# The Impact of Tour Guide's Interpretation on Sustainable Behavior at Cultural Heritage Sites Mediated Through Place Attachment

Meril Ibrahem Moris Mariam Samy Zekry

Tourism Studies department, Faculty of Tourism & Hotels, Suez Canal University

#### **Abstract**

Al-Moez Street is a remarkable tourist attraction that is open to many groups of visitors per day especially, after the government renovations to transform the street into an 'openair' museum. However, it is impossible for tourists to experience heritage resources without causing negative impacts to those resources. Literature revealed that tour guide interpretation is one of the main factors influencing tourists' behavior. however, very limited research has been conducted to investigate the relationship between tour guide interpretation, place attachment and sustainable behaviour. Therefore, study contributes to fill in some gaps in the literature regarding the relationship between tour guide's interpretation and place attachment and assessing whether sustainable behavior can be stimulated through the mediating role of place attachment or not. For this purpose, a questionnaire has been distributed among 240 local and foreign tourists who visited Al -Moez Street in guided tours. Results indicated that the sustainable behavior at cultural heritage sites can be stimulated through the mediating role of place attachment. The study recommends that the tourist Guide Syndicate should seek to improve tour guides' interpretation through education and trainings to upgrade their skills additionally, Site administrators should combine personal interpretation with non-verbal one for more sustainable heritage sites.

**Key words**: Cultural Heritage -Interpretation- Place attachment -Sustainable behavior – Al-Moez Street.

### Introduction

Historic Cairo has grabbed many tourists' attention, especially after being inscribed by UNESCO as one of the world's cultural heritage sites in 1979. Unfortunately, tourists' visitations to heritage resources caused many negative impacts to the heritage values. The study of Jones (2007) discussed those negative impacts as thefts, climbing monuments, souvenir hunting, and breaking objects. Consequently, the role of tour guides in leading tourists to demonstrate sustainable behavior could radically minimize these impacts.

Tour guides are seen as forefront employees who play a major role in stimulating visitors' behavior, experience, and sense of places. This research shows that when tour guides stimulate the visitors to appreciate the cultural heritage sites, the visitors tend to demonstrate sustainable behavior within these sites.

Several studies tended to emphasize on natural-based sites (e.g., Kim, 2011; Lee, 2011) rather than cultural heritage sites when studying the impact of tour guide's interpretation on sustainable behavior. Additionally, very limited research has been conducted to investigate the relationship between the three constructs: tour guide's interpretation, place attachment, and sustainable behaviour. As well as assessing whether sustainable behavior can be stimulated through the mediating role of place attachment or not.

### 1.Literature Review and Hypotheses Formulation:

### 1.1. Tour Guide's Interpretation:

According to the study of the National Association for Interpretation "NAI" (2021) Interpretation is:

"A mission-based communication process that forges emotional and intellectual connections between the interests of the audience and the meanings inherent in the resource."

Interpretation has been described as a distinctive type of communication in tourism sector because of the activities included in it such as presentations, guided tours, and educational programs, conducted in visitor centers, wildlife parks and other protected environment (Morrison ,2010).

Additionally, in the heritage context, Interpretation has gained a great value as a tool for making heritage sites expressive to tourists (Hannam and Knox, 2010) and encouraging them to appreciate these sites. The study of Howard (2003) referred to heritage interpretation as a process of translating heritage into a language, which tourists can easily recognize.

The study of Skibins et al., (2011) classified interpretive services at heritage sites into personal interpretative services presented by tour guides and non-personal interpretive services presented through different methods such as visitor centers, signage, media, brochures, and exhibits. While the following studies (Ababneh, 2017; Alani et al., 2017; Alazaizeh et al., 2019) classified interpretation into two groups: guided and non-guided interpretation.

The guided interpretation is based on the direct personal communication and the face-to-face interaction with a tour guide at the heritage site (Reisinger and Steiner, 2006). Padbury (2014) added that personal interpretation are programs in the form of demonstrations, storytelling, talks, living history, and nature walks. While the non-guided interpretation relies on providing information through signs without the tour guide intervention (Rabotic, 2008; Poudel and Nyaupane, 2013). Non guided interpretation is also known as non-verbal interpretation which can be seen in physical settings and printed materials at the attractions (Mohamed et al, 2014).

The study of Brochu and Merriman (2002) has even argued that personal interpretation is the most powerful approach to interpretation as the interpreter can adapt to each tourist. however, personal interpretation needs skilled and well-trained interpretive staff who can minimize negative impacts of tourist at heritage sites and direct them towards sustainable behaviour (Sandaruwani and Gnanapala, 2016; Çetinkaya and Öter, 2016). Látková et al (2017) added that tourist guide's communication skills, their interpretation and knowledge of a destination's culture can change tourists' visits from tours into experiences. Ham and Weiler (2006) have even argued that tour guide interpretation can promote positive behaviors among tourists and improving their experiences.

Heritage interpretation plays a key role in the promotion of the culture, the local economy, and the development of esteem towards each other among tourists and the host community, as well as the preservation and authentic representation of local culture, traditions, customs and the natural environment (Nowacki ,2021).

