ASSESSING THE ROLE OF DENTAL CENTRES IN STIMULATING DENTAL TOURISM IN EGYPT

By

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Assessing the role of dental centres in stimulating dental tourism in Egypt.
Abstract:

The study's goal is to assess the influence of dentistry centres in promoting dental tourism in Egypt. Moreover, the research closely focuses on dental clinic centres in Egypt. The study uses SPSS software to analyze the collected data (235) visitors to choose a dental clinic for their treatments in Egypt; it is conducted on a random sample their responses were examined by using linear regression and exploratory factor analyses. The findings revealed that numerous factors influence international dental patients' decisions to travel to Egypt for treatment, as well as practitioners' decisions to focus on dental tourism. Patients are motivated by low costs, shorter wait times, cutting-edge technology, and high-quality treatment and care. Working with a cost advantage might assist promote the medical tourism business, as the cost is usually the most essential aspect when deciding where to receive treatment. The results of the study refer that there is a statistically significant correlation between the latest experience of tourists and the perception of employees' performance in Egyptian dental centres. Moreover, Medical tourism, such as dental tourism, increases the number of tourists and activates the tourism movement in Egypt, especially after the COVID-19 pandemic.

Keywords: Dental centre, patient-consumers, Worldwide, Medical tourism, Egypt.
Introduction:
Dental tourism is growing worldwide material, technique, and technological advances assist in rapid spread, allowing providers in developing countries to provide dental care at significantly lower cost when compared to peers in the developed world. Dentistry - especially cosmetic dentistry - is expensive. Some dental clinics are looking for low-cost, high-quality dental services that use advanced procedures and high-quality materials that meet international standards but at reduced costs, and play a significant role in building cultural and cooperative bridges between Egypt and the rest of the globe. (Onesimo et al., 2017). In the context of sustainable development, exploitation of tourism resources and meeting the tourism market, it is essential to add new tourism patterns aimed at attracting more tourists, optimizing the use of resources and enhancing the competitiveness of the tourism sector in Egypt. In Europe, dental tourism (also known as dental vacations or dental holidays) is a subset of the larger medical tourism industry. Individuals seeking dental care outside of their local healthcare systems may plan a vacation to accompany their visit. Medical services provided in collaboration with the tourism industry or patients. (Chowdhary, 2013)
Dental tourism extends beyond North America; people from other countries travel for dental care as well. This is also a common practice in Europe. Britons frequently travel to Hungary, Slovakia, and Poland in search of lower prices. Ten Irish citizens travel to India, the United Arab Emirates, Malta, and Turkey.
Mexico, Thailand, Hungary, Spain, Poland, Costa Rica, the Philippines, Malaysia, Turkey, and the Czech Republic are the top ten dental tourism destinations among US patients.
Patients from the United States can expect to save 40–65 percent in Mexico, 45–65 percent in Costa Rica, and 50–75 percent in Thailand. (Newman, 2020)
In 2017, the Medical Tourism Index (MIT) ranked Egypt 28th in terms of global ranking for medical tourism. Egypt ranked third in the Arab world for its medical tourism industry, due to its lower cost advantage over other countries in the region, as well as its reputation as a historic and resort destination. (North Africa Health, 2020)

**Research Objectives:** The objectives of this study are:

- Analyzing the role of dental centres in stimulating dental tourism in Egypt.
- Evaluating Consumer Behavior through Personal Experience with Dental Centers in Egypt.
- Determining why patients Travel to Egypt for dental treatment and the extent to which Egyptian dentists benefit from this experience.
- Identifying sustaining the role of Egyptian dental centres in increasing the dental tourism movement to Egypt.
Literature Review:

Dental Tourism as a sector of Medical Tourism:
"Medical tourism is when consumers elect to travel across international borders to receive some form of medical treatment. This treatment may span the full range of medical services, but most commonly includes dental care, cosmetic surgery, elective surgery, and fertility treatment.” (e.g. North Africa Health, 2020; Abubakar, 2017)

Medical tourism denotes purposeful short-term travel from one’s country of habitual residence to receive medical treatment paid for out-of-pocket in a country in which he/she does not habitually reside and within which he/she may not enjoy entitlements to healthcare beyond those availed to any other private consumer (e.g. Ormond, 2015; John & Larke, 2016; Uygun & Ekiz, 2016).

Contemporary medical tourism builds upon longstanding links between travel and the pursuit of physical, mental, and spiritual well-being (Ormond, 2014) which can balance body, mind and soul. (Puczkó, 2010) Medical tourism is also a subset of the broader concept of health care tourism, Implicit in the concept of wellness tourism. (John & Larke, 2016)

1- Health Tourism: (Uygun & Ekiz, 2016)
   a. Wellness Tourism
   b. Health Care Tourism
   c. Medical Tourism
Medical tourism reported fourteen million medical tourists in 2018 and is expected to grow to 60 million by 2025. According to a 2015 European Commission survey, 49 percent of European citizens travel for medical care. (Gergely, 2020)

Egypt, Kenya, South Africa, Tunisia, Mauritius and Morocco are emerging medical tourism destinations in Africa for cardiac, cosmetic, dental, organ transplant and plastic surgery. (Evelyn F. Wamboye, Peter J. Nyaronga, 2018)

Egypt and Lebanon, once major Middle Eastern tourism destinations, are attempting to break into this new market, from cosmetic surgery and dental care, but secondarily at European tourists (Connell, 2011)

Medical tourism, defined as "all activities related to travel and hosting a tourist who stays at least one night in the destination region, to maintain, improve, or restore health through medical intervention," is seen as a way for destinations to attract foreign exchange, mitigate health worker brain-drain, and improve health care and tourism infrastructure. Similarly, governments and private-sector actors in a growing number of low- and middle-income countries have actively embraced medical tourism as a potentially powerful economic growth engine. (Ormond, Mun and Khoon, 2017)
“According to the American Dental Association, dental tourism is defined as the act of travelling to another country to receive dental treatment”. (Vikuk, 2018)
Patients who seek dental care outside their home countries because it is less expensive than in their home country are referred to as "dental vacationers" or "dental tourists." (e.g Turner L., 2008; MacReady, 2007; Horowitz, 2007)

