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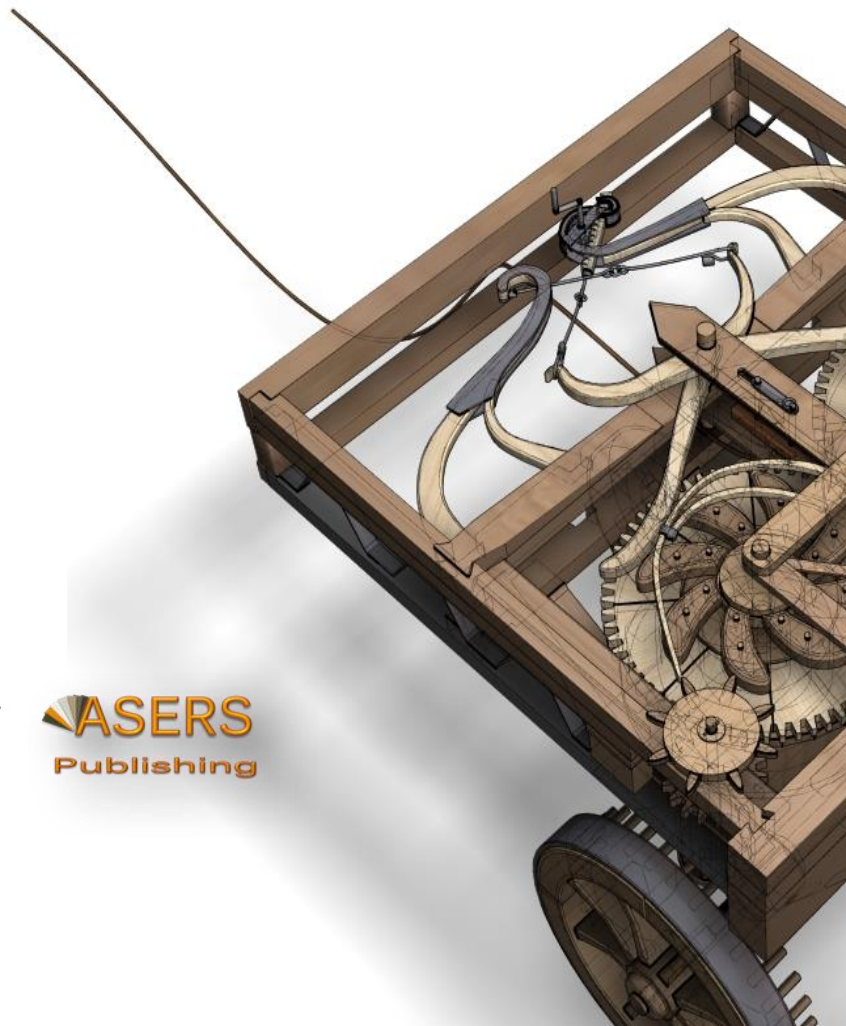
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**Journal of Environmental Management and Tourism** is an interdisciplinary research journal, aimed to publish articles and original research papers that should contribute to the development of both experimental and theoretical nature in the field of Environmental Management and Tourism Sciences.

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## Museum Visitors' Interest on Virtual Tours in COVID-19 Situation

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### Abstract:

The pandemic of COVID-19 has significantly impacted the tourism industry in worldwide. The main objective of this research was to explore the desire of virtual museums tourists during the quarantine regulation under impact of COVID-19 pandemic. In this light, we considered the four main step of the quarantine lockdown phase in Spain. During these phases the availability of six types of virtual museums were evaluated to figure out the visitors' interest. The results were obtained by analysing the number and kind of the visits being recorded in the virtual museum's tours while Spanish inhabitation used to stay at homes for long days, weeks and even months. According to the results, in the zero-quarantine phase, the highest amount of visitors tend to visits the museum parks. While the science museums were received less visits. However, overall results indicated that the reduction of strictures during the quarantine period while the intensity of people's interest were decreased. Based on the results, we conclude that this research makes significant contribution for tourism research and will benefit the decision makers and stakeholders for developing virtual tourism industry further. We also conclude that for new approaches in the post-corona, special attention should be paid to the new interest developed by tourists during the quarantine period.

**Keywords:** virtual tourism; museums tours; pandemic of COVID-19; Spain.

**JEL Classification:** Z32; Z10; I12; H70.

### Introduction

The COVID-19 marked a major turning point in the tourism sector and tendency of tourists. The spread of the diseases has had a world-changing effect, not least on the world of traveling (UNWTO 2020). The devastating impact of the COVID-19 pandemic on global tourism has carried on into 2021, with new data showing an 87% fall in international tourist arrivals in January as compared to 2020 (UNWTO 2021). Therefore, many countries are taking several measures stopping productive activities from slowing down the spread of COVID-19 (Piguillem, Shi 2020). It is understood that the world is going through significant change under impact of COVID-19. One of the principal results of this pandemic is the need to change lifestyles including mobility, particularly during the quarantine period. Nonetheless, not the entirety of the outcomes of this circumstance has negative undertones