### 1.1.1. Tour guide's Interpretation and sustainable behavior:

Many researchers (e.g., Huang et al., 2009; Mossberg et al., 2014; Kabii, 2017) argued that the tour guides are considered heritage defenders, site interpreters, guards for the

archaeological sites, cultural brokering, behavior transformers and sustainability developers. the study of Látková et al. (2017) referred to culture brokering as an act of mediating between individuals or groups of different cultural backgrounds for the aim of minimizing conflict or producing change.

It has been argued among number of researchers (e.g., Mak et al., 2010. Weiler and Kim, 2011; Poudel and Nyaupane, 2013) that tour guide interpretation serves as one of the major factors contributing to sustainable tourism Moreover, Öter and Sonuç (2014); Khornjamnong (2017) referred to the memorable experience presented by tour guides at cultural heritage sites as a motivation directing visitor's sustainable behavior.

According to Ababneh (2017) there is a direct management approach which tend to regulate tourists' sustainable behavior through a set of instructions and regulations that limit their activities within the site while on the other hand, the indirect management approach tends to adjust tourist behavior through educating them on the allowable behaviors at the site (Poudel and Nyaupane, 2013). Interpretation is one of the effective indirect management tools that encourage administrators to activate the principles of sustainable tourism at the archaeological sites (McDonnell, 2001; Poudel and Nyaupane, 2013).

#### 1.2. Place attachment

Place attachment can be defined as the link between people and places with which they interact (Guiliani and Feldman, 1993). Place attachment was viewed in literature as a multidimensional concept. Ramkissoon et al., (2013) referred to three constructs of place attachment as place dependence, place social bonding and place identity While, another dimension was mentioned in the study of Hinds and Sparks (2008) which is place affect. Place identity reflects how a place is significant to a person (Williams and Vaske, 2003). additionally, Place dependence stresses on how-well the place can meet people's functional requirements (Williams and Roggenbuck, 1989).

The study of Carmona et al (2010) have even argued that the connection linking people and places is not physical, because each place has an intangible value that is added to the entity by the person's mind, as well as a unique identity of its own that is drawn by a self-constructed image.

The affective component of place attachment focuses on emotions of security and well-being that an individual draws from a place (Nielsen et al ,2010). The study of Jorgensen and Stedman (2001) has even argued that the affective attachment of place includes emotions and affect that goes beyond preference, beliefs, or cognition. The study of Kyle and Chick (2007) referred to social-bonding as a two level definition, the first level includes how strong is the social link between individuals and communities. While the second level explains the emotions of individuals of belonging to a place. In tourism context, place attachment is also often labelled as "destination attachment" (Hou et al., 2005; Yuksel et al., 2010).

### **1.2.1.** Tour Guide's Interpretation and Place attachment:

According to Knudson et al., (2003), one purpose of interpretation is to encourage tourists to develop a sense of place. These authors believe that emotional attachments to cultural and natural sites are significant for tourists to appreciate the spirit or character of a given site. Moreover, the Study of Cheng et al., (2018) showed that interpretive services are useful to satisfying tourists and enhancing their travel experience, which advances their place attachment to the destinations. Additionally, according to Larsen (2003)

Interpretation provides tourists with opportunities to form emotional attachment to the visited sites.

Tour guides' interpretation was seen as a mediator linking heritage sites and tourists (Dahles, 2002). The study of Mackenzie and Kerr (2013) contributed to explain that relation as tour guides' interpretation can satisfy tourists' requirements for knowledge enrichment and emotional experience at a cultural heritage site. The study of Látková et al. (2017) added that mediating goes beyond telling tourists how feel and think about their experiences; it is all about allowing them to learn.

Additionally, Alazaizeh et al., (2019) pointed to the role of tour guide's interpretation in creating tourist's place attachment which in turn translated into sustainable behaviour within those places, by discussing that when the tour guides inform the tourists about the code of conducts that ensure no or minimum disorders to the local environments, the tourists are likely to obey, due to the concerns and link they have with the environment.

Poria (2006) argued that historical sites can be managed by investigating the emotional link between tourists and places.

### 1.2.2. Place attachment and sustainable behaviour

Buonincontri et al, (2017) defined sustainable behaviour as the behavior by individuals who respect the future outcomes and behave in a more sustainable way.

Many researchers agreed on the impact of people's place attachment on their sustainable behaviour (e.g., Lee, 2011). Ramkissoon et al., (2013) have even argued that the more people are attached to a place, the more they're expected to demonstrate sustainable behaviour within these places. Going with previous idea, the study of Vaske and Kobrin (2001) reported that individuals who had more place attachment were correlated with higher sustainable behaviors than those who were less attached to places. The study of Halpenny (2007) explained the relationship between place attachment and sustainable behaviour by saying that people who are cognitively, emotionally, or functionally attached to a place will behave to Additionally, the study of Kelly and Hosking (2008) found that attachment to places was positively associated with sustainable behaviors such as environmental conservation and volunteering in Western Australia. The study of Lee (2011) argued that as a tourist's place attachment increases, the likelihood of his sustainable behavior also increases. Previous literature has referred to place attachment as motivator sustainable behaviour among tourists in both cultural and natural sites (Halpenny, 2010; Lee, 2011; Ramkissoon, 2016). Place attachment was seen to be more effective in influencing sustainable behaviour than the perception of beliefs or disasters (Zhang et al..2014).

