makes a social follow up to the project to investigate how it affected the people's lives, and how after witnessing such efforts, residents perceive their surrounding heritage.

What makes the public values an old place and not another?

Is it the media that controls people's minds and tell them what to think and what to value?

Is it the education and what people are taught at school?

Is it the market rules that evaluates things only by their materialist value?

Studies have proven that the factors that affect the human behavior towards its environment are the following:

#### 1- Demographic factors

The most influential demographic factors found were gender and years of education. Studies stated that women show more emotional engagement in pro-environmental causes; also the years of education when longer they may affect environmental knowledge, but not necessarily affects behavior. (Kollmuss and Agyeman, 2002) Researchers have also agreed that Age is a very obvious factor in environmental activists; they are all young. They found that income and prestige to be very less likely to affect the environmental behavior. Area of residence takes a part of people's attitude towards the environment, so does the political ideology; liberal people showed higher concern about the environment. The theory that supports the existence of environmental activists among the socially higher grades in the industrial community we are living in now is widely controversial. (Buttel, 1987)

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Studies have agreed that the most influential demographic factors in addition to gender and years of education are: Age, Area of residence, Political ideology, Income, Prestige (Occupation).

### **2- Internal factors**

Studies have proven that the internal factors that affect human behaviour and attitudes were Motivation, Environmental knowledge, Values, Attitude, Environmental awareness, Emotional involvement, Emotional reaction, Locus of control, Responsibility and priorities and Habits.

### **3- External factors**

Institutional factors like the infrastructure and official help to encourage environmental behaviour, Economic factors where people tend to take financially beneficial decisions, if the environmental behaviour is costly or money demanding, they may not be interested in doing it, or simply can't afford it. And Socio-cultural factors where the cultural norms of a society affect how people treat their natural and built environments. (Kollmuss and Agyeman, 2002).

## **Materials and Methods**

The research worked mainly on sociological factors; it dealt with people and environmental behavior towards architectural heritage. This perspective is crucial and it can fill the gap between reality and expected behavior from the public.

Architecture is being built, designed, executed, lived in, destroyed, conserved and exploited by humans, therefore human perspective and sets of values are in the main core of the science of architecture.

### *Research Design:*

Cross-sectional model is adopted in this research, where the samples of the study are from different age groups, but have the same trait at a certain point in time. The common trait in the research is living in the same area or street, either historic or non-historic. And other samples will be working in the same field connected to heritage preservation.

### *Research Methods:*

The research had two parts, one is theoretical and the other is a field study.

The Field study part:

1- A comparative case study will take place in chosen areas:

Aldarb alahamr, Baba El Wazir Street, AlGAmaleyya: Al Muizz Street, AlKhalifa, Alkalaa, Rod Al Farag, Shobra, Dokki, Nasr City, Kobba, Boulaq al dakrou, Heliopolis, Ain Shams, Qallyoubeyya, Giza, Some informal settlements.

The researcher was a participant observer, questionnaires and interviews are also used in order to collect the necessary data and test the research hypotheses.

2-The field study took place in many Egyptian sites and organizations dealing with heritage.

Target places are:

- A. Schools in chosen areas.
- B. Residents of chosen areas.
- C. Different professionals working in the heritage field (Experts)

3-All statistical calculations were done using computer program SPSS (Statistical Package for the Social Science; SPSS Inc., Chicago, IL, USA) release 15 for Microsoft Windows (2006).

4-Finally, the research came up with a final conclusion to answer the research questions.

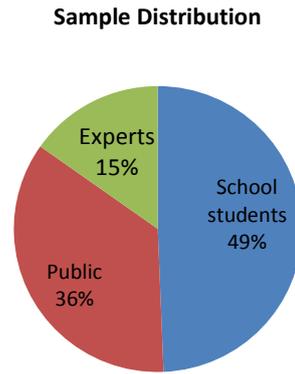
## **Results**

The research tested the total grade each group of the sample got. The results showed no significance in the difference between the three groups (School kids, adults and experts).

(Figure 1)

Therefore the final grade that represents the person's attitude towards architectural heritage is not influenced by the main categorization of the research: School kids, Public adults or Professional experts.