**Dental Tourism in Egypt:** according to Oxford Business Group, the Egyptian healthcare system is characterized by a pluralistic mix of public institutions, but it has been stretched by rapid population growth and relatively low funding level.
In terms of dental care, exceptional dentists provide low-cost services throughout the country, particularly in Cairo and popular tourist destinations. Egypt's temperate climate draws visitors from all over the world, and Egyptians are extremely friendly people who will try to strike up a conversation with you almost anywhere you go. Also, discover Egypt's treasures and profit from them by saving money on dental procedures. (Talreja, 2019)
Also, dental education is of high quality, with the majority of dental schools, both public and private, located in Cairo. Egypt has recently begun offering dental and medical tourism services to meet the growing needs of clients from all over the world, with a focus on visitors from Western European countries such as the United Kingdom, Ireland, France, and Germany. Egyptian dentists provide unparalleled service, with expertise available to address all patients' oral health and cosmetic dentistry needs, no matter how simple or complex they are. Egypt has a wide variety
of things to see and do before or after dental appointments. (The Ultimate Guide to Dentists in Egypt, 2021)

- Egypt has a wide variety of things to see and do, so you won't be short on things to do before or after dental appointments.
- Egypt ranks second after India in the pricing of dental services.
- Dentistry is one of the fields that can contribute to attracting Arabs and foreigners to medical tourism in Egypt, as Egypt is considered one of the cheapest countries in the world for dental treatment.
- That all modern devices for diagnosis and treatment in the world are used efficiently in Egypt, in addition to the skill and high training of the Egyptian doctor.
- Governor of South Sinai inaugurates the first digital dentistry clinic in Sharm El-Sheikh.
- A modern laboratory is currently being prepared that contains German devices that are used for the first time in Egypt to apply "digital" electronic techniques devoid of any manual intervention concerning dental implants and installation.
- Whereas the price of one implant in the rest of the Arab countries ranges from 700 to 2000 dollars, and in Europe, the cost of dental implants ranges from 2000 to 5000 dollars.
- The most famous and best countries for dental implants for patients from all countries of the world are Egypt, Turkey, India and the Philippines, due to a large number
of specialized centres and the cheapest prices for the rest of the world, where the prices of dental implants in these countries range from $300 to $1,000 depending on the type.

**The GCR – Global Clinic Rating:** Through GCR.org: (Global Clinic Rating) Providing simple, transparent "reputation" scores of medical offices, clinics & hospitals worldwide. So that patients can immediately assess which is the safest, most affordable and most reliable choice for them. The GCR project began in the spring of 2014 as a basic clinic ranking of 126,000 clinics. GCR.org now rates over 430,000 clinics, from 126 countries of the world. This forms the largest database of clinics in the world and wants to make this data available to as many people as possible. The GCR was developed to assist both healthcare patients and clinic owners in evaluating the apparent standard of any medical clinic wherever in the world...

According to their GCR Score, dental clinics were ranked in comparison to other clinics in the same country based on the apparent level of expertise, services, facilities, and patient feedback. The GCR feedback score for clinics incorporates patient rating scores from Google, Facebook, and other independent rating providers.

The GCR Scores are subject to change daily, depending on what has recently changed in terms of clinic expertise, facilities, services, and patient input. Every minor adjustment in a clinic's profile can have an impact on the clinic's total GCR Score.

This report is based on the GCR Index, a unique evaluation of medical clinics based on apparent levels of standards in
the four GCR quality pillars of clinic expertise, facilities, services, and patient feedback.

Patients, doctors, insurance companies, and governments all rely on the Global Clinic Rating, which employs hundreds of meticulously calibrated performance factors to provide the most comprehensive and equitable comparison of healthcare facilities available globally.

The rankings are determined by the GCR Score, a proprietary algorithm developed by prominent healthcare and big data experts. It enables healthcare clinics to view their current quality score, track their progress over time, and compare their clinic's apparent reputation to that of competitors or clinics in the same city, country, or planet.

(http://gcr.org/blog/egypt-top-10-dental-clinics-2022/)
Figure 1: GCR top 10 clinics in Egypt according to Price

GCR's top 10 clinics (from 459) in Egypt according to price are Bone Institute (Cairo), Asnan Dental Center (Giza), Royal Dental Care (Alexandria), Ultra Dental Care & Esthetics (Cairo), Maurice Dental Clinic (Cairo), Shiny White Dental Center (Cairo), Helio-Dental Clinic (Cairo), Wonders Dental Care (Cairo), Dr Eman Tantawy (Giza), Smile Way Clinic (Cairo)
Figure 2: GCR top 10 clinics in Egypt according to Quality

GCR's top 10 clinics (from 459) in Egypt according to Quality are Implant & Cosmetic Center (Cairo), Dental House Cairo (Cairo), Al-Alem Dental Center (Cairo), Dr Feras Ghazy, Dentist, (Hurghada), Healthy Smile (Cairo), Abou-ElFetouh Clinic for Oral & Implant Surgery (Giza), Optimum Care Dental Clinic (Cairo), Diamond Dental Care Clinic (Cairo), Agamy Dental Clinic (Alexandria), Warda Dental Clinic (Alexandria).

Consumer Behavior: "A patient who travels to another country for dental care is known as dental tourism. It is frequently, although not always, accompanied by a vacation. Some people combine dental tourism with medical tourism, which includes medical procedures." (Lunt et al., 2011)
The main reason that dental tourism is thriving is the available savings. In some cases, flying, staying in a hotel, and paying for treatment abroad may be less expensive than booking the same procedure at home. Many individuals combine dental treatment with a vacation to save money. Patients saved thousands of dollars by getting dental care in another country while on vacation. For foreign travellers, there are two types of travel motivation. The first is procedure-related, in which patients travel overseas for medical treatment; the second is travel-related, in which tourists combine a holiday with medical treatment. However, before determining what drives patients to travel abroad for dental treatment, the term "motivation" must be defined. "a psychological condition in which an individual is directed toward and attempts to acquire a sense of fulfilment," according to Wikipedia. (Zekan, 2020)

Several variables influence dental tourism. Although some patients will benefit from dental tourism, there are significant dangers associated with greater patient migration. Among these issues are the high cost of local care, delays in obtaining access to local dentists, competent care at many international clinics, low-cost plane travel, and the internet's ability to connect 'clients' to 'brokers' of health-related services. (Mohammed, 2012)

In delimiting 'medical tourism' as the purposeful short-term travel by people from their country of habitual residence for medical treatment in a country in which they do not habitually reside and within which they may not enjoy formal healthcare entitlements, we can distinguish 'medical tourists' from travellers whose temporary medical pursuits abroad are subsidized or reimbursed by the governments or
According to the push-pull model, "people travel because they are pushed into making travel decisions by internal, psychological forces, and pulled by external forces of the destination attributes" (John & Larke, 2016).