(UNWTO 2020). Considering the impact of Covid -19, it is currently impossible to avoid pandemics and limit the spread due to the increasing frequency of traveling (Çetin, Kara 2020). Thus, quarantine being introduced as an essential public health measure to control outbreaks in practice (Kılıç, Hatipoglu, Günes 2020). The significant impacts of the COVID-19 forced many countries to apply many measures due to the high rate of virus spread among people. Obviously quarantine being identified as one the initial solutions (Hao, Xiao, Chon 2020). In COVID-19, it is imperative to prevent society's spread (Güner, Hasanoglu, Aktas 2020). According to Brouder (2020), the tourism industry is experiencing a reset due to the COVID-pandemic which is faced just as occurred in the past (e.g. previous terrorist attack of 11 September 2001 and the global financial crisis in 2008). The pandemic's negative effect on the hospitality industry, one of the most critical sectors in the service, can be reduced by the right regional quarantine decisions. Sohrabi *et al.* (2020) highlighted that one of the key learning points from the response to COVID-19 is to identify high-risk quarantine areas as soon as possible. Therefore, quarantine decisions during a pandemic should be taken by using the systematic method. There is no universal guideline regarding the quarantine decision during a pandemic. Each country makes its own quarantine decisions by taking into account its conditions and dynamics. There is a gap in the literature on making the right quarantine decisions to decrease the negative effect of a pandemic on the hospitality industry (Altuntas, Gok 2020). It is clear that media and internet might be critical for the people during the quarantine. In this context, some digital services are practically substitutable for the conventional ones, contingent upon an individual's needs (UNWTO 2020). One of the interesting tool to promote culture and propagate knowledge is virtual museum tours (Pujol, Lorente 2013). Museums ought to take up the challenge of spreading data in virtual area and treat it as a mission during which the reward is to make identity and educate communities not solely within the region however worldwide (Towards 2020. The British Museum's Strategy 2020). As answer for this demand, Google Arts & Culture teamed up with over 2500 museums and galleries around the world which aiming to provide the facility for anyone and everyone for various virtual tours and online exhibits. So far some of the most famous museums such as historical museums around the world have contributed and this number being increased by extension the COVID-19 pandemic and respective quarantine policies (<https://www.travelandleisure.com/attractions/museums-galleries/museums-with-virtual-tours>).

Right now, some virtual and Culture's collection contains several well-known museums around the world (e.g. the British Museum in London, the Van Gogh Museum in Amsterdam, the Guggenheim in New York City) which aiming to gain knowledge and enrich the virtual tourist information about art, history, and science. This collection is especially good for students who are looking for ways to stay on top of their studies while schools are closed (<https://www.travelandleisure.com/attractions/museums-galleries/museums-with-virtual-tours>).

As historical museums and sites being observed by virtual tourist, modern museum, arts, and even, wild-life museums and Nature-Environment Museum could also being available every day. According to ICOM (2020) report, all digital activities increased or began after the lockdowns, for at least 15% of participants. In particular, activity on social networks increased or started for almost 50% of the total number of respondents. Recent statics shows that due to increasing digital activities of museums the number of virtual tourist have visited the wild-life, art and modern museums and Nature-Environment Museum have increased. The COVID-19 pandemic represents a massive global health crisis. The crisis requires large-scale behavior change and places significant psychological burdens on individuals (Bavel *et al.* 2020). The Spanish online journal of tourism based on the outcome of its recent research pointed out that duration the post COVID nature based tourism and in particular rural tourism will be the most popular sector of the tourism industry. This research figured out by collaboration 600 experts, researchers and authorities in domain tourism industry ([https://www.hosteltur.com/136189\\_el-turismo-rural-y-de-naturaleza-seran-los-primeros-en-recuperarse.html](https://www.hosteltur.com/136189_el-turismo-rural-y-de-naturaleza-seran-los-primeros-en-recuperarse.html)). In this light the main objective of this research is to explore the desire of virtual museums tourists during the quarantine regulation.

## 1. Literature Review

Since the beginning of the outbreak of the COVID-19 and the spread of Coronavirus in the world, which has led to significant effects on the tourism industry, many research articles have been written in this field. These include articles on the behavior and motivation of individuals and how the factors influencing the decision to visit museums during the COVID-19 outbreak, that also called the Post COVID-19 period.

### 1.2. Visitors Behavior

Travelers' perceived knowledge and the serious concern of the safety/social/environmental issues of tourism destinations have long been important concepts to explain their behavior (Han *et al.* 2020). Better to say, the perceived knowledge about travel, which is a cognitive variable, indeed plays a crucial role in tourists

'product/brand/destination choices in the international tourism industry (Verma, Chandra, Kumar 2019). Travelers tend to avoid a situation where their knowledge to direct their specific actions is not sufficient (Chan *et al.* 2014). In other words, when their knowledge is not enough to conduct certain types of measures, tourists are likely to reduce the possible uncertainty by not practicing the action (Han, Hyun 2017). The theory of planned behavior TPB is one of the most broadly used socio-psychological theories designed to predict human decisions and behaviors (Guerin, Toland 2020). Han *et al.* (2020) show us valuable information that individuals perceived social pressures are of the utmost criticality when they form any decision related to making a safe behavioral choice or taking risks. In other study by Fuchs & Reichel (2006) have considered the link between demand crises and tourism has received substantial momentum making the public more aware of global terrorist threats or the economic crisis. When such crises happen, they eventually have a direct impact on the value and volume of the tourist flows between origin and destination zones (Polyzos, Samitas, Spyridou 2020).