Moreover, Ramkissoon et al., (2013) showed that each of the place attachment constructs impacted the sustainable behavior of the tourists of the national parks. Finally, the results of the study of Tonge et al., (2015) implied on tourists to Ningaloo Marine Park, Australia showed that place identity affects tourists' behavioral intentions in a significant and direct way.

### 2.Site description

### 2.1. Al -Moez street

Al-Moez Street is one of the significant Islamic sites in Egypt as it includes a range of historical buildings and Islamic monuments. Al-Moez Street was named after the leader Al-Moez Li-Deen Allah Al-Fatimi, who entered Egypt by 356H / 969 A.D and then Egypt

was governed by Al-Fatimi leaders (Mortada et al, 2012). The site is considered as the largest Islamic open- air museum in the world. The study of Paymanfar (2021) reported that the street is considered a panorama of the Islamic, religious, military, educational, social, and architectural monuments which constantly includes the history of Islam. Many social buildings located within the street sides, as Qalawon complex, Sabil Katkhuda and Mustafa Ga"far house show the significance of that street which presents multi-usage social services (Mannoun, 2014)

Now, Al-Moez Street is a remarkable tourist attraction that is open to many groups of visitors per day especially after the government renovations to transform the street into an 'open-air' museum. These restorations had a sounded effect at the international level as well as the locals to attend all cultural events held at this historical street (Amara,2017) Unfortunately, the uncontrolled tourist visits to Al-Moez Street and interference on historical buildings lead to a greater demand for financial investment in superstructure and infrastructure facilities (Paymanfar ,2021). Additionally, the results of the study of Mortada et al (2012) showed that some visitor's drawing and distortion of historical building are from the challenges facing Al-Moez street.

### 3. Sample Selection and Data Collection

This study utilized both online and paper surveys to collect data from tourists who visited Al- Moez street. A total of 350 questionnaires were distributed, out of which 300 were returned, and 240 usable ones were statistically handled.

#### 3.1 Measures

The instruments used to measure Tour guide interpretation in this study were based on the research by Alazaizeh et al., (2019), Also, statements for place attachment were adapted from Williams and Roggenbuck's (1989); Goussous and Al-Hammadi (2017). Moreover, sustainable behaviour measures were based on research by Orabi and Fadel (2020)

The study variables were measured on a 3-point Likert scale, with 1 representing disagree" and 3 representing "Agree." The survey was separated into two sections. The first section consisted of three categories. The first category consists of 9 statements, including tour guide interpretation. The second category consists of 10 items including place attachment, and the third category consists of 6 items including sustainable behavior.

The second section of the survey consists of 3 items collecting demographic data included gender, age, visiting times to Al-Moez street.

### 3.2. Results of the study

### **Demographics of respondents:**

Table (1) Respondents' Profile

| Demographic<br>Characteristics | Category                 | Frequency | Percentage |
|--------------------------------|--------------------------|-----------|------------|
|                                | Egyptian                 | 85        | 35.4%      |
|                                | Iraqi                    | 6         | 2.5%       |
|                                | Jordanian                | 10        | 4.2%       |
| Nationality                    | German                   | 44        | 18.3%      |
| Nationality                    | British                  | 42        | 17.5%      |
|                                | American                 | 23        | 9.6%       |
|                                | Spanish                  | 30        | 12.5%      |
|                                | Total                    | 240       | 100%       |
|                                | Less than 20 years       | 3         | 1.3%       |
| Age                            | 20 to less than 35 Years | 168       | 70%        |
|                                | 35 to 50 Years           | 42        | 17.5%      |

|                  | More than 50 years | 27  | 11.3% |
|------------------|--------------------|-----|-------|
|                  | Total              | 240 | 100%  |
|                  | Male               | 117 | 48.8% |
| Gender           | Female             | 123 | 51.2% |
|                  | Total              | 240 | 100%  |
|                  | Yes                | 59  | 24.6% |
| First time visit | No                 | 181 | 75.4% |
|                  | Total              | 240 | 100%  |

Table (1) demonstrates that 85 respondents representing 35.4% of research sample were Egyptian, 6 respondents representing 2.5% were Iraqi, 10 respondents representing 4.2% were Jordanian, 44 respondents representing 18.3% were German, 42 respondents representing 17.5% were British, 23 respondents representing 9.6% were American and 30 respondents representing 12.5% were Spanish. Most of the respondents representing 70% were aged from 20 to less than 35 Years, while 42 respondents representing 17.5% were aged between 35 and 50 Years. Most of the respondents representing 51.2% were female, while 117 respondents representing 48.8% were male. Most of the respondents (75.4%) have visited Al- Moez Street before, while 24.6% of respondents have visited Al- Moez Street for the first time.