For example, the main reason for going abroad for dental care in the United States is the cost advantage that the foreign country provides. In some cases, it is the difficulty in obtaining urgently needed care on time that drives people to seek care elsewhere. The extensive waitlists in Canada and certain European countries with national healthcare systems force their citizens to seek alternative sources to meet their dental care needs. The Internet has a significant impact on connecting "customers" to providers of dental services. The internet is used by dental clinics all over the world to market their services to international patients. On the Internet, dental tourism companies, mainstream travel agencies selling health-related travel packages, and medical tourism companies all advertise "all-inclusive deals." Dental procedures with predetermined prices, hotel rooms, airfare, ground transportation, 'VIP treatment,' restaurant reservations, and side trips to popular tourist destinations are all included in these packages. (Mohammed, 2012)

Companies have been formed to research and prepare trips for medical tourists as dental tourism has grown in popularity over the last ten years. Companies like Patients Beyond Borders and Dental Departures, for example, use marketing services to connect patients with global healthcare professionals.
Because of the global nature of COVID-19's pandemic effect, tourism has faced unprecedented challenges. Health pandemics, such as COVID-19, are just one of the many types of crises that the tourism industry faces. While academic research has focused on crisis management, little is known about the use of medical tourism as a panacea for destination recovery. (Abbaspour, Soltani & Tham. 2021)

Factors Influencing Patient Flows: to provide high-quality dental care in accordance with international standards and to meet the needs of customers Dental tourism allows people to access treatments and procedures that are not available in their home healthcare systems for a variety of reasons and motivations, including the following:

- A scarcity of expertise and equipment in their home country
- Treatments and procedures with limited supply and/or qualifying restrictions
- Favourable exchange rates so lower medical costs at the destination
- The reputation of the dental clinic's professionals in the destination
- The proximity of destination, culture, insurance portability and other economic factors: Patients from neighbouring countries are typically attracted to destination countries. (lunt et al., 2011)
Advertising, brokers' roles, the use of international accreditation the reputation of the destination country also have an impact on patient mobility. (Al Jassmi, 2013)

Treatment and surgery combined with leisure travel, service excellence, and cultural similarities...

Patients should also be aware of how long the treatment will take, how many visits to their dentist will be required, and how the procedure will be performed.

Persuasive elements can be linked to cost savings, combining therapy and surgery with leisure trips, service quality, and cultural similarity, all of which are motivating factors. (Surej & Roy. 2016)

**Factors Influencing Dental Tourism Quality:** The most pressing issue is the standard of care provided to patients. Patients who cross borders in search of low-cost procedures may be at a higher risk of receiving substandard care. Dentist licensing and accreditation, dental clinic regulation, the quality of dental education, assistant training, the selection of equipment and supplies, and other factors can all have an impact on the quality of care, identifies six determinant categories that influence consumer satisfaction in medical tourism: aspects of care and safety; interactions between staff and patient; the outcome of medical treatment; the facilities; the patient's background; and the
Assessing the role of dental centres in stimulating dental tourism in Egypt.

care provided to family and friends. (e.g Mishra&Shailesh, 2012; Gill&Singh, 2011; Coțiu, 2014)

Research Methodology
A descriptive study using the quantitative method, applying the survey technique to achieve the objectives. The research field community was collected through an online survey conducted on a sample of tourists of different nationalities (Saudi Arabian, Sudan, Emirates, India, Africa, Jordan, Philippines, Kuwait, Morocco, China, Bahrain, Pakistan, Indonesia, Yemen…). The research quantitative data were collected from 235 questionnaires, the quantitative measurable study methodology and process, based on convenience random sampling technique was implemented to experiment with the study of various quantitative variables. To explore the theoretical outline relationships and descriptive analysis, the research data was processed through SPSS statistics v.26 and apply the global Partial least squares structural equation modelling (PLS-SEM) statistics analysis methods were used (Ringle et al., 2015; Hair et al., 2011-2012). Furthermore, PLS-SEM was used to assess the study measurement of reliability and validity of the model and structural model estimations and to investigate the proposed concepts of the study conceptual framework. Before running the last original questionnaire form, a pilot study was conducted to consider the suitability of the questions, attribute clarity, language consistency, and guarantee reliability-validity test (Shehawy, 2017;
Lancaster, 2004; Podsakoff et al., 2003). The analyses depended on using the 5-point Likert scale of 1-strongly disagree, and 5-strongly agree. The practical part of this study was conducted from Aug 2021 to Jan 2022.

The study sample and methodology
The Research Hypotheses
To achieve the main aim of this research as well as to address the specific objective, the study sets out to test these hypotheses:

H1: There is a statistically significant difference between nationality and the level of satisfaction of tourists on medical tourism by Egyptian dental centres.

H2: There are statistically significant differences between age categories concerning the tourists' behavioural intentions about Egyptian dental centres.

H3: There is a statistically significant correlation between the latest experience of tourists and the level of satisfaction with medical tourism by Egyptian dental centres.

H4: There is a statistically significant correlation between the latest experience of tourists and the perception of employees' performance in Egyptian dental centres.

Results
Personal Profile

Table 1: patients / Tourists' Sample Characteristic
Assessing the role of dental centres in stimulating dental tourism in Egypt.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>143</td>
<td>60.9</td>
</tr>
<tr>
<td>Female</td>
<td>92</td>
<td>39.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>235</td>
<td>100</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 25 Years</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Between 26-35 Years</td>
<td>90</td>
<td>38.3</td>
</tr>
<tr>
<td>Between 36-45 Years</td>
<td>131</td>
<td>55.7</td>
</tr>
<tr>
<td>Between 46-55 Years</td>
<td>14</td>
<td>6.0</td>
</tr>
<tr>
<td>More Than 56 Years</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>235</td>
<td>100</td>
</tr>
<tr>
<td><strong>Nationality</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saudi Arabian</td>
<td>46</td>
<td>19.6</td>
</tr>
<tr>
<td>Sudan</td>
<td>30</td>
<td>12.8</td>
</tr>
<tr>
<td>Emirates</td>
<td>14</td>
<td>6.0</td>
</tr>
<tr>
<td>India</td>
<td>16</td>
<td>6.8</td>
</tr>
<tr>
<td>African</td>
<td>6</td>
<td>2.6</td>
</tr>
<tr>
<td>Jordan</td>
<td>20</td>
<td>8.5</td>
</tr>
<tr>
<td>Philippines</td>
<td>13</td>
<td>5.5</td>
</tr>
<tr>
<td>Kuwait</td>
<td>15</td>
<td>6.4</td>
</tr>
<tr>
<td>Morocco</td>
<td>17</td>
<td>7.2</td>
</tr>
<tr>
<td>China</td>
<td>9</td>
<td>3.8</td>
</tr>
<tr>
<td>Bahrain</td>
<td>22</td>
<td>9.4</td>
</tr>
<tr>
<td>Pakistan</td>
<td>12</td>
<td>5.1</td>
</tr>
<tr>
<td>Indonesia</td>
<td>9</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage (%)</td>
</tr>
<tr>
<td>--------</td>
<td>-----------</td>
<td>----------------</td>
</tr>
<tr>
<td>Yemen</td>
<td>6</td>
<td>2.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>235</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Education Level**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School or Less than Bachelor</td>
<td>70</td>
<td>29.8</td>
</tr>
<tr>
<td>Bachelor or Diploma degree</td>
<td>123</td>
<td>52.3</td>
</tr>
<tr>
<td>Master</td>
<td>39</td>
<td>16.6</td>
</tr>
<tr>
<td>PhD</td>
<td>3</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>235</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**The most influential factor to choose the Egyptian Dental Center**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family &amp; Friends recommendations</td>
<td>107</td>
<td>45.5</td>
</tr>
<tr>
<td>Personal experiences</td>
<td>62</td>
<td>26.4</td>
</tr>
<tr>
<td>Internet websites &amp; e-mail</td>
<td>66</td>
<td>28.1</td>
</tr>
<tr>
<td>Newspapers</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TV and Outdoor Advertisements</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>235</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Number of travelling to Egypt after your medical visit**