In this regards, Polyzos *et al.* (2020) in their paper explain the expected results of the current COVID-19 outbreak to arrivals of Chinese tourists to the USA and Australia and their findings, suggest that recovery of arrivals to pre-crisis levels can take from 6 to 12 months and this can have significant adverse effects not only on the tourism industry but also on other sectors that interact with it. Generally, Tourism and its affiliated industries have experienced numerous crises before, including the 2005 tsunami in the Indian Ocean region, the impacts of the '9/11 terrorist attacks on the USA in 2001 and previous pandemics such as the 2009 swine flu or Zika crisis. These experiences have seen the development of toolkits of risk management, risk mitigation and crisis recovery as well as a recent focus on resilience. However, the COVID-19 pandemic is of a much higher magnitude than previous crises because of its global scale and the widespread shutdown of travel, businesses and life activities (Higgins-Desbiolles 2020). Besides, Itani & Hollebeek (2021) state that their analyses indicate the severity of the perceived threat to visitors, the effectiveness of response, and self-efficacy increase social distancing behavior. In turn, social distancing increases (decreases) the willingness of visitors to use virtual reality (face-to-face) visits during the pandemic. They find social distancing to drive visitation demand for advanced virtual tours and to elevate their advocacy intentions. Their findings also show that social distancing does not affect the intention of potential visitors to use virtual reality rather than face-to-face visits following the pandemic.

El-Said & Aziz (2021) have investigated that regarding previous studies the technology acceptance model and the protection decision-making model are effective in predicting the intention of users to adopt virtual tours. This intent to adopt has a positive effect on the trend to visit the site. Additionally, the practical implications are provided for site managers to consider when choosing virtual tours as a promotional tool or as an alternative product in times of crisis.

So, It is obvious that During a new virus outbreak, one can expect a significant cut in travel, which will eventually affect both supply and demand for tourism-related products and services Page *et al.* (2012).

As it said before in introduction about Countries' policies against the coronavirus outbreak and its effects on tourism, UNWTO has announced:

Tourism has the potential to recover and once again establish itself as a key part of national economies and of the wider sustainable development agenda.

This crisis may also offer a unique opportunity to shape the sector to ensure it not only grows but it grows better, with inclusivity, sustainability and responsibility prioritized.

Furthermore, to build for the future, special attention should be placed on building resilience and on promoting sustainability at all levels (UNWTO 2020).

### 1.3. Visiting Museums, Turn to Digital

Renaissance because it allows the rediscovery of collections for new uses by new users. Before the Corona Outbreak in the World, the application of digital technologies was much more advanced in other areas, a number of museums had been implementing digital applications to develop new products and services such as online exhibitions, new processes to research, display and manage collections and reaching new markets (Navarrete 2019).

According to Zbucha *et al.* (2020), the rise of a global health emergency due to the advent of a new coronavirus leading to COVID-19 has forced museums to close onsite visits and strengthen the opportunities provided by the use of information and digital technologies as a strategic source to develop new services and reinforce the relationship with visitors, users and the public in general. The rise of a new opportunity for getting online services and materials has led museums to redevelop a digital strategy for promoting increased communication and interaction with the public. The opportunities emerging from an online and digital explosion and presences open up to rediscovering museums as project-driven organizations that reposition themselves

acting to play a new role and meaning restoring communication and relationship with their audience within social and cultural ecosystems. Thereby, it is reasonable to think that the museum's initiatives oriented to, at this stage and under uncertainty conditions, rearrange the organizational and technological infrastructures and sources to reposition the museum within the community and society were moving coherently with emergency contingencies as shown from the advent of a global health threat constituted by the COVID-19 pandemic. In particular, museums are rethinking the future role and positioning of the museum in post-pandemic society and reality by developing and enhancing online capabilities in times of pandemic emergency that had driven museums to reinvent a digital approach to cultural contents production and delivery.

Based on Vayanou *et al.* (2020) posit that the digital empowerment of sociality is an important and pertinent issue not only in the museums' physical space but also in the virtual museum world. Moreover, we claim that virtual visits offer an incredible opportunity to cope with the physical constraints that may be posed to one or more members of a social group, enabling them to experience a joint, synchronous, social activity without requiring to be co-located in the same physical place - a need that highly increased due to the recent pandemic lockdown.

International Council of Museums (ICOM) has mentioned the forced temporary closure of museums during lockdowns suddenly brought digital communication with the public to the fore. We witnessed a surge in virtual tours, social media posts, remote interactions with the public, and much more and this demonstrates the reactivity and creativity that characterize the cultural sector, and its ability to adapt to the crisis (ICOM 2020).

A research which has been done and is also related to the subject of this paper, is the article written by Samaroudi *et al.* (2020), they have studied how memory institutions including museums and heritage organizations adapted during COVID-19 lockdowns by surveying the existing and novel digital resources that enabled access to cultural heritage organizations. This study, conducted during the UK COVID-19 lockdowns period (April-July 2020), collected and analyzed data from 83 cultural heritage institutions in the United Kingdom and the United States including digital interaction opportunities. The paper presented an analysis of the digital offering's types and subtypes; their provision according to institution types; the type/format of content involved; as well as the audiences which these offerings targeted. The analysis shows how different types of these institutions support online visitors with resources such as educational materials, live events and creative activities, and highlights of how museums have worked effectively and changed methods. They have shown that they respond to social needs while locked up.