Table (2) Descriptive statistics (Range, Minimum value, Maximum value, mean, Standard deviation and variance)

| Descriptive      | No  | Range | Minimum | Maximum | Mean  | Std.<br>Deviation | Variance |
|------------------|-----|-------|---------|---------|-------|-------------------|----------|
| Nationality      | 240 | 6.00  | 1.00    | 7.00    | 3.587 | 2.20513           | 4.863    |
| Age              | 240 | 3.00  | 1.00    | 4.00    | 2.387 | .69956            | .489     |
| Gender           | 240 | 1.00  | 1.00    | 2.00    | 1.512 | .50089            | .251     |
| First time visit | 240 | 1.00  | 1.00    | 2.00    | 1.754 | .43148            | .186     |

Table (2) indicates that all the data seem to be normal, and the level of deviation is acceptable.

Reliability: Cronbach's Alpha was used to calculate reliability.

Table (3) The Coefficient Value of Alpha Cronbach

| N     | Variables                 | Alpha Cronbach | No of Items |
|-------|---------------------------|----------------|-------------|
| 1     | Tour guide Interpretation | 0.922          | 9           |
| 2     | place attachment          | 0.832          | 10          |
| 3     | sustainable behavior      | 0.779          | 6           |
| Total |                           | 0.873          | 25          |

Table (3) shows that the questionnaire's value reliability ranged from (0.779-0.922), and statistically, they are supported values, which suggests a high degree of reliability.

### Validity:

The Pearson correlation was used to calculate the internal consistency between items and the overall score. Table 4 illustrates the correlation value for each item.

Table (4) Pearson's Correlation Value

| N | Tour guide Interpretation | N  | Place attachment | N | Sustainable behavior |
|---|---------------------------|----|------------------|---|----------------------|
| 1 | 0.673**                   | 1  | 0.653**          | 1 | 0.672**              |
| 2 | 0.779**                   | 2  | 0.586**          | 2 | 0.720**              |
| 3 | 0.815**                   | 3  | 0.648**          | 3 | 0.567**              |
| 4 | 0.769**                   | 4  | 0.544**          | 4 | 0.705**              |
| 5 | 0.817**                   | 5  | 0.679**          | 5 | 0.807**              |
| 6 | 0.828**                   | 6  | 0.696**          | 6 | 0.652**              |
| 7 | 0.854**                   | 7  | 0.482**          | - | -                    |
| 8 | 0.822**                   | 8  | 0.767**          | - | -                    |
| 9 | 0.681**                   | 9  | 0.654**          | - | -                    |
| - | -                         | 10 | 0.788**          | - | -                    |

Table (4) shows that the Pearson correlation between items and the variables ranged from (0.482) to (0.854). These are statistically acceptable values, and they suggest a high degree of internal consistency and validity.

The study presents the mean, standard deviation, skewness, and significance level for each of the questionnaire's questions, as shown in the following table:

Table (5) Mean, standard deviation, skewness and significance level

| Construct                 | Mean                 | SD    | Skw:   | Sign. |  |  |
|---------------------------|----------------------|-------|--------|-------|--|--|
| Tour Guide Interpretation |                      |       |        |       |  |  |
| TGI1                      | 2.60                 | 0.645 | -0.366 | 0.001 |  |  |
| TGI2                      | 2.72                 | 0.548 | -0.887 | 0.001 |  |  |
| TGI3                      | 2.35                 | 0.761 | -0.686 | 0.001 |  |  |
| TGI4                      | 2.41                 | 0.787 | -0.875 | 0.001 |  |  |
| TGI5                      | 2.58                 | 0.647 | -1.309 | 0.001 |  |  |
| TGI6                      | 2.53                 | 0.707 | -1.206 | 0.001 |  |  |
| TGI7                      | 2.32                 | 0.639 | -0.602 | 0.001 |  |  |
| TGI8                      | 2.36                 | 0.747 | -0.703 | 0.001 |  |  |
| TGI9                      | 2.66                 | 0.570 | -1.484 | 0.001 |  |  |
| Place attachment          |                      |       |        |       |  |  |
| PA1                       | 2.60                 | 0.322 | -1.492 | 0.001 |  |  |
| PA2                       | 2.87                 | 0.331 | -0.282 | 0.001 |  |  |
| PA3                       | 2.81                 | 0.438 | -0.367 | 0.001 |  |  |
| PA4                       | 2.85                 | 0.357 | -0.973 | 0.001 |  |  |
| PA5                       | 2.52                 | 0.613 | -0.920 | 0.001 |  |  |
| PA6                       | 2.40                 | 0.719 | -0.768 | 0.001 |  |  |
| PA7                       | 2.80                 | 0.459 | -0.259 | 0.001 |  |  |
| PA8                       | 2.85                 | 0.285 | -0.259 | 0.001 |  |  |
| PA9                       | 2.88                 | 0.288 | -0.468 | 0.001 |  |  |
| PA10                      | 2.80                 | 0.280 | -0.259 | 0.001 |  |  |
| Sustainable behavio       | Sustainable behavior |       |        |       |  |  |
| SB1                       | 2.65                 | 0.265 | -1.474 | 0.001 |  |  |
| SB2                       | 2.42                 | 0.242 | -0.866 | 0.001 |  |  |
| SB3                       | 2.77                 | 0.277 | -0.009 | 0.001 |  |  |
| SB4                       | 2.52                 | 0.252 | -1.094 | 0.001 |  |  |
| SB5                       | 2.17                 | 0.217 | -0.321 | 0.001 |  |  |
| SB6                       | 2.43                 | 0.243 | -0.783 | 0.001 |  |  |

Table (5) shows that the frequency distribution of study variables' items is close to moderation, which indicates that the data of the sample members are moderately distributed, more over the skewness values for all the variables' dimensions are close to zero, which indicates that the study variables' questions are moderately distributed over the study sample. It is also shown that there is a positive relationship between the study variables 'questions, and all of them are statistically significant at the level (0.001).