<table>
<thead>
<tr>
<th>Number of times</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>10</td>
<td>4.3</td>
</tr>
<tr>
<td>Less Than 2 Times</td>
<td>84</td>
<td>35.7</td>
</tr>
<tr>
<td>Between 2 and 5 Times</td>
<td>85</td>
<td>36.2</td>
</tr>
<tr>
<td>More Than 5 Times</td>
<td>56</td>
<td>23.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>235</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**How did you make your bookings**

<table>
<thead>
<tr>
<th>Booking Method</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental centre</td>
<td>115</td>
<td>48.9</td>
</tr>
<tr>
<td>Travel Agents</td>
<td>49</td>
<td>20.9</td>
</tr>
<tr>
<td>Airlines offices</td>
<td>59</td>
<td>25.1</td>
</tr>
<tr>
<td>Online travel search engine</td>
<td>12</td>
<td>5.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>235</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Table 1 indicated the numbers of patients/tourists who are males (60.9%), whilst only (39.1%) are females. Also, it shows that the age of the vast majority of patients/tourists is between 36-45 years old (Frq.= 131, P= 55.7%). Moreover, (Frq.= 90, P= 38.3%) are between 26-35 years, and only (Frq.= 14, P= 6%) of the respondents were between 46-55 years old. In terms of nationality, The vast majority of patients/tourists have Saudi Arabian (Frq.=46, P= 19.6%) and only (Frq.= 6, P= 2.6%) of patients/tourists have African and Yemen Countries. According to educational level, (Frq.= 70, P= 29.8%) graduated as high school or less than bachelor, the vast majority (Frq.=123, P= 52.3 %) of patients/tourists have a bachelor or diploma degree and only (Frq.= 3, P= 1.3%) of patients/tourists have PhD. In terms of the most influential factor to choose the Egyptian Dental Center, The vast majority of patients/tourists have family & friends' recommendations (Frq.=107, P= 45.5%). Concerning the number of travelling to Egypt after the medical visit (Frq.= 85, P= 36.2%) of patients/tourists are between 2 and 5 times, and only (Frq.= 10, P= 4.3%) of patients/tourists answered was Never. In terms of booking (Frq.= 115, P= 48.9%) were through the dental centre and other channels too with the same frequency, and (Frq.= 59, P= 25.1%) by airlines offices, (Frq.= 49, P= 20.9%) of patients/tourists through the travel agents.
Validity and Reliability:

Table 2: Factor analysis of research variables

<table>
<thead>
<tr>
<th>Factor analysis of the latest experience variable</th>
<th>Extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value for price</td>
<td>.721</td>
</tr>
<tr>
<td>Cleanliness</td>
<td>.916</td>
</tr>
<tr>
<td>Hospitality</td>
<td>.848</td>
</tr>
<tr>
<td>Punctuality</td>
<td>.898</td>
</tr>
<tr>
<td>Quality of Service</td>
<td>.778</td>
</tr>
<tr>
<td>Customers service</td>
<td>.874</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor analysis of the level of satisfaction variable</th>
<th>Extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel warmly welcome when dealing with the dental centre</td>
<td>.871</td>
</tr>
<tr>
<td>Booking experience and price suitable for me</td>
<td>.715</td>
</tr>
<tr>
<td>Service quality in Sales offices is very high</td>
<td>.682</td>
</tr>
<tr>
<td>Employees presenting timely and accurate services</td>
<td>.884</td>
</tr>
<tr>
<td>There are high-quality marketing and advertising efforts and campaigns</td>
<td>.712</td>
</tr>
<tr>
<td>I am satisfied with the technological application used</td>
<td>.855</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor analysis of the perception of employees' performance variable</th>
<th>Extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel high appreciation when dealing with employees</td>
<td>.710</td>
</tr>
<tr>
<td>Employees have high experience in presenting services and dealing with patients</td>
<td>.699</td>
</tr>
</tbody>
</table>
Employees have attentiveness and clear communication, time management and persuasion skills | .787
---|---
Employees have enough knowledge and ability to use positive language | .918
Dealing with employees increases patient loyalty | .926
Employees appreciate patient complaints and take care of problem-solving | .862

**Factor analysis of behavioural intentions variable**
- I prefer to deal with the Egyptian dental centre in the long term | .670
- I will generate and promote positive content about my experience with the dental centre on social media | .884
- I will recommend the Egyptian Dental Center to my friends and relatives. | .928
- I intend to repurchase from the Egyptian Dental Center due to the reasonable price. | .912
- I will keep participating in the Egyptian dental centre customers surveys with my reviews and positive ensure a good reputation | .936

**Table 2** showed that all factor analysis scores ranged between 0.670 and 0.936 (> 0.6) suggesting that all elements are statistically acceptable (Basheer, 2003).

**Table 3: Reliability analysis of the independent variables used in the questionnaire**

<table>
<thead>
<tr>
<th>The Axis</th>
<th>No. of statements</th>
<th>Alpha Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>I prefer to deal with the Egyptian dental centre in the long term</td>
<td></td>
<td>.670</td>
</tr>
<tr>
<td>I will generate and promote positive content about my experience with the dental centre on social media</td>
<td></td>
<td>.884</td>
</tr>
<tr>
<td>I will recommend the Egyptian Dental Center to my friends and relatives.</td>
<td></td>
<td>.928</td>
</tr>
<tr>
<td>I intend to repurchase from the Egyptian Dental Center due to the reasonable price.</td>
<td></td>
<td>.912</td>
</tr>
<tr>
<td>I will keep participating in the Egyptian dental centre customers surveys with my reviews and positive ensure a good reputation</td>
<td></td>
<td>.936</td>
</tr>
</tbody>
</table>
Cronbach's alpha scores for all of the research variables surpass 0.70, indicating that the research measurements were acceptable and reliable, as recommended by Hair et al. (2010).