What (Braun, Clarke 2006) has in common with the present article is that the results of current research show which type of museums are the priority of museum visitors interests during the COVID-19 outbreak, in this way museums can consider the ways of estimating for enhancing effective satisfaction from both article.

In respect of these studies, the contribution of the research is that it provides an in-depth understanding of the visitors' interests which could be highly effective in making decision for visiting cultural places virtually during COVID19 lockdown.

## 2. Methodology

As the principal purpose of this research was to determine the ratio of a person tends to use virtual tours of museums in a confinement situation. In this respect, we apply the quantitative sampling method to collect a representative sample that can be generalized to the wider community. As well, implemented phases of Spain confinement have been applied as the case study. To do so, we investigated 817 people visiting museum virtual tours through an online questionnaire. 817 persons visited their favorite museum through a virtual tour during these phases. Then, to obtain a categorical structure, we engaged in thematic investigation. According to Braun and Clarke (Braun, Clarke 2006) estimated, six objects (Museum's type) have been created to make a meaningful pattern. Following the familiarization with data, we extracted initial codes, examined for cases among codex, studied them, set and marked themes, filled several cycles within these steps, and then the final categories have been created. Based on this qualitative content analysis, we categorized what types of lockdown phase people were in, during the confinement period in the first wave of Covid-19 in Spain. Finally, implemented lockdown phases by Spanish and states government are divided into 4 phases (Table 1).

As was mentioned before, and according to Farokhi (2019) category, six types of the museum have been selected to study: (1) historical and archeological museums that are based on history; (2) Open-air Museum whose establishment has originated from an idea, which insists on transferring the origin to a specified place. Mostly the term open-air museum is applied to museums, which specialize in the collection and re-erection of multiple old buildings at large outdoor sites, usually in settings of re-created landscapes of the past and often include living history; (3) The anthropology museum is another type of museum, which is focused deeper on the

history of a country or a region; (4) The art museum is another type which comprises 41 privileged artworks from various societies made in diverse historical periods; (5) Scientific museums, which promotes information about research and development processes; (6) Park museum, which displays multiple cultures and educational dimensions, leisure attractions and simultaneously focuses on the promotion of environmental issues.

Table 1. Lockdown phases in Spain during first wave of COVID - 19

| Lockdown Phases | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Phase 0         | <ul style="list-style-type: none"> <li>▪ -Opening of some business (just with the prior appointment).</li> <li>▪ -Restaurants with food delivery service or hairdressers, among others.</li> <li>▪ -Personal training of federated athletes and expert leagues is approved.</li> <li>▪ -Lastly, common maintenance areas such as allowing kids to go out/play for an hour, personal sports, and family walks have been permitted.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Phase 1         | <ul style="list-style-type: none"> <li>▪ -Movement: the probability of moving inside the same province.</li> <li>▪ -Social meetings of up to 10 people in individual areas are permitted, considering the social distancing. We will finally be capable to see our family and friends at residence if they are in the same region.</li> <li>▪ -Markets: Activities will start in the tiny store 'in circumstances of stringent protection', but not in extensive stores 'where crowds are more likely'.</li> <li>▪ -Open-air sales, with distance requirements between the stalls.</li> <li>▪ -Cafes and restaurants: The opening of cafe and restaurant patios at 50% of their capacity will be permitted.</li> <li>▪ -Hotels and traveller accommodation: Opening of hotels and other traveller accommodation, excluding public spaces and with a special program for people over 65 years of age.</li> <li>▪ -Non-professional sport: any exercises that do not require physical connection or the use of dressing places will be permitted.</li> <li>▪ -Professional sport: Expert athletes will have fewer limitations since training will be allowed in professional leagues and in high-performance canterers. Additionally, professional leagues will restart their exercise.</li> <li>▪ -Cultural shows of less than 30 people inside (with a third potential) and fewer than 200 people outside</li> <li>▪ -Visits to museums, galleries are restricted to one-third of the space.</li> </ul> |
| Phase 2         | <ul style="list-style-type: none"> <li>▪ -Opening of cafes and restaurants for meal service, with restricted capacity.</li> <li>▪ -travel to other habitations, only if they are in the same region.</li> <li>▪ -Reopening of markets, preventing the stay in public spaces or recreational spaces.</li> <li>▪ -Cinemas and theatres with 1/3 of the capacity. You can visit buildings and show rooms.</li> <li>▪ -Cultural activities with fewer than 50 people seated inside. If they are outside activities, less than 400 people seated will be permitted.</li> <li>▪ -Educational centres: The class year will begin in September, but in this phase, allowances are established to open educational centres. They may open for support exercises, to assure that kids under the age of six can go to the centre if both parents have to work and to secure the 'Selectividad' exams take place, as that is a mandatory exam to enter college.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Phase 3         | <ul style="list-style-type: none"> <li>▪ -In this phase 'common movement will be made more resilient' and accentuated that, although it is the least limiting, the usage of masks in public transportation will remain to be approved, as in all prior phases.</li> <li>▪ -The use of various areas will be regularly expanded</li> <li>▪ -Stores: Capacity will be restricted to 1/2, with the condition that there be the least distance of two meters within people.</li> <li>▪ Bars and restaurants: capacity limitations will reduce but regularly keeping the divorce forms among customers.</li> <li>▪ Disco and night bars with the highest capacity of 1/3 of the normal.</li> <li>▪ Beaches in safety and distance requirements.</li> <li>▪ - Bullrings: with a capacity restriction that ensures 1 person for every 9 square meters.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