### 3.3. Structural Equation Modeling

To confirm the measurement model, "path analysis" and "structural equation modeling" were developed using LISREL 8.80

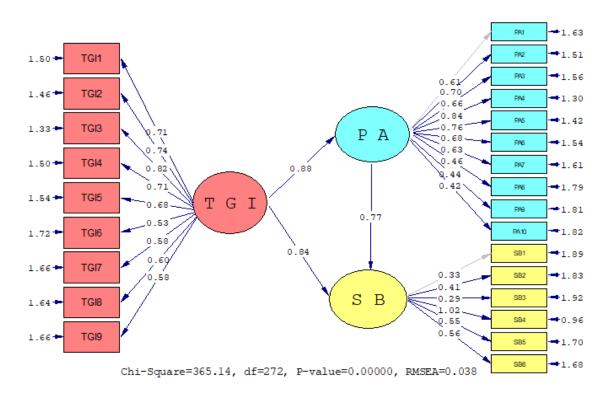


Figure 1. Structural Equation Modeling. Model–Data Fit Indication Table (6) Fit indices for measurement model

| N  | Fit indices       | Values |
|----|-------------------|--------|
| 1  | $X^2$ / df (CMIN) | 1.342  |
| 2  | RMR               | 0.11   |
| 3  | GFI               | 0.98   |
| 4  | AGFI              | 0.97   |
| 5  | NFI               | 0.89   |
| 6  | NNFI              | 0.90   |
| 7  | RFI               | 0.87   |
| 8  | IFI               | 0.91   |
| 9  | CFI               | 0.91   |
| 10 | RMSEA             | 0.027  |

Table 5 indicates that the measurement model has adjusted with the data to improve Goodness-of-fit indices. These are indices that have obtained after modification: RMSEA=0.027; CFI=0.91; NFI=0.89; RFI=0.87; IFI=0.91; and x 2/df = 1.342

### 3.4. Results of Hypotheses Testing

Results, presented in Table 6 summarize results tested in the theoretical framework.

Table (6) Values of the direct, indirect, and total effects of the independent latent variable in the dependent latent variables

| Dependent      |          | Sustainable behavior |               | Place attachment |        |               |        |
|----------------|----------|----------------------|---------------|------------------|--------|---------------|--------|
| Independent    | Effects  | Effect               | Std.<br>Error | Т                | Effect | Std.<br>Error | T      |
| T              | Direct   | 0.84                 | 0.16          | 5.25**           | 0.88   | 0.15          | 5.90** |
| Tour guide     | Indirect | 0.77                 | 0.14          | 5.50**           | -      | -             | -      |
| Interpretation | Total    | 1.61                 | 0.02          | 80.50**          | 0.88   | 0.15          | 5.90** |

Note: Standardized structural coefficients; \* p<0.05; \*\* p<0.01

### Hypothesis 1: Tour guide's interpretation stimulates sustainable behaviour.

The results of this study revealed that Tour guide interpretation had a significant effect on Sustainable behaviour ( $\beta = 0.84$ ) supporting Hypothesis 1. In other words, tour guides act as motivators directing visitor's sustainable behaviour through educating them by setting instructions and regulations on the allowable behaviors at the heritage site.

### Hypothesis 2: Tour guide's interpretation has a direct effect on place attachment

The results of this study revealed that Tour guide interpretation had significant impact on place attachment ( $\beta = 0.88$ ) supporting Hypothesis 2. When the tour guides inform the tourists about the code of conduct that ensure minimum disorders to the visited site, the tourists are likely to obey, due to the link they have with the place.

# Hypothesis 3: Sustainable behaviour at cultural heritage sites can be stimulated through the mediating role of the place attachment.

The results of this study showed that the more tourists are linked to places, the more sustainable behaviour is expected ( $\beta = 0.77$ ) supporting hypothesis 3.

| Table ( | (7) | Summary | of hyp | otheses | testing |
|---------|-----|---------|--------|---------|---------|
|         |     |         |        |         |         |

| Hypotheses | Test      |
|------------|-----------|
| H1         | Supported |
| H2         | Supported |
| H3         | Supported |

Table 7 indicates that all the hypotheses of the research are supported.