Normality of data distribution
Kolmogorov-Smirnove test was applied to test the normality of distribution which is a precondition for many statistical tests (Ghasemi and Zahediasl, 2012), results were introduced in the following table:

**Table 4:** Normality of data distribution

<table>
<thead>
<tr>
<th>Variables</th>
<th>Kolmogrov-Smirnove</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>df</td>
<td>Sig.</td>
</tr>
<tr>
<td>Latest experience</td>
<td>0.181</td>
<td>235</td>
<td>0.000</td>
</tr>
<tr>
<td>Level of satisfaction</td>
<td>0.170</td>
<td>235</td>
<td>0.000</td>
</tr>
<tr>
<td>Perception of employees’ performance</td>
<td>0.200</td>
<td>235</td>
<td>0.000</td>
</tr>
<tr>
<td>Behavioural intentions</td>
<td>0.189</td>
<td>235</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**Table 4** showed that the data distribution for all four items was not normally distributed, where Sig. value is less than 0.05, So the data of all research variables were non-normal (Ghasemi and Zehedias, 2012). Accordingly, non-
parametric tests were used to analyze collected data such as (chi-square, and Kruscal-Wallis) tests to analyze the validity of the hypothesis of the research

**Descriptive Statistics**

1. **Latest experience**

*Table 5: Descriptive statistics of the latest experience*

<table>
<thead>
<tr>
<th>Code</th>
<th>The Axis</th>
<th>M</th>
<th>SD</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latest 1</td>
<td>Value for price</td>
<td>4.12</td>
<td>1.134</td>
<td>4</td>
</tr>
<tr>
<td>latest 2</td>
<td>Cleanliness</td>
<td>4.21</td>
<td>1.016</td>
<td>2</td>
</tr>
<tr>
<td>latest 3</td>
<td>Hospitality</td>
<td>4.13</td>
<td>1.023</td>
<td>3</td>
</tr>
<tr>
<td>latest 4</td>
<td>Punctuality</td>
<td>4.02</td>
<td>1.046</td>
<td>5</td>
</tr>
<tr>
<td>Latest 5</td>
<td>Quality of Service</td>
<td>4.24</td>
<td>0.936</td>
<td>1</td>
</tr>
<tr>
<td>latest 6</td>
<td>Customers service</td>
<td>4.01</td>
<td>1.216</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>4.121</strong></td>
<td><strong>0.961</strong></td>
<td></td>
</tr>
</tbody>
</table>

*M = Mean  SD = Standard Deviation  R = Rank*

According to the preceding table, "Quality of Service" is ranked top (M= 4.24, SD= 0.936), followed by "Cleanliness" (M= 4.21, SD= 1.016), a result that is consistent with the findings. In addition, "hospitality" is ranked third (M= 4.13, SD= 1.023), while "customer
service" is ranked last (M= 4.01, SD= 1.216). The total mean of the Personal experiences was (4.121) with a standard deviation of (0.961), indicating that all of the Personal experiences phrases had a high degree of agreement, indicating that this variable has a high level.

2. Level of satisfaction

Table 6: Descriptive statistics of the level of satisfaction

<table>
<thead>
<tr>
<th>Code</th>
<th>The Axis</th>
<th>M</th>
<th>SD</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfying1</td>
<td>I feel warmly welcome when dealing with the dental centre</td>
<td>4.25</td>
<td>1.009</td>
<td>3</td>
</tr>
<tr>
<td>Satisfying2</td>
<td>Booking experience and price suitable for me</td>
<td>4.24</td>
<td>.876</td>
<td>4</td>
</tr>
<tr>
<td>Satisfying3</td>
<td>Service quality in Sales offices is very high</td>
<td>4.37</td>
<td>.644</td>
<td>1</td>
</tr>
<tr>
<td>Satisfying4</td>
<td>Employees presenting timely and accurate services</td>
<td>4.28</td>
<td>.831</td>
<td>2</td>
</tr>
<tr>
<td>Satisfying5</td>
<td>There are high-quality marketing and advertising efforts and campaigns</td>
<td>3.92</td>
<td>.982</td>
<td>6</td>
</tr>
<tr>
<td>Satisfying6</td>
<td>I am satisfied with the technological application used</td>
<td>4.22</td>
<td>1.011</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>4.220</td>
<td>0.711</td>
<td></td>
</tr>
</tbody>
</table>

M = Mean  SD = Standard Deviation  R = Rank

"Satisfying3" is ranked top (M= 4.37, SD= 0.644) in the preceding table. "Satisfying4" was next (M= 4.28, SD= 0.831). Furthermore, "Satisfying1" is ranked third (M= 4.25, SD= 1.009). In turn, "Satisfying5" was ranked last.
Assessing the role of dental centres in stimulating dental tourism in Egypt.

The total mean of positive medical tourism experiences was 4.220, with a standard deviation of 0.711, indicating a high degree of agreement for all positive medical tourism experience phrases, indicating that this variable has a high level.

3. Perception of employees’ performance

Table 7: Descriptive statistics of Perception of employees’ performance

<table>
<thead>
<tr>
<th>Code</th>
<th>The Axis</th>
<th>M</th>
<th>SD</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception1</td>
<td>I feel high appreciation when dealing with employees</td>
<td>4.07</td>
<td>1.052</td>
<td>6</td>
</tr>
<tr>
<td>Perception2</td>
<td>Employees have high experience in presenting services and dealing with patients</td>
<td>4.23</td>
<td>.887</td>
<td>1</td>
</tr>
<tr>
<td>Perception3</td>
<td>Employees have attentiveness and clear communication, time management and persuasion skills</td>
<td>4.20</td>
<td>1.027</td>
<td>3</td>
</tr>
<tr>
<td>Perception4</td>
<td>Employees have enough knowledge and ability to use positive language</td>
<td>4.22</td>
<td>.957</td>
<td>2</td>
</tr>
<tr>
<td>Perception5</td>
<td>Dealing with employees increases patient loyalty</td>
<td>4.19</td>
<td>1.102</td>
<td>4</td>
</tr>
</tbody>
</table>
Employees appreciate patient complaints and take care of problem-solving

<table>
<thead>
<tr>
<th>Perception 6</th>
<th>M</th>
<th>SD</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.14</td>
<td>1.128</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>4.174</td>
<td>0.932</td>
<td></td>
</tr>
</tbody>
</table>

M = Mean  SD = Standard Deviation  R = Rank

"Perception2" is ranked top (M= 4.23, SD= 0.887) in the preceding table. "Perception4" was next (M= 4.22, SD= 0.957). Furthermore, "Perception3" is ranked third (M= 4.20, SD= 1.027). In turn, "Perception1" was ranked last. The total mean of employee performance perception was 4.174, with a standard deviation of 0.932, indicating a high degree of agreement for all employee performance perception phrases, indicating that this variable has a high level.