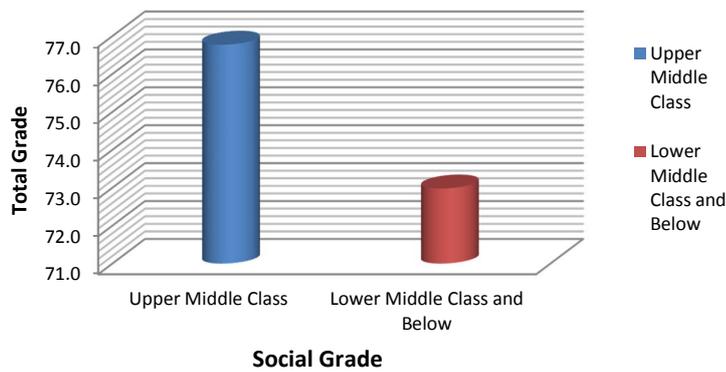
The research then started to measure each independent variable alone on the non-expert, in order to know which factor is affecting the public perception towards architectural heritage. The statistical tests identified whether the probability value (p value) was significant or not, proving the significance of the factor's influence.



**Fig. 1:** Sample composition and number

**Social Grade:**

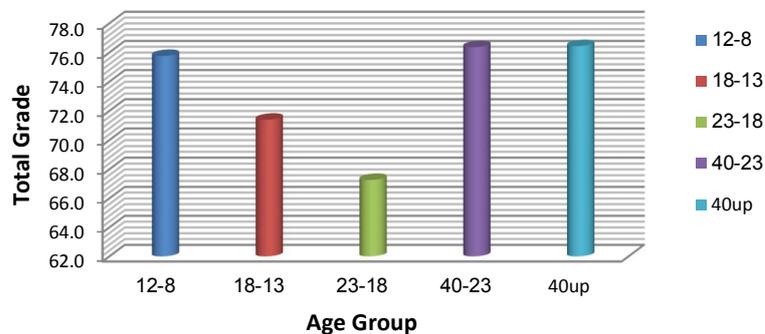
Using t-test for equality of means, p value was non-significant. Therefore, the social grade is not necessarily affecting the attitude towards architectural heritage. This result is in harmony with the researcher's observation throughout the survey. Although the results of testing the economic grade factor turned out to be positive (It was calculated for the public only, because school kids were not aware of the family income in most cases), the social grades that are usually connected to the economic grade turned out to be negative (Figure 2).



**Fig. 2:** Social grade in non-expert sample graphical presentation

**2-Age:**

Using ANOVA test, p value is significant. Therefore, the age variable is affecting the attitude towards architectural value (Figure 3).



**Fig. 3:** Age groups graphical presentation

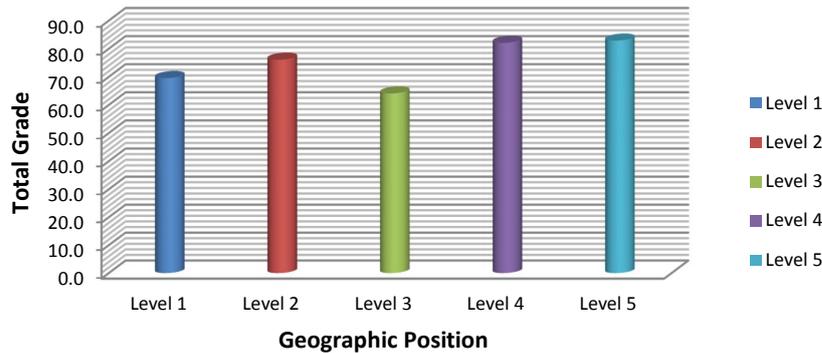
**Geographic Position:**

The research divided the Greater Cairo Governorate (Cairo, Giza and Qallyubeyya) into 4 levels. Each level is closer in distance to a suggested focal point, that focal point is the ancient Fatimid Cairo. The levels start from the further distance to the closer one in circular shapes.

The reason behind this categorization is testing whether or not the area of respondents matter in terms of closeness to the historic city. This criterion measures the extent to which being a part of the urban fabric of heritage and having daily interactions with it affects the public perception about it or not.

*The observation:*

Level 1 and 2 and 3 have a mean grade of 69.56, 76.08 and 64.10 consecutively, while level 4 and 5, which represent the center of the old city mark mean grades of 82.09 and 82.89 consecutively. Using ANOVA test to the 5 grades of geographic position, the p value was highly significant (Figure 4).