### 4.Discussion

The current study investigated the relationship between guided interpretation and sustainable behaviour at cultural heritage sites mediated through place attachment. The findings support the proposed model and indicate that the positive influence of guided interpretation on sustainable behaviour is activated through the mediating role of place attachment. The results of the current study suggest that guided interpretation has a direct influence on tourists' sustainable behaviour; these findings align with several previous studies (e.g. Poudel and Nyaupane, 2013; Khornjamnong ,2017). these studies reported that when tour guide inform the local code of conduct to tourists they will behave in more sustainable behaviour at the visited sites. A possible explanation of that result is that when tourists are being educated about the site value, they are expected to appreciate those sites; and through their appreciation, sustainable behaviour is expected to be demonstrated during their visits.

Moreover, the study results indicate a significant direct relationship between guided interpretation and place attachment. This result is consistent with Cheng et al., (2018) and Alazaizeh et al., (2019) who argued that tour guide interpretation advances tourists' linkage and appreciation towards the visited places and transform visits to experiences. Finally, the results of the current study indicate that place attachment serves as a mediator between guided interpretation and sustainable behaviour. This result agrees with (Lee ,2011; Tonge et al, 2015) which pointed that place attachment plays a mediating role in the relationship between tour guide interpretation and sustainable behaviour, explaining that as tourists rely on guided interpretation this will help them to be linked to places as result demonstrating more sustainable behavior within those places.

4

#### **5.**Conclusion and recommendation:

The study examined whether guided interpretation impact the sustainable behaviour of tourist at Al- Moez street mediated by the place attachment. The result of the study demonstrated that tour guide interpretation (guided "personal "interpretation) is the one of the most powerful tools in stimulating tourists' sustainable behaviour when mediated through place attachment at the cultural heritage sites.

The study recommends that tourist syndicate should seek to improve tour guides' interpretation through education and trainings to upgrade their skills. Tour guides should be trained to conduct personal interpretation in enjoyable and attractive way to audience (e.g., using demonstration, living history, interactions) as well as being relevant to audience personalities and experiences.

Policy makers should impose strict legislations that protect cultural heritage sites. Moreover, site administrators should combine personal interpretation with non-verbal ones (visitor centers, signage, and brochures) for more sustainable heritage sites. finally, the Ministry of tourism and Antiquities should raise awareness of heritage among students in schools and universities.

### **References:**

- Ababneh, A. (2017). Tour guides and heritage interpretation: guides' interpretation of the past at the archaeological site of Jerash, Jordan. Journal of Heritage Tourism, 1(16). 1-16.
- Akis, A. (2011). The effects of mass tourism: A case study from Manavgat (Antalya – Turkey). Procedia Social and Behavioral Sciences, 19, 289-296.
- Alani, F. S., Khan, F. R., & Manuel, D. F. (2017). Need For Professionalism and Quality Service of The Tourist Guides in Oman. International Journal of Tourism & Hospitality Reviews, 4(1), 20-29.
- Alazaizeh, M. M., Jamaliah, M. M., Mgonja, J. T., & Ababneh, A. (2019). Tour guide performance and sustainable visitor behavior at cultural heritage sites.
   Journal of Sustainable Tourism, 27(11), 1708-1724.
- Amara, D. (2017). Events Tourism: A Potential to Build a Tourist Destination Branding: The Case of Cultural Events in Egypt. International Journal of Heritage, Tourism and Hospitality, 11 (2/2).1-12.
- Bob, U. (2016). An assessment of responsible tourism behaviour among beach tourists in Durban, South Africa. African Journal of Hospitality, Tourism and Leisure, 5(3), 1-14
- Brochu, L., & Merriman, T. (2002). Redefining Interpretation as a Core Belief for Certification of Professionals. Journal of Interpretation Research, 7 (1),11-16

- Buonincontri, P., Marasco, A., & Ramkissoon, H. (2017). Visitors' Experience,
   Place Attachment and Sustainable Behavior at Cultural Heritage Sites: A
   Conceptual Framework. Sustainability, 9(7), 11-12.
- Carmona, M., Heath, T., Oc, T., & Tiesdall, S. (2010). Public places urban spaces: the dimensions of urban design. Second Edition. Oxford: Architectural Press.
- Çetinkaya, M. Y., & Öter, Z. (2016). Role of Tour Guides on tourist satisfaction level in guided tours and impact on re-visiting intention: research in Istanbul.
   European Journal of Tourism Hospitality and Recreation, 7(1), 40-54.
- Chan, A., Hsu, C. H., & Baum, T. (2015). The Impact of Tour Service Performance on Tourist Satisfaction and Behavioral Intentions: A Study of Chinese Tourists in Hong Kong. Journal of Travel & Tourism Marketing, 32(1-2), 18-33.
- Cheng ,T.E., Wang , J., Cao, M. M., & Zhang ,D. J. (2018). The Relationships among Interpretive Service Quality, Satisfaction, Place Attachment and Environmentally Responsible behavior at the Cultural Heritage Sites in XI'AN, China. Applied Ecology and Environmental Research , 16(5), 6317-6339.
- Dahles, H. (2002). The Politics of Tour Guiding: Image Management in Indonesia.
   Annals of Tourism Research, 29(3), 783–800
- Giuliani, M. V., & Feldman, R. (1993). Place attachment in a developmental and cultural context. Journal of Environmental Psychology, 13, 267–274.
- Goussous, J.S., & Al-Hammadi, N.A. (2018). Place attachment assessment of a heritage place: A case study of the Roman amphitheater in downtown Amman, Jordan. Architectural Research, 7, 1-10
- Halpenny, E. A. (2007). Environmental Behaviour, Place attachment and Park Visitation: A case study of visitors to Point Pelee National Park. Unpublished doctoral thesis, University of Waterloo, Waterloo, ON.
- Halpenny, E. A. (2010). Pro-environmental behaviour and park visitors: The effect of place attachment. Journal of Environmental Psychology, 30 (4), 409-421
- Ham, S.H., & Weiler, B. (2006). Development of a research-based tool for evaluating interpretation. 1 ed. Gold Coast Qld Australia: CRC for Sustainable Tourism. p.44