4. Behavioral intentions

<table>
<thead>
<tr>
<th>Code</th>
<th>The Axis</th>
<th>M</th>
<th>SD</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral 1</td>
<td>I prefer to deal with the Egyptian dental centre in the long term</td>
<td>4.07</td>
<td>1.068</td>
<td>5</td>
</tr>
<tr>
<td>Behavioral 2</td>
<td>I will generate and promote positive content about my experience with the dental centre on social media</td>
<td>4.31</td>
<td>.864</td>
<td>2</td>
</tr>
<tr>
<td>Behavioral 3</td>
<td>I will recommend the Egyptian Dental Center to my</td>
<td>4.37</td>
<td>.835</td>
<td>1</td>
</tr>
</tbody>
</table>
Assessing the role of dental centres in stimulating dental tourism in Egypt.

| Behavioral 4 | I intend to repurchase from the Egyptian Dental Center due to the reasonable price. | 4.25 | 1.075 | 3 |
| Behavioral 5 | I will keep participating in the Egyptian dental centre customers surveys with my reviews and positive ensure a good reputation | 4.09 | 1.251 | 4 |

**Total** | 4.220 | 0.850 |

**M** = Mean  \( \text{SD} \) = Standard Deviation  \( R \) = Rank

Based on the previous table, **Behavioral 3** comes at a first rank (M= 4.37, SD= 0.835). Followed by **Behavioral 2** (M= 4.31, SD= 0.864). Moreover, **Behavioral 4** comes a third rank (M= 4.25, SD= 1.075). In turn, "Behavioral 1" was ranked last. The total mean of behavioural intentions was 4.220, with a standard deviation of 0.850, indicating that all of the behavioural intentions’ phrases had a high degree of agreement, indicating that this variable had a high level.

**Test of Hypotheses:**

To test H1 of the research, the Kruskal-Wallis test was applied, it was also used when data distribution of research variables does not meet the normality (McDonald, J, 2014). The results are presented as follows:

**Table 9:** Differences between nationality and level of satisfaction
<table>
<thead>
<tr>
<th>Variable</th>
<th>Nationality</th>
<th>No. of Tourists</th>
<th>Mean Rank</th>
<th>Chi-Square</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>level of satisfaction</td>
<td>Saudi Arabian</td>
<td>46</td>
<td>137.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sudan</td>
<td>30</td>
<td>114.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emirates</td>
<td>14</td>
<td>164.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>India</td>
<td>16</td>
<td>63.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>African</td>
<td>6</td>
<td>43.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jordan</td>
<td>20</td>
<td>144.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Philippines</td>
<td>13</td>
<td>205.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kuwait</td>
<td>15</td>
<td>8.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Morocco</td>
<td>17</td>
<td>118.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>China</td>
<td>9</td>
<td>194.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bahrain</td>
<td>22</td>
<td>88.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pakistan</td>
<td>12</td>
<td>88.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indonesia</td>
<td>9</td>
<td>149.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yemen</td>
<td>6</td>
<td>98.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>235</td>
<td></td>
<td>114.842</td>
<td>0.000</td>
</tr>
</tbody>
</table>

From the previous table, the significance value is (0.00) less than (0.05); which means that there are significant differences between the 14 nationality categories concerning the level of satisfaction. This means that the third hypothesis of the research is accepted.

To test the H2 of the research, the Kruskal-Wallis test was applied. The results are presented as follows:
Table 10: Differences between age categories and behavioural intentions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Age categories</th>
<th>No. of Tourists</th>
<th>Mean Rank</th>
<th>Chi-Square</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>behavioural intentions</td>
<td>Between 26-35 Years</td>
<td>90</td>
<td>98.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between 36-45 Years</td>
<td>131</td>
<td>129.02</td>
<td>12.764</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td>Between 46-55 Years</td>
<td>14</td>
<td>140.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>235</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the previous table, the significance value is (0.002) less than (0.05); which means that there are significant differences between the five age categories concerning the tourists' behavioural intentions about Egyptian dental centres. This means that H4 is accepted.

To test H3 of the research, the chi-square test was applied, it is used to locate whether there is a significant correlation between the expected and observed values of one or more variables (West, 2008). The findings of chi-square showed as follows:
Table 11: Statistical significant correlation between the latest experience of tourists and the level of satisfaction

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pearson Chi-Square</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>latest experience</td>
<td>1036.368</td>
<td>126</td>
<td>0.000</td>
</tr>
<tr>
<td>level of satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 11 referred that the Chi-Square coefficient is 1036.368 with Sig. value (0.000), this result meant that there is a statistically significant correlation between the latest experience of tourists and the level of satisfaction with medical tourism by Egyptian dental centres. This result indicated that H3 of the research is accepted and leads to that the more latest experience, the more level of satisfaction.

To test H4 of the research, the chi-square test was used as follows:

Table 12: Statistical significant correlation between the latest experience of tourists and the perception of employees' performance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pearson Chi-Square</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>latest experience</td>
<td>981.340</td>
<td>140</td>
<td>0.000</td>
</tr>
<tr>
<td>perception of employees'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>performance</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 12 referred that the Chi-Square coefficient is 981.368 with Sig. value (0.000), this result meant that there is a statistically significant correlation between the latest
experience of tourists and the perception of employees' performance in Egyptian dental centres. This result indicated that the H4 of the research is accepted.

**Factor analysis:**

**Exploratory factor analysis of the constructs of ICSR and NC**

Exploratory factor analysis (EFA) is a multivariate statistical method for reducing and summarizing data. Hair, Black, Babin, and Anderson (2010) employed exploratory factor analysis to compress the information in the original variables into a smaller collection of varieties (factors) with the least amount of information loss, resulting in a more judicious conceptual knowledge of the set of measured variables.