Source: Implemented phases by Spanish local states and national government

### 3. Result

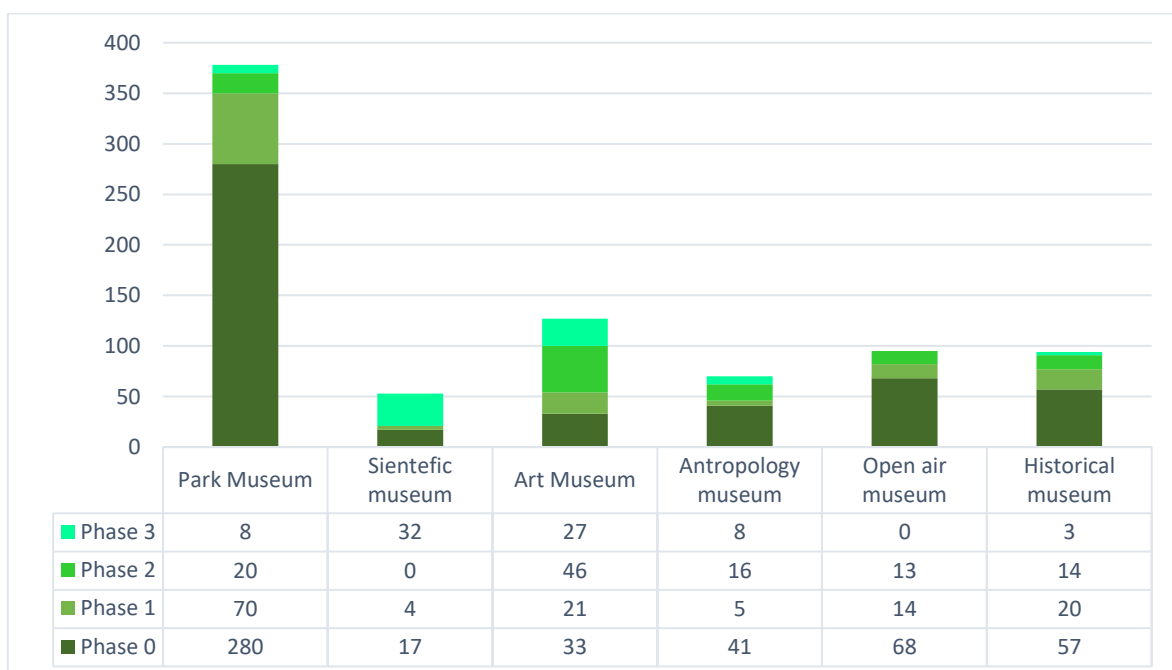
The majority of museum type visited belongs to the park museum (46.2%). According to Seymour (2016) argument, research has exposed the various methods people are associated with the natural environment. The majority of this percentage (280 cases) as well indicates this belief that in Phase 0 situation which had been considered the strictest restrictions (this situation was called Dry quarantine), human in interested to simulate

his/her area to nature to satisfy his/her desire for nature. As well, has been revealed, about 11.6% visited the open-air museum such as Persepolis in Iran during covid-19 time. Another element that testifies this fact which people in a strict lockdown, besides cultural satisfying is interested to get out of his/her quarantine. Consequently 11.5% of visited cases that belongs to the archaeological museum, prove this fact that the name of the museums basically relied on history aspect of this cultural tourism segments. Also, and according to increase of nationalism in the World and according to Doxanaki assumption (2017), archaeology has an inescapably political dimension. One of its many possible manifestations is nationalism, which can be related to numerous archaeological traditions. Even in lockdown situation, it seems people don't give up in their beliefs.

The number of visited cases of art museums and galleries in phase 2 and 3 (46, 27 cases) indicates that even in phase 2 and 3 that people were allowed to visit cultural institutes, museums and art galleries, they preferred to visit them through a virtual tour. It should be mentioned that even in these phases, some specified sanitary laws should be observed such as social distancing, wearing mask and .... Interesting to use art museum virtual tours after passing phases 0 and 1, brings this fact that after satisfying the nature demand of people, now they want to satisfy their cultural demands. DiMaggio (1996) believes there are socio-demographic distinctions between art-museum visitors and other visitors. For example, he proved art museum visitors included old age visitors due to their behavior and interests. But thanks to developing technology in this field such as comfort facilities various types of tablets, smartphones and etc, now this range of visitors is available to use a virtual tour easily. As well, the result indicates people aren't interested (6.4%) to use a scientific museum virtual tour and they prefer to watch and follow scientific topics through documentaries, video engine channels such as YouTube. Apart from the lockdown situation, the mayor scientific museum visits are happened due to the school agenda. So that Griffin (1998) believes school visits to scientific museums should be formally included in the school curriculum units. The result of this paper also reveals people didn't use a virtual tour of anthropony museums very much, to compare with other ones such as open-air museums or even archaeological museums. Although At a more specific level, anthropological knowledge provides guidance to art education in museums by locating cultural objects in their historical and cultural context (Yuan 2016) but also the authenticity and originally of object that is the anthropology of a place, it seems is more important to visit that place virtually.