- Hannam, K., & Knox, D. (2010). Understanding tourism: A critical introduction.
   London: SAGE Publication Inc.
- Hinds, J., & Sparks, P. (2008). Engaging with the natural environment: The role of affective connection and identity. Journal of Environmental Psychology, 28, 109– 120
- Hou, J. S., Lin, C. H., & Morais, D. B. (2005). Antecedents of attachment to a cultural tourism destination: The case of Hakka and non-Hakka Taiwanese visitors to Pei-Pu, Taiwan. Journal of Travel Research, 44(2), 221-233.
- Howard, P. (2003). Heritage: Management, interpretation, identity. New York:
   Continuum.
- Huang, S., Hsu, C. H., & Chan, A. (2009). Tour guide performance and tourist satisfaction: a study of the package tours in Shanghai. Journal of Hospitality and Tourism Research, 34(1), 3-33.
- Jones, K. (2007). Caring for archaeological sites. New Zealand: Science & Technical Publishing.
- Jorgensen, B. S., & Stedman, R. C. (2001). Sense of place as an attitude:
   Lakeshore owner's attitudes toward their properties. Journal of Environmental Psychology, 21, 233–248.
- Kabii, F. (2017). Effects of Tour Guides Training on Their Performance in Kenya.
   Journal of Tourism and Hospitality Management, 5(6), 233-250.
- Kassawnh, M. S., Makhadmeh, I. M., Shatnawi, H. S., & Najdawi, B. M. (2019).
   The impact of behaviors and skills of tour guides in guiding tourist groups. African
   Journal of Hospitality, Tourism and Leisure, 8(1), 1-13
- Kelly, G., & Hosking, K. (2008). Nonpermanent residents, place attachment, and
   "sea change" communities. Environment and Behaviour, 40(4), 575-594
- Khornjamnog, B. (2017). Factors Influencing the Performance of Tour Guides in Thailand. Unpublished doctoral thesis, University of Bedfordshire.
- Knudson, D. M., Cable, T. T., & Beck, L. (2003). Interpretation of Natural and Cultural Resources. State College, Pennsylvania: Venture Publishing.
- Kim, A., Airey, D., and Szivas, E. (2011): The multiple assessment of interpretation effectiveness: promoting visitors' environmental attitudes and behavior. Journal of Travel Research 50(3): 321-334.

- Kyle, G., & Chick, G. (2007). The social construction of a sense of place. Leisure Sciences, 29(3), 209–226
- Larsen, D. L. (2003). Meaningful Interpretation: How to Connect Hearts and Minds to Places, Objects, and Other Resources. Eastern National, Fort washing, PA.
- Látková, P., Jordan, E., Vogt, C., Everette, M., & Aquino, C. (2017). Tour guides' roles and their perceptions of tourism development in Cuba. Tourism Planning &Development, 1 (17)
- Lee, T. H. (2011). How recreation involvement, place attachment and conservation commitment affect environmentally responsible behavior. Journal of Sustainable Tourism, 19(7), 895-915.
- Mackenzie, S. H., & Kerr, J. H. (2013). Can't we all just get along? Emotions and the team guiding experience in adventure tourism. Journal of Destination Marketing and Management, 2(2),85–93
- Mak, A. H., Wong, K. K., & Chang, R. C. (2010). Factors affecting the service quality of the tour guiding profession in Macau. International Journal of Tourism Research, 12(3), 205-218.
- Mannoun, M. A. (2014). Analysis of Self-Developed Areas in Egypt. Unpublished Master thesis, Ain Shams University, Faculty of Engineering, Department of Urban Planning and Design
- McDonnell, I. (2001). The role of the tour guide in transferring cultural understanding. School of Leisure, Sport and Tourism, 1-12. Sydney
- Mohamed, M.N., Noor, S.M., & Mohamed, R. (2014). Creating mindful tourists at heritage sites through tour guide's interpretation: a case of Georgetown World Heritage sites. International Journal on Media & Communications, 1(2), 1-14.
- Morrison, A. M. (2010). Hospitality and Travel Marketing (4th Ed). Clifton Park,
   N.Y, Delmar Cengage Learning.
- Mortada, N.E., Hasan,S.B., & Hassanein , F.A. (2012) . Tourism Development in Protected Areas : A case study of Al-moez Street in Cairo . Journal of Hospitality Management and Tourism , 3(5),69-81.
- Mossberg, L., Hanefors, M., & Hansen, A.H. (2014). Guide performance: cocreated experiences for tourist immersion. In N. K. Prebensen, J. S. Chen, & M.