Principal component analysis and factor analysis were used to determine the kind of extraction. EFA assists in determining the structure of the relationship between variables and respondents' views. In this work, the EFA technique was employed as a measurement tool to uncover several dimensions of assessing the impact of ICSR on NOC. Twenty-six items were chosen for this purpose after a thorough review of the literature. Respondents supplied information for future analysis of the sample on a 5-point Likert Scale ranging from 1-strongly disagree to 5-strongly agree.
Sample adequacy

SPSS 26.0 was used to calculate the KMO (Kaiser-Meyer-Olkin) value and the Bartlett Test of Sphericity results for exploratory factor analysis of the pre-survey data. According to Comrey, pre-analysis testing was done to ensure that the entire sample was suitable for factor analysis (1978). To determine sample adequacy, the Kaiser-Meyer-Olkin (KMO) test was utilized (Field, 2005; Kaiser & Rice, 1974). The sample was eligible for factor analysis with a result of (.721).

In addition, Bartlett's test is employed in this study to determine whether the correlation between all variables is zero. The salience value of the Bartlett test of sphericity (7696.104) was 000, which was extremely significant. The pre-survey sample was found to be eligible for factor analysis based on these findings. As a result, exploratory factor analysis may be used in future studies.

Table 13.: KMO and Bartlett's Test

<table>
<thead>
<tr>
<th>KMO and Bartlett's Test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
<td>.721</td>
</tr>
<tr>
<td>Bartlett's Test of Sphericity</td>
<td>Approx. Chi-Square</td>
</tr>
<tr>
<td></td>
<td>df</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
</tr>
</tbody>
</table>
Assessing the role of dental centres in stimulating dental tourism in Egypt.

**Loading factors**

According to the data in Table no., the contribution range of the items indicated by the scale and related dimensions were between .702 and .919, fulfilling the questionnaire’s set critical threshold. Except for two items, EFA found that all 23 items adequately represent their respective constructs after adding variables into SPSS (int1, int5). Table no. lists the factor loadings of each variable onto each factor. All loadings are displayed by default in SPSS; however, a request was made to hide all loadings less than 0.4 in the report.

<table>
<thead>
<tr>
<th>Table 14: Communalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
</tr>
<tr>
<td>Exp1</td>
</tr>
<tr>
<td>Exp2</td>
</tr>
<tr>
<td>Exp3</td>
</tr>
<tr>
<td>Exp4</td>
</tr>
<tr>
<td>Exp5</td>
</tr>
<tr>
<td>Exp6</td>
</tr>
<tr>
<td>Sat1</td>
</tr>
<tr>
<td>Sat2</td>
</tr>
<tr>
<td>Sat3</td>
</tr>
<tr>
<td>Sat4</td>
</tr>
<tr>
<td>Sat5</td>
</tr>
<tr>
<td>Sat6</td>
</tr>
<tr>
<td>Emp1</td>
</tr>
<tr>
<td>Emp2</td>
</tr>
<tr>
<td>Emp3</td>
</tr>
<tr>
<td>Emp4</td>
</tr>
</tbody>
</table>
Factor extraction:
Factor analysis was used to establish the strength of the components, with 1 as the Eigenvalue. Four factors were collected when the rotation converged in its iterations. Eigenvalues larger than one was used to establish the total number of factors in the study. On this basis, five factors (components) with Initial Eigen Values greater than one have been found. The percentage of variance is listed in the second column, and the cumulative percentage of variance is listed in the third column.

Because only four elements have been assigned, a cumulative percentage of the four components provide an estimate of the study's complete coverage. The cumulative percentage of the four components in this study is 80.688 per cent of the study area, which is extremely good. According to table no., the first component accounts for 52.928 per cent of the variance, which is also extremely acceptable for the study.

<table>
<thead>
<tr>
<th>Component</th>
<th>Eigenvalue</th>
<th>Cumulative Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emp5</td>
<td>1.000</td>
<td>.831</td>
</tr>
<tr>
<td>Emp6</td>
<td>1.000</td>
<td>.625</td>
</tr>
<tr>
<td>Int2</td>
<td>1.000</td>
<td>.859</td>
</tr>
<tr>
<td>Int3</td>
<td>1.000</td>
<td>.818</td>
</tr>
<tr>
<td>Int4</td>
<td>1.000</td>
<td>.755</td>
</tr>
</tbody>
</table>
Assessing the role of dental centres in stimulating dental tourism in Egypt.

### Table 15: Total Variance Explained

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative %</td>
</tr>
<tr>
<td>1</td>
<td>11.115</td>
<td>52.928</td>
<td>52.928</td>
</tr>
<tr>
<td>2</td>
<td>3.329</td>
<td>15.850</td>
<td>68.778</td>
</tr>
<tr>
<td>3</td>
<td>1.414</td>
<td>6.733</td>
<td>75.510</td>
</tr>
<tr>
<td>4</td>
<td>1.087</td>
<td>5.177</td>
<td>80.688</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

### Table 16: Pattern Matrix

<table>
<thead>
<tr>
<th></th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Exp1</td>
<td>.803</td>
</tr>
<tr>
<td>Exp2</td>
<td>.903</td>
</tr>
<tr>
<td>Exp3</td>
<td>.991</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Exp4</td>
<td>.952</td>
</tr>
<tr>
<td>Exp5</td>
<td>.927</td>
</tr>
<tr>
<td>Exp6</td>
<td>.765</td>
</tr>
<tr>
<td>Sat1</td>
<td>.707</td>
</tr>
<tr>
<td>Sat2</td>
<td>.509</td>
</tr>
<tr>
<td>Sat3</td>
<td>.759</td>
</tr>
<tr>
<td>Sat4</td>
<td>.854</td>
</tr>
<tr>
<td>Sat5</td>
<td>.721</td>
</tr>
<tr>
<td>Sat6</td>
<td>.838</td>
</tr>
<tr>
<td>Emp1</td>
<td>.914</td>
</tr>
<tr>
<td>Emp2</td>
<td>.704</td>
</tr>
<tr>
<td>Emp3</td>
<td>.899</td>
</tr>
<tr>
<td>Emp4</td>
<td>.845</td>
</tr>
<tr>
<td>Emp5</td>
<td>.805</td>
</tr>
<tr>
<td>Emp6</td>
<td>.781</td>
</tr>
<tr>
<td>Int2</td>
<td>.874</td>
</tr>
</tbody>
</table>
The researcher calculated the Pearson Correlation Coefficient between the latest experience and level of satisfaction. The results show that there is a statistically significant relationship between the latest experience and level of satisfaction (sig: .000), at a significant level of (0.05).

The researcher calculated the Pearson Correlation Coefficient between the latest experience and the perception of employees' performance. The results show that there is a statistically significant relationship between the latest experience and the perception of employees' performance (sig: .000), at a significant level of (0.05).