In the end, 60.7% visiting virtual museum tours in phase 0, reveals museum position in the product basket of people even during this situation. It should be mentioned that one of the main reasons for this huge number could be this reason that many of these virtual tours were free. Consequently, the percentage of other phases indicates that, by opening up some social restrictions, the people gradually are not interested to use virtual museum tours: Phase 1: 16.4%, Phase 2: 13.3%, and phase 3: 9.5%. The result of this research brief is visible in chart 1.

Chart 1: The result of this research



Source: Author

## Conclusion and Future Work

This research started off by focusing to explore the desire of virtual museums tourists during the quarantine regulation under impact of COVID-19 pandemic. It is widely acknowledged that quarantine decisions and its respective policies directly impact the tourism industry significantly. It is clear that as results of the COVID-19 tourism industry has been shutting down during the 2020. Nevertheless, as results of quarantine season, and travel restrictions virtual tourism and in particular virtual tours in the worldwide museums getting more popular every day. Thus, from the tourism perspective it is optimized that analyzing and determining the types of museum's virtual tours that visitors are interested, might help to minimize the impacts of COVID-19 essentially. However, one of the most important theories of humanity is about his relationship with nature. The relevance with nature environment is the most essential requirement of human. Because he/she is inherently inclined to nature. The results were obtained by analyzing the number and kind of the visits being recorded in the virtual museum's tours while Spanish inhabitation used to stay at homes for long days, weeks and even months. According to the results, in the zero-quarantine phase, the highest amount of visitors tend to visits the museum parks. While the science museums were received less visits. However, overall results indicated that the reduction of strictures during the quarantine period while the intensity of people's interest were decreased. Therefore, such analysis and study will support virtual tourism development and reduce the impacts of COVID-19 on tourism industry in some points. Based on this statement, we conclude that this research makes significant contribution for tourism researchers and will benefit the decision makers and stakeholders for developing virtual tourism industry further. Based on the outcome of this research, the following remarks are to be outlined: a) To apply the new models of tourist attraction for designing the virtual museums which can be significant revitalize of the tourism industry, b) To develop new ideas of navel businesses related to virtual tourism, c) to develop the navel ideas in the context of marketing for attracting the tourists for virtual museums tours and d) to establish active collaboration between museums and traveling agencies for organizing the virtual tours.