- Uysal, Creating Experience Value in Tourism (2nd ed., pp. 203-214). Wallingford: CAB International.
- Nielsen, M., Hall, T., Force, J. E., & Wulfhorst, J. D. (2010). Sociodemographic effects on place bonding. Journal of Environmental Psychology, 30, 443–454.
- Nowacki, M. (2021). Heritage Interpretation; Wydawnictwo AWF w Poznaniu:
   Pozna´n, Poland.
- Orabi, R. and Fadel, D. (2020), The Role of Tour Guide Performance in Creating Responsible Tourist Behavior: An Empirical Study: Archaeological Sites in Alexandria. International Journal of Heritage, Tourism and Hospitality,14(3),325-346.
- Öter, Z., & Sonuç, N. (2014). Cultural Heritage Interpretation in Gender Context:
   Case of Female Tourist Guides in Turkey. Heritage, Tourism and Hospitality:
   International Conference, Istanbul: Boğaziçi University
- Padbury, S.A. (2014). A study of the perceived outcomes of participation in a Gatineau Park interpretive program. Unpublished Master thesis, Carleton University, Ottawa, Ontario.
- Paymanfar, S. (2021). The Authenticity of Heritage Sites and Necessity to Pay Attention to the Conflict in its Definition from Two Perspectives: Conservation and Tourism (Case Study: Al-Moez Street in Cairo). Bagh-E- Nazar, 17(92),21-32
- Poria, Y., Reichel, A., Biran, A. (2006): Heritage site management: motivations and expectations. Annals of Tourism Research, 33(1),162-178
- Poudel, S., and Nyaupane, G. P. (2013). The Role of Interpretative Tour Guiding in Sustainable Destination Management A Comparison between Guided and Nonguided Tourists. Journal of Travel Research, 52(5), 659-672.
- Rabotic, B. (2008). Tourist Guides as Cultural Heritage Interpreters: Belgrade
   Experience with Municipality-Sponsored Guided Walks for Local Residents. The
   Proceedings Book of the International Tourism Conference: Cultural and Event
   Tourism: Issues & Debates (pp. 213-233). Alanya: Ankara: Detay Anatolia
   Akademik Yayincilik.
- Ramkissoon, H. (2016). Place satisfaction, place attachment and quality of life: development of a conceptual framework for island destinations. In: P., Modica and M., Uysal (Eds.), Sustainable Island Tourism: Competitiveness and Quality of Life, PP (106-117).UK: CABI.

- Ramkissoon, H., Smith, L.D., Weiler, B. (2013). Testing the dimensionality of place attachment and its relationships with place satisfaction and proenvironmental behaviour: A structural equation modelling approach. Tourism management, 36, 552-566
- Reisinger, Y., & Steiner, C. (2006). Reconceptualizing Interpretation: The Role of Tour Guides in Authentic Tourism. Current Issues in Tourism, 9(6), 481-498.
- Sandaruwani, J. A., & Gnanapala, W. K. (2016). The role of tourist guides and their impacts on sustainable tourism development: A critique on Sri Lanka. Tourism, Leisure and Global Change, 3, 62-73.
- Skibins, J. C., Powell, R. B., &Stern, M. J. (2011). Exploring empirical support for interpretation's best practices. Journal of Interpretation Research, 17(1), 25-44.
- Tonge, J., Ryan, M. M., Moore, S. A., & Beckley, L. E. (2015). The effect of place attachment on pro-environment behavioral intentions of visitors to coastal natural area tourist destinations. Journal of Travel Research, 54(6), 730-743.
- Vaske, J.J., & Kobrin, K.C. (2001). Place attachment and environmentally responsible behavior, Journal of Environmental Education, 32(4), 16–21.
- Weiler, B., & Kim, A. K. (2011). Tour guides as agents of sustainability: Rhetoric, reality, and implications for research. Tourism Recreation Research, 36(2), 113–125.
- The National Association for Interpretation (NAI)Available online: <a href="https://www.interpnet.com/NAI/interp/About/About\_Interpretation/What\_isInterpretation/what\_isInterpretation/nai/About/what\_is\_interp.aspx?hkey=b5ddeff3-03a8-4000-bf73-433c37c8a7a (last accessed on 18 june 2021).</a>
- Williams, D.R., & Roggenbuck, J.W. (1989) . Measuring place attachment: Some preliminary results. Conference: National Parks and Recreation, Leisure Research Symposium at: San Antonio, TX
- Williams, D., & Vaske, J. (2003). The measurement of place attachment: Validity and generalizability of a psychometric approach. Forest Science, 49(6), 830–840.
- Yuksel, A., Yuksel, F., & Bilim, Y. (2010). Destination attachment: Effects on customer satisfaction and cognitive, affective, and conative loyalty. Tourism Management, 31, 274–284.
- Zhang , J., Zheng , C., Guo , Y., & Zhang., Y. (2019) . Disruption and reestablishment of place attachment after large-scale disasters: The role of

perceived risk, emotions, and coping. International Journal of Disaster Risk Reduction , 40 ,1-9.