**Fig. 4:** Geographic presentation graphical presentation.

**Area of residence:**

Areas of Cairo and Giza and Qallyubeyya were divided according to many criteria, like historic and non-historic, the socio-economic status and whether the areas were planned or informal settlements. Comparing 7 chosen categories of residential areas, Using ANOVA test, p value is highly significant.

*Observation:*

The two first categories: area 2 the historic public area, and area 3 the non-historic classy area, are showing the highest mean grades.

When the school kids were added to the public adults, the mean grade in area 1 decreased relatively, which indicates that school kids in area 1 the historic classy area, were not as interested in heritage as adults. This means that the area of residence is an effective factor affecting the public value and attitude towards architectural heritage.

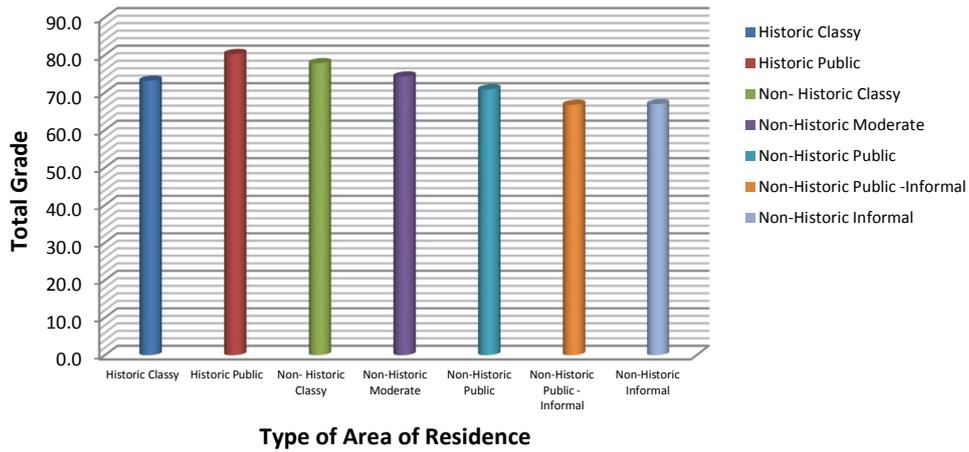
The lowest grades in this classification go to the area 6 the non-historic public semi informal settlements like Boulak Eldakrou and Shobra Elkheima, and 7 which is the non-historic informal settlement area like Ard Ellewa, Saft ellaban and Ezbet Elnakhl. (Figure 5).

**Relationship to heritage:**

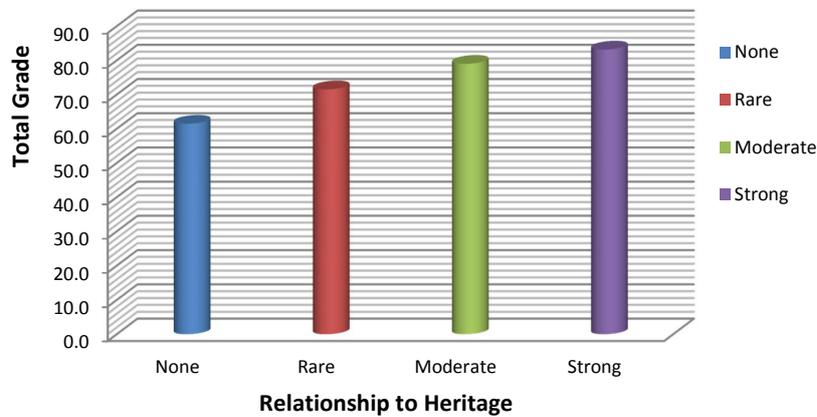
*The observation:*

Results from Strong to none are as follows: strong has a mean result of 83.15, Moderate has a mean result of 78.98, rare has a mean result of 71.51, and none, which indicates the non-existence of any relationship to historic sites, has a mean result of 61.45.