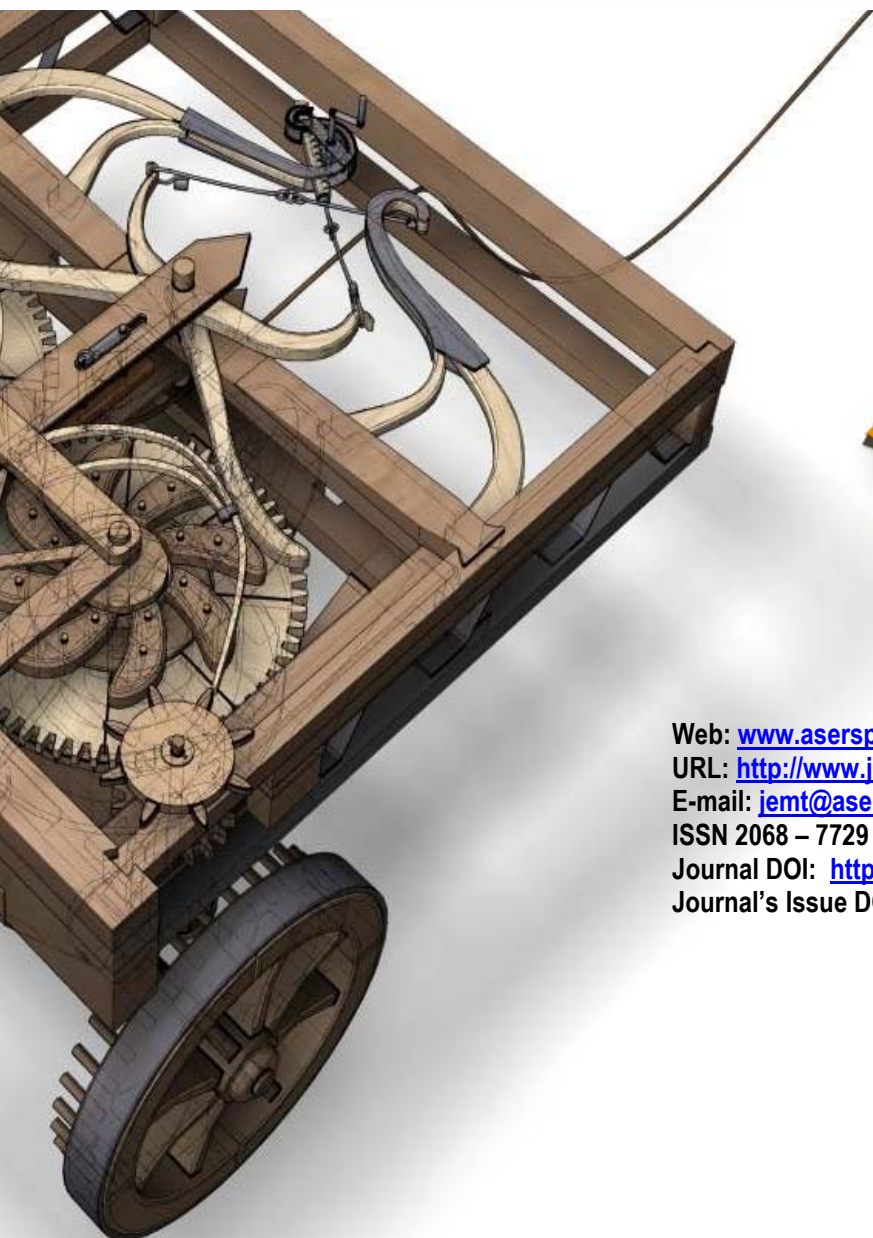
## References

- [1] Altuntas, F., Gok, M.S. 2020. The effect of COVID-19 pandemic on domestic tourism: A DEMATEL method analysis on quarantine decisions. *International Journal of Hospitality Management*, Volume 92, January 2021, 102719.
- [2] Bavel, J.J.V., et al. 2020. Using social and behavioral science to support COVID-19 pandemic response. *Nature Human Behaviour* 4, 460–471
- [3] Braun, V., Clarke, V. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. DOI: <https://doi.org/10.1191/1478088706qp0630a>.
- [4] Brouder, P. 2020. Reset redux: possible evolutionary pathways towards the transformation of tourism in a COVID-19 world. *Journal of Tourism Geographies* 22(3):1-7. DOI: [10.1080/14616688.2020.1760928](https://doi.org/10.1080/14616688.2020.1760928)
- [5] Chan, E.S.W., Hon, A.H.Y., Chan, W., Okumus, F. 2014. What drives employees' intentions to implement green practices in hotels?: the role of knowledge, awareness, concern and ecological behaviour. *International Journal of Hospitality Management*, 40.
- [6] Çetin, C., Kara, A. 2020. Global surveillance, travel, and trade during a pandemic. *Turkish Journal of Medical Sciences* 50, 527–533.
- [7] DiMaggio, P. 1996. Are art-museum visitors different from other people? The relationship between attendance and social and political attitudes in the United States. *Poetics*, 24(2–4), 161–180. DOI: [https://doi.org/10.1016/S0304-422X\(96\)00008-3](https://doi.org/10.1016/S0304-422X(96)00008-3).
- [8] Doxanaki, A. 2017. Public perceptions about archaeology and its interrelation with museums: a case study of the archaeological museums in Athens, Greece. *International Journal of Advanced Research and Review*, 2(2), 15–35.
- [9] El-Said, O., Aziz, H. 2021. Virtual tours a means to an end: an analysis of virtual tours' role in tourism recovery post COVID-19. *Journal of Travel Research*. DOI: <https://doi.org/10.1177/0047287521997567>.
- [10] Farokhi, O.S. 2019. Evaluation of the Role of Iran National Museum in the Cultural Tourism in Iran. 375..
- [11] Fuchs, G., Reichel, A. 2006. Tourist destination risk perception: the case of Israel. *Journal of Hospitality & Leisure Marketing*, 14, 83–108. DOI: [https://doi.org/10.1300/J150v14n02\\_06](https://doi.org/10.1300/J150v14n02_06)

