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## **Imprint of action : the sociocultural impact of public activities in archaeology**

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### **Citation**

Boom, K. H. J. (2018, October 16). *Imprint of action : the sociocultural impact of public activities in archaeology*. Sidestone Press, Leiden. Retrieved from <https://hdl.handle.net/1887/66266>

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**Title:** Imprint of action : the sociocultural impact of public activities in archaeology

**Issue Date:** 2018-10-16

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## Case study: Invisible Monuments

### 5.1 Introduction

This chapter discusses the third case study of this PhD research. As with the former two case studies discussed, this chapter too describes the impact of a public activity in archaeology on participants; The *Invisible Monuments, Digital Memory* event (described from here on out as the *Invisible Monuments* event). Though *Invisible Monuments* forms part of the NEARCH project, the activity is not connected to the You(R) Archaeology contest, nor is it connected to DOMunder. However, like the other two activities, it connects ‘the public’ with an archaeological site through a specific public activity built on specific goals. Furthermore, the organizers of the event have a similar goal; to increase people’s connection to and interaction with archaeology, and thereby enhance their level of interpretation and increase their historical knowledge.

As in the former chapter, which discussed the *You(R) Archaeology* contest, the current case is built on two types of goals; research goals, specifically set for this PhD research, and activity goals, which were set by the organiser of the activity. The former goals will be discussed in section 5.2, the latter will be discussed in the methodology subchapter 5.4.2.

After the description of the research goals, the context of the activity will be explained in section 3. It provides background information about the activity which is later used for the creation of the methodological framework and will be referred to when discussing and interpreting the data.

As with the other two case studies, data were gathered through an online survey. In section 4, the procedure for the creation of the survey as well as its methodological framework will be described. Matarasso’s framework on socio-cultural indicators is once again implemented as a foundation for the methodology and acts as a leitmotiv in terms of content discussion. As with the other case studies, the activity goals set by the organisation of the *Invisible Monuments* activity were leading in the creation of the final indicators and subsequent questions. Analysis of the data will be discussed in section 5; section 6 concludes the data analysis.

### 5.2 Research goals for this case study

Unlike the *You(R) Archaeology* case study, here we have only one general research goal, which is quite similar to the second research goal of the *You(R) Archaeology* case study:

to create a comparable case study in terms of methodology, scope, and data. This is necessary to make analyses and cross-comparisons between the different datasets possible. For example, the *Invisible Monuments* activity affects participants in their connection to archaeology, which is also one of the main activity goals. While different in scope and geographic setting, in this the *Invisible Monuments* activity is quite similar to the DOMunder case study: both activities invite participants to search for clues to learn more about archaeological objects, in order to make them feel more connected to local archaeology and history. Creating a commensurable dataset, based on one methodological framework, is a requirement for a valid comparison between data of the three case studies; this comparison will be made in the next chapter of this thesis (chapter 6).

In addition to the general goal, the case study is also built on certain specific research goals, namely:

1. To see whether participants were motivated enough to finish such an activity, and whether or not the trail actually increased their motivation;
2. To see whether such an activity increases participant's knowledge;
3. To see if there is a difference in data between touristic and residential participants;
4. To see if there is a difference in data from the different age categories as this was quite a technological activity (see next paragraph).

### 5.3 About the Invisible Monuments, Digital Memory event

This case study describes a unique public archaeological activity held in Thessaloniki (Greece) in the late summer of 2016. Fully titled '*Invisible Monuments*, Digital Memory', this event is part of the NEARCH programme and listed under activity A6: 'Promoting dialogue and social integration in a multicultural society. The case-studies of Saint-Denis and Thessaloniki' (NEARCH 2013, 4). As written in the NEARCH programme outline, the main objective of the activity was that 'The Aristotle University will pursue its field involvement in the framework of the educational policies and the museological approaches of various Greek museums, aiming at exploring the meaning of cultural diversity and social exclusion through the prism of the individuality of social groups, including immigrants as well as groups of different religion and ethnicity' (NEARCH 2013, 4). Just like the *You(R) Archaeology* contest described in the previous chapter, the *Invisible Monuments* activity forms part of the broader goal of the NEARCH project to understand the relation between (local) communities and archaeology and to find new ways of interacting with them. This specific activity was focused on understanding how various groups and individuals would react to a new and innovative way of interacting with and learning about archaeology. Through studying the effects on, and demographics of, the participants of the activity, the democratisation of archaeology and archaeological heritage management can be investigated.<sup>30</sup>

The main idea was "to combine digital social media and mobile phone technology to raise public awareness of antiquities in an innovative and unconventional way" (Theodoroudi *et al.* 2016, 1). This idea is largely based on the outcomes of Theodoroudi's Master Thesis called 'Invisible cities: Discovering the palimpsest of Thessaloniki with