The tests proved that the degree of relationship to heritage is directly affecting the attitude towards architectural heritage; the more a person is related to historic sites, whether by living or working, the more positive his attitude is towards heritage. (Figure 6)



**Fig. 5:** Area of residence in non-expert sample graphical presentation



**Fig. 6:** Relationship to heritage graphical presentation.

**Degree of Satisfaction:**

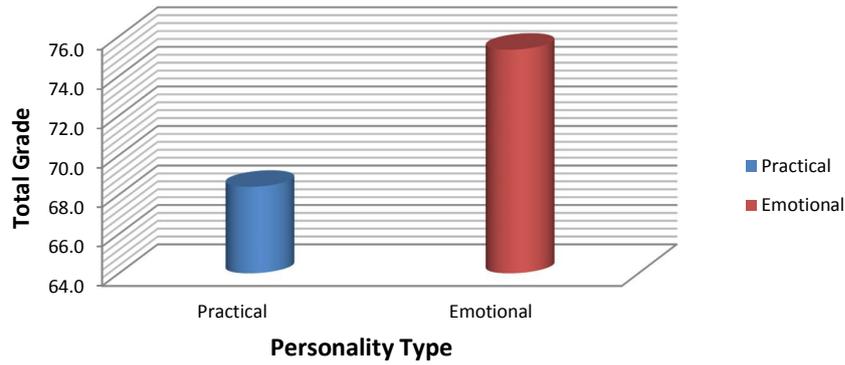
Using t-test for equality of means, showed a p value more than 0.05, which is non-significant. That means that the degree of satisfaction of a person’s towards his environment, does not affect his attitude towards architectural heritage. This point needs future investigation on the effect of “quality of life” over people’s happiness and therefore their attitude towards their environment.

**Personality Type:**

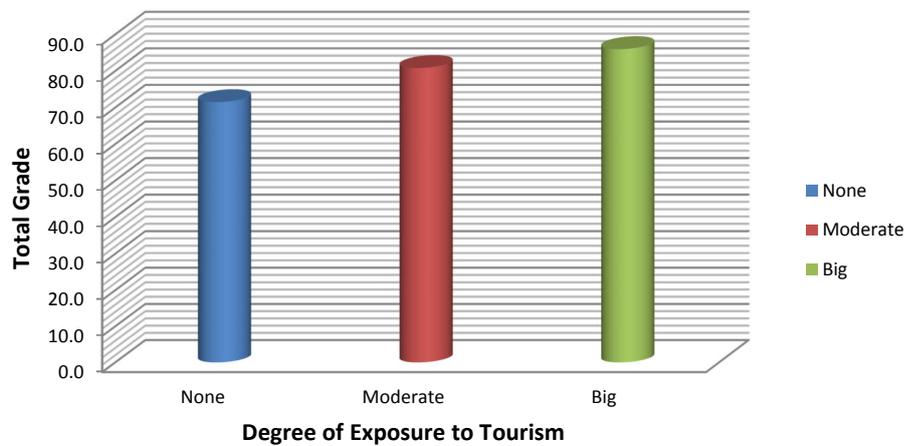
The effect of a person’s personality type in School and public individuals showed a positive effect over their attitude towards architectural heritage. The emotional type that tends to keep attached to old belongings showed a more positive attitude towards heritage than the practical personality type (Figure 7).

**Exposure to Tourism:**

The big exposure marks a mean grade of 86.00, the moderate exposure marks a grade of 80.83, while the absence of exposure to tourism marks a mean of 71.49. Different tests proved that the effect of degree of exposure to tourism and touristic sites affects positively a person’s attitude towards heritage (Figure 8).



**Fig. 7:** Personality type in non-expert sample graphical presentation



**Fig. 8:** Exposure to tourism graphical presentation.

**Cultural Identity:**

The observation: The Mixed Cultural ID marks a mean grade of 77.04, while the national cultural ID marks a grade of 72.90. Therefore the type of cultural ID affects the attitude towards architectural heritage in the taken sample.

**Table 1:** Non-expert sample significant factors

	Variable	Test Used	P value Significance
Non-Expert Group (school students and Public)	Social Grade	t-test for equality of means	Non-Significant
	Age	ANOVA	Significant
	Geographic Position	ANOVA	Highly significant
	Area of Residence (All)	ANOVA	Highly significant
	Relationship to heritage	ANOVA	Highly significant
	Degree of Satisfaction	t-test for equality of means	Non-Significant
	Personality Type	t-test for equality of means	Significant
	Exposure to Tourism	Kruskal Wallis test	Highly significant
	Cultural Identity	t-test for equality of means	Significant

The above table, (table 1), explains briefly the significance of the tested variables over the sample of the school students and the public. It sums that the significant factors are age, geographic position, area of residence, relationship to heritage, personality type, exposure to tourism and cultural ID; whereas the non-significant factors are the social grade and degree of satisfaction.