- [12] Griffin, J. 1998. Learning science through practical experiences in museums. *International Journal of Science Education*, 20(6), 655–663. DOI:<https://doi.org/10.1080/0950069980200604>.
- [13] Guerin, R.J., Toland, M.D. 2020. An application of a modified theory of planned behavior model to investigate adolescents' job safety knowledge, norms, attitude and intention to enact workplace safety and health skills. *Journal of Safety Research*, 72, 189–198. DOI:<https://doi.org/10.1016/j.jsr.2019.12.002>
- [14] Güner, R., Hasanoglu, I., Aktas, F. 2020. Covid-19: prevention and control measures in community. *Turk. J. Med. Sci.* 50, 571–577.
- [15] Han, H., Al-Ansi, A., Chua, B. L., Tariq, B., Radic, A., Park, S.H. 2020. The post-coronavirus world in the international tourism industry: Application of the theory of planned behavior to safer destination choices in the case of us outbound tourism. *International Journal of Environmental Research and Public Health*, 17(18), 1–15. DOI:<https://doi.org/10.3390/ijerph17186485>.
- [16] Han, H., Hyun, S.S. 2017. Fostering customers' pro-environmental behavior at a museum. *Journal of Sustainable Tourism*, 25(9), 1240–1256. DOI:<https://doi.org/10.1080/09669582.2016.1259318>.
- [17] Hao, F., Xiao, Q., Chon, K., 2020. COVID-19 and China's hotel industry: impacts, a disaster management framework, and post-pandemic agenda. *International Journal of Hospitality Management* 90, 102636
- [18] Higgins-Desbiolles, F. 2020. Socialising tourism for social and ecological justice after COVID-19. *Tourism Geographies*, 22(3), 610–623. DOI:<https://doi.org/10.1080/14616688.2020.1757748>.
- [19] Itani, O.S., Hollebeek, L.D. 2021. Light at the end of the tunnel: Visitors' virtual reality (versus in-person) attraction site tour-related behavioral intentions during and post-COVID-19. *Tourism Management*, 84, 104290. DOI:<https://doi.org/10.1016/j.tourman.2021.104290>.
- [20] Kaplan, R., Kaplan, S. 1989. *The Experience of Nature: A Psychological Perspective*, CUP archive.
- [21] Piguillem, F., Shi, L. 2020. Optimal Covid-19 Quarantine and Testing Policies. CEPR Discussion Paper No. DP14613.
- [22] Kılıç, R., Hatipoğlu, Ç.A., Günes, C. 2020. Quarantine and its legal dimension. *Turkish Journal of Medical Sciences* 50, 544–548.
- [23] Navarrete, T. 2019. Digital heritage tourism: innovations in museums. *World Leisure Journal*, 61(3), 200–214. DOI: <https://doi.org/10.1080/16078055.2019.1639920>
- [24] Page, S., Song, H., Wu, D.C. 2012. Assessing the impacts of the global economic crisis and swine flu on inbound tourism demand in the United Kingdom. *Journal of Travel Research*, 51(2), 142–153. DOI:<https://doi.org/10.1177/0047287511400754>.
- [25] Polyzos, S., Samitas, A., Spyridou, A.E. 2020. Tourism demand and the COVID-19 pandemic: an LSTM approach. *Tourism Recreation Research*, 0(0), 1–13. DOI:<https://doi.org/10.1080/02508281.2020.1777053>
- [26] Pujol, L., Lorente, A. 2013. The Virtual Museum: a Quest for the Standard Definition. *Archaeology in the Digital Era. Proceedings of the 40th Annual Conference of Computer Applications and Quantitative Methods in Archaeology (CAA)*, 40-48.
- [27] Samaroudi, M., Echavarria, K.R., Perry, L. 2020. Heritage in lockdown: digital provision of memory institutions in the UK and US of America during the COVID-19 pandemic. *Museum Management and Curatorship*, 35(4), 337–361. DOI:<https://doi.org/10.1080/09647775.2020.1810483>.
- [28] Seymour, V. 2016. The human-nature relationship and its impact on health: A critical review. *Frontiers in Public Health*, 4(NOV), 1–12. DOI:<https://doi.org/10.3389/FPUBH.2016.00260>.
- [29] Sohrabi, C., et al. 2020. World health organization declares global emergency: a review of the 2019 novel coronavirus (Covid-19). *International Journal of Surgery* 76, 71–76.
- [30] Towards 2020. The British Museum's Strategy. 2020. Published by British Museum, 5. [https://www.britishmuseum.org/sites/default/files/2019-10/Towards\\_2020-The\\_British\\_Museum\\_Strategy.pdf](https://www.britishmuseum.org/sites/default/files/2019-10/Towards_2020-The_British_Museum_Strategy.pdf)
- [31] Vayanou, M., Chrysanthi, A., Katifori, A., Antoniou, A. 2020. Cultural heritage and social experiences in the times of COVID 19. *CEUR Workshop Proceedings*, 2687, 2–5.

- [32] Verma, V.K., Chandra, B., Kumar, S. 2019. Values and ascribed responsibility to predict consumers' attitude and concern towards green hotel visit intention. *Journal of Business Research*, 96 (October 2018), 206–216. DOI:<https://doi.org/10.1016/j.jbusres.2018.11.021>.
- [33] Yuan, Y. (Selena). 2016. The Value of Anthropology in Museum Education A Case Study of Art Education through Ethnographic Objects at the Pitt Rivers Museum
- [34] Zbucnea, A., Romanelli, M., Bira, M. 2020. Strategica. In STRATEGICA International Academic Conference - Eighth Edition Bucharest, Romania, October 15-16, 2020 Preparing for Tomorrow, Today (p. 929). [https://www.researchgate.net/profile/Alexandra\\_Zbucnea/publication/345730256\\_Strategica\\_2020\\_Preparing\\_for\\_Tomorrow\\_Today/links/5fabfb0e458515078107ff58/Strategica-2020-Preparing-for-Tomorrow-Today.pdf#page=680](https://www.researchgate.net/profile/Alexandra_Zbucnea/publication/345730256_Strategica_2020_Preparing_for_Tomorrow_Today/links/5fabfb0e458515078107ff58/Strategica-2020-Preparing-for-Tomorrow-Today.pdf#page=680).
- [35] ICOM. 2020. Museums, museum professionals and COVID-19: survey results, International Council of Museums.
- [36] UNWTO. 2020. Supporting Jobs and Economies through Travel and Tourism – A Call for Action to Mitigate the Socio-Economic Impact of COVID-19 and Accelerate Recovery. Supporting Jobs and Economies through Travel and Tourism – A Call for Action to Mitigate the Socio-Economic Impact of COVID-19 and Accelerate Recovery.
- [37] UNWTO.(2021). <https://www.unwto.org/news/tourist-arrivals-down-87-in-january-2021-as-unwto-calls-for-stronger-coordination-to-restart-tourism>.
- [38] <https://www.travelandleisure.com/attractions/museums-galleries/museums-with-virtual-tours>.
- [39] [https://www.hosteltur.com/136189\\_el-turismo-rural-y-de-naturaleza-seran-los-primeros-en-recuperarse.html](https://www.hosteltur.com/136189_el-turismo-rural-y-de-naturaleza-seran-los-primeros-en-recuperarse.html)

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