Table 17: Correlations

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Pexp</th>
<th>Sat</th>
<th>staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>.659**</td>
<td>.505**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>235</td>
<td>235</td>
<td>235</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.05 level (2-tailed).
The researcher calculated the One-Way ANOVA analysis of the difference between regions according to their level of satisfaction. The results were shown in above Table. The tabulated data revealed that there is no statistically significant difference between regions according to satisfying experience (sig: .052; F: 2.991).

**Table 18: ANOVA (Satisfaction)**

<table>
<thead>
<tr>
<th>ANOVA</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>107.114</td>
<td>2</td>
<td>53.557</td>
<td>2.991</td>
<td>.052</td>
</tr>
<tr>
<td>Between Groups</td>
<td>107.114</td>
<td>2</td>
<td>53.557</td>
<td>2.991</td>
<td>.052</td>
</tr>
<tr>
<td>Within Groups</td>
<td>4154.307</td>
<td>232</td>
<td>17.906</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4261.421</td>
<td>234</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The researcher calculated the One-Way Anova analysis of the difference between regions according to their perception of employees` performance. The results were shown in Table no. The tabulated data revealed that there is no statistically significant difference between regions according to the perception of employees` performance (sig: .000; F: 13.396).

**Table 19: ANOVA (Staff)**

<table>
<thead>
<tr>
<th>ANOVA</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>staff</td>
<td>756.846</td>
<td>2</td>
<td>378.423</td>
<td>13.396</td>
<td>.000</td>
</tr>
<tr>
<td>Between Groups</td>
<td>756.846</td>
<td>2</td>
<td>378.423</td>
<td>13.396</td>
<td>.000</td>
</tr>
</tbody>
</table>
To find the relationship between both level of satisfaction and employees ` performance and behavioural intention, a multiple linear regression model was used in which level of satisfaction and employees ` performance are considered as an explanatory variable and behavioural intention as a dependent variable. The regression model's findings revealed that they are significantly correlated. Concerning the level of satisfaction, the F value and its accompanying P-value (F=106.750, P=.000b). The level of satisfaction explains 31.4% of variations in the behavioural intention showing the strength of the relationship between the two variables.

In the case of employees ` performance the F value and its accompanying P-value (F=421.830, P=.000b). The employee's performance explains 64% of variations in the behavioural intention showing the strength of the relationship between the two variables.

To find the moderating effect of the relationship between both level of satisfaction and employees ` performance and behavioural intention, a multiple linear regression model was used in which interaction between geographical region and both levels of satisfaction and employees ` performance are considered as an explanatory variable and behavioural intention as a dependent variable. The regression model's findings revealed that geographical region contributes to strengthening the effect of both levels of satisfaction and employees ` performance on behavioural intention. First, the results confirmed that geographical region moderates
the relationship between the level of satisfaction and behavioural intention. This can be inferred from the F value and its associated P-value (F=6.513, P=.000b). Second, the results confirmed that geographical region moderates the relationship between employees' performance and behavioural intention. This can be inferred from the F value and its associated P-value (F=66.017, P=.000b)

Table 20: Regression Model

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Predictors:</th>
<th>R</th>
<th>R Square</th>
<th>F value</th>
<th>F significance</th>
<th>Beta</th>
<th>T value</th>
<th>T significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td></td>
<td>.561a</td>
<td>.314</td>
<td>106.750</td>
<td>.000b</td>
<td>.520</td>
<td>10.332</td>
<td>.000</td>
</tr>
<tr>
<td>Employees' performance</td>
<td></td>
<td>.803a</td>
<td>.644</td>
<td>421.830</td>
<td>.000b</td>
<td>.476</td>
<td>20.539</td>
<td>.000</td>
</tr>
<tr>
<td>Interaction (Region_Satsfact)</td>
<td></td>
<td>.392a</td>
<td>.154</td>
<td>42.422</td>
<td>.000b</td>
<td>.087</td>
<td>6.513</td>
<td>.000</td>
</tr>
<tr>
<td>Interaction (Region_employees)</td>
<td></td>
<td>.470a</td>
<td>.221</td>
<td>66.017</td>
<td>.000b</td>
<td>.096</td>
<td>8.125</td>
<td>.000</td>
</tr>
</tbody>
</table>

Conclusion & Recommendations: There is a strong case to be made for Egypt is the world's top dental tourism destination. Egypt is a great city to spend time in. There are exciting and varied sites, and plenty of cultural, and recreational pursuits.

The researcher discovered that the quality of service and cleanliness had a significant impact on the latest experience of patients/tourists. The results also showed that the vast majority of patients/tourists confirmed that the quality of service in sales offices helps increase their level of satisfaction. The patients/tourists also confirmed that there are low-quality marketing and advertising efforts and campaigns. Furthermore, employees have high experience in presenting services and dealing with patients. Patients/Tourists also confirmed that they would
recommend the Egyptian Dental Center to their friends and relatives. The results also showed that there was a statistically significant correlation between the latest experience of tourists and the level of satisfaction with medical tourism by Egyptian dental centers. Finally, there is a statistically significant correlation between the latest experience of tourists and the perception of employees' performance in Egyptian dental centers. Furthermore, this paper presents many recommendations as follows:

- Dental clinic centres should co-operations with the tourism ministry to attract foreign patients to Egypt.
- The necessity of coordination and cooperation between the Egyptian dental sector and the tourism sector to stimulate the movement of dental tourism to Egypt.
- The necessity of cooperation between Egyptian dental centres and the medical-dental sector in countries of the world to conclude agreements and ways of cooperation for health systems for their care treatments within Egypt.
- The necessity of providing sufficient information about the role of dental centres that has a role in attracting tourists, and providing information about their nationalities and their spending capabilities.
- Enrolling the type of dental tourism in the Egyptian tourism agenda, as well as using various publicity methods to prepare and implement various tourism programmes.
• Launching initiatives to revitalize the dental tourism movement to Egypt in cooperation with specialized dental centres.

• The necessity for coordination and cooperation between the ministry of investment and the tourism ministry to stimulate the movement of dental tourism to Egypt by stimulating investment in the establishment of specialized dental clinics, especially in the major tourist governorates such as Luxor and Aswan… that are devoid of this type of centres capable of receiving and attracting dental tourism.

From the above discussion, it's evident that dental requirements are increasing steeply and they'll skyrocket in the future. So, it becomes necessary to realize the importance of dental treatment. Moreover, medical tourism plays an important role in promoting the tourism industry, especially after Covid 19 pandemic as a type of crisis encountered by the tourism industry.

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