## **Discussion**

Proops, (2001) has identified the importance of the study of environmental attitudes as a way to knowledge of public attitudes and behaviours towards their surroundings, to help solve local environmental problems, and as way to identify bigger problems that might need long term treatments such as ozone problems. People in this present survey agreed with vast majorities both from public and experts groups that measuring public value and attitude towards architectural heritage is essential.

Previous research work demonstrated that several variables are affecting the pro-environmental behaviour. Research has proven race, gender, age, income and education as effective factors in shaping environmental attitude. (MacMillan *et al.*, 1997)

Research has proven that age and education are the most significant factors related to environmental attitudes. And that gender, residence, income and political tendency as effective factors too. (Arcury, 1990; Buttel and Flinn, 1974; Tarrant and Cordell, 1997; Cottrell and Graefe, 1997; Buttel and Johnson, 1977; Dunlap and Van Liere, 1978; Albrecht *et al.*, 1982; Ramsey and Rickson *et al.*, 1976; Paul and Twight, 1987; Freudenburg, 1991; Inglehart, 1995; Bowman, 1977; Dunlap 1975; Stern *et al.*, 1993).

A study by Klineberg *et al.* (1998) has tested variables of age, education, gender, ethnicity, household income, political ideology and religiousness to view their relationship to environmentalism by using the four common statements used to gauge environmental attitudes, the results were shown consistently positive for age and education only.

The present research result stated that the gender is not a significant factor that affects attitude towards architectural heritage. It proved that the significant factors were: the area of residence, the economic grade Unlike (Kemmelmeyer *et al.*, 2002), the education level like (Inglehart 1995; Arcury, 1990; Klineberg *et al.* 1998; Gelissan 2007; Kemmelmeier *et al.*, 2002) and Age like (Arcury, 1990; Inglehart 1995; Klineberg *et al.* 1998; Plombon, 2011).

## **Education**

Most research has linked high environmental awareness to higher educational levels. Studies greed that the higher the education was the more the person's environmental knowledge is. (Inglehart 1995; Arcury, 1990). This result was supported by other research that proved education as a significant factor to environmentalism, and correlating positively (Klineberg *et al.*, 1998; Kemmelmeier *et al.*, 2002, Gelissan, 2007).

## **Age**

Age was proven as an effective factor, where studies proved that the young people are more prone to act pro-environmental (Arcury, 1990; Inglehart 1995) because, according to studies, environmentalism is an outlet to young people away from the social order and dominant value system.

This result is supported by other studies that proved age as significant factor affecting environmentalism, and correlating negatively (Klineberg *et al.*, 1998; Plombon, 2011).

Adolescence is by social psychologists characterised as a period of lower self-esteem, a heightened self-consciousness and greater instability of self-image (Simmons, Rosenberg & Rosenberg 1973), and these conditions could be causing the more negative attitudes. This result is in harmony with the present study results, where the school children below 13 years old and the adults above 18 years old had higher grades than the teenager group from 13 to 18 years old.

Age was proven as a non-significant factor by (Ogunjinmi *et al.*, 2012), income and membership to an environmentally active NGO were also proven non-significant by the same study.

## **Gender**

Some studies have proved that women are more emotionally engaged and show more concern about the environment (Fliegenschnee and Schelakovsky, 1998; Lehmann, 1999). These results are contradicting the present research results that proved that the gender was not affecting the person's attitude towards his environment.

The gender effect on environmental attitude was discussed by Tarrent and Cordel (1997), Stern *et al.* (1993), Arcury (1990). Their findings were contradictory. Arcury, (1990) found that the female respondents were less environmentally concerned than males. Whereas Tarrent and Cordel (1997) and Stern *et al.* (1993) found that males show less environmentalism than females.

Most researchers found that gender was non-significant in affecting pro-environmental behavior (Engel and Manuela, 1998; Klineberg *et al.*, 1998).

## **Urban and rural residents**

Some researchers have found many variables interrelated to each other. Buttel and Flinn, (1974) have found the education; income and occupation are interrelated to age and residence. They found that urban

residents who are mostly young and well educated act more environmentally than rural residents who are older and less educated and have less income, because the urban residents seem to suffer more from environmental issues.

Freudenberg (1991) has proven that rural residents' attitudes towards the environment depended on their economic activities and whether or not their activities are affected by the environment. Buttel and Flinn (1974) have stated that economically disadvantaged people are less environmentally concerned during any economic crisis.

### **Socio-economic**

In terms of the socio-economic profile of the respondents, this is difficult to measure in a sample of teenagers, since they, on the one hand, seldom have an income of their own and, on the other hand, rarely have knowledge of neither income levels and household budgets for the family nor educational level of their parents (Currie *et al.*, 1997). This is agreed on in the present research, and school kids were not compared in terms of economic grade.

As for social grade, the factor was proven non-significant in the current research; this result is in harmony with many research that proved that the social level was not affecting people's interest in their environment and that it is the financial part only that prevents some parts of the society to make action to support their surroundings. This theory was proved internally and externally between nations (Dunlap and York 2008; Gelissan 2007).

The results of a study by Kemmelmeier *et al.* (2002) proved that the economic factor is significant on a societal level, but is non-significant on an individual level. Unlike the present research that proved the economic grade as a significant factor on an individual level.

Ogunjinmi *et al.* (2012), in a study about local inhabitants' attitude towards their natural environment has proven the income as a non-significant factor, although the respondents have low economic grade. The significant factors were low education and hard life conditions.

The results of studies that tested the relationship between wealth and environmentalism, before and after introducing post-materialist values, were not significantly different (Plombon, 2011). This made researchers agree that the economic factor contributes in some pro-environmental attitude and behavior, but there must be many other factors, and that not all attitudes are linked to economic prosperity (Plombon, 2011).

### **Willingness to pay and volunteer**

Studies that observed the differences in attitudes between countries have found some positive environmental attitudes in poor countries and other positive attitudes in more developed countries. Researchers attributed the difference to the ability of citizens of developed countries to pay more for what they perceive valuable and the inability of poorer nations' citizens to pay even if they had positive attitudes towards the matter (Dunlap and York 2008; Kemmelmeier *et al.*, 2002).

When respondents were asked about whether they are willing to volunteer with some of their labor time to support their environment, the results were positive in poorer countries even more than developed countries. This results show that in developing countries even if citizens cannot afford to help financially they are willing to help with their time. This lead to a conclusion that environmentalism is a global attitude and is not limited to wealthy nations. (Brechin and Willett, 1994).

Blake, (1999) has stated in his theory of barriers to pro-environmental behavior that environmental concern can be interrupted by stronger needs and desires. Constraints like the lack of time, lack of money or lack of information can hinder people who have positive attitude from acting according to their beliefs and values.

### **Society and culture**

Plombon, 2011, stated in a study about the factors affecting pro-environmental behaviour that the cultural shift a society can experience, from materialist to post-materialist in this case, cannot alone affect the public attitude towards their environment. The research stated that demographic factors were not consistent from a society to another. The research stated that the pro-environmental behaviour is affected by different factors in each society.

### **The object of research**

The object to environmental behaviour research was generally the environment, mostly the natural environment. The studies focused on attitudes and behaviours consistency, the construction of environmental attitudes, and the factors affecting environmental behaviour such as demographic variables, experiences, beliefs about control, efficacy, responsibility and personal values (Park, 2009).

## Conclusion

The research has proven that many factors affect pro-environmental behaviour in Egypt and attitudes towards architectural heritage.

Factors like age, economic grade, and area of residence, education level, and personality type were proven to affect the people's attitude towards architectural heritage in Egypt.

Social grade was proven insignificant in affecting attitude towards architectural heritage in Egypt.

The degree of satisfaction of an Egyptian citizen towards his area of residence and surrounding was proven insignificant in affecting his attitude towards architectural heritage.

The more the person is connected to heritage or tourism, the better attitude he has towards the matter, unlike many other theories about residents of historic areas.

Informal settlements are the biggest challenge in Egyptian present, not for the urban or legal problems it contains, but for a whole value, belief norm that is drastically different from the Egyptian mentality.

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