30 Eleftheria Theodoroudi, personal comment 12-1-2017

the use of new technologies’, which describes the dissonance between the availability and visibility of ‘hidden monuments’ within Thessaloniki and the absence of the public’s connection to and memory of them (Theodoroudi 2016). The main objective of the *Invisible Monuments* event was to activate and invite passers-by, through interaction, and stimulate them to find out more about archaeological monuments in the city of the Thessaloniki. The assumption was that this act would help them to become more aware of the unfamiliar history of the city. Seven ‘invisible’ archaeological sites scattered across the city of Thessaloniki were chosen as the points of interest: The Basilica of Hagia Sophia, the Snakes’ Column (Yılan Mermer), the Circus of Thessaloniki, remains of a Neolithic settlement, remains of Roman baths, the Cubiculum burial building, and the Sergios Pragamas’ Temple. These seven archaeological monuments were chosen because of the relatively short, walkable, distance between them and their diversity in terms of conservation and visibility (figure 5.1). The monuments were classified into three categories (Theodoroudi *et al.* 2016, 2):

1. Monuments that are not physically preserved and hence not visible anymore;
2. Monuments inaccessible for the public, for instance because they are privately owned;
3. Monuments that are physically preserved and visible, but are invisible due to neglect or because they are part of everyday life.

To create a better connection between the public and the monuments, the public was provided with short but precise and functional information, including one or two photos of what the monument looked like in the past. Combined, these would explain both the unique and commonplace of those monuments; the interaction between passers-by and the monuments was to be “easy, fast, simple, cheap, and agreeable” (Theodoroudi *et al.* 2016, 2). These short texts, about 150 words per monument, written in both Greek and English, were put online on dedicated web pages per monument, on a website created especially for the *Invisible Monuments* event. The site was

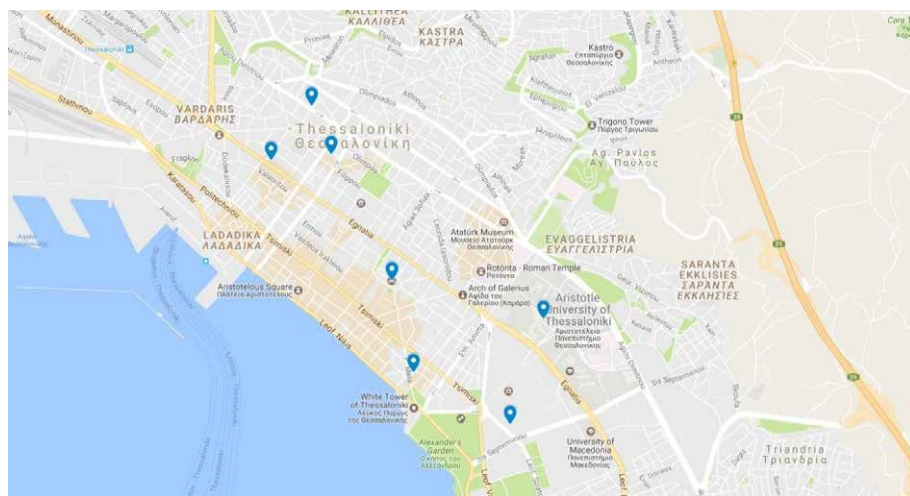


Figure 5.1: Map showing the location of the seven ‘Invisible Monuments’. Copyright: Google, Google Maps.

geared towards fast loading of the individual monument pages as well as good visibility for mobile phones.<sup>31</sup> Apart from the short text and images, each dedicated monument page also contained an icon which visitors could interact with, leading them to a page with tips and suggestions, for instance on how to visit a certain museum if they wanted to know more about that particular monument. Because the interaction was meant to be fast and easy, QR technology was used, allowing passers-by to scan a QR code attached to, or close to, the monuments, leading them towards the specific monument webpage on the *Invisible Monuments* website. These QR codes were also distributed on posters placed across the city, but near the monuments, such as in shops, cafés, bars and bus-stops. Dedicated to the nearest ‘invisible’ monument, these posters were visibly recognizable as part of the Invisible Monuments activity, or instance by showing the logo and banner so that passers-by could recognize that specific poster was part of a larger set and broader activity.

In addition to the posters, flyers, and website, a social media campaign was initiated. It consisted of three different social media channels: Facebook<sup>32</sup>, Instagram<sup>33</sup>, and Twitter.<sup>34</sup> The Facebook page in particular saw major success, as the *Invisible Monuments* Page gathered over 1200 ‘likes’.<sup>35</sup> A Facebook ‘Event’ was also created to let the Facebook users know the dates, times, and starting location. On this Event Page, 124 Facebook users indicated to actually ‘go’ and another 120 indicated to ‘consider’ going. Less successful were the two other channels in terms of reach: The Instagram channel has over 60 followers and Twitter only 15. In addition to the social media campaign, a press release was distributed and several interviews were held on both local and national radio- and television-stations.

Initially, the activity’s time span was restricted to one week. This official event was held between the 24<sup>th</sup> of September and the 2<sup>nd</sup> of October in order to coincide with the European Cultural Heritage Days which were celebrated on the 24<sup>th</sup> and 25<sup>th</sup> of September of 2016. Many participants have expressed their interest to do another round of the event, or even to open up the event and make it a permanent activity for both residents and tourists visiting Thessaloniki. The enthusiasm of some of the participants can be also be noted in the results of the survey which participants were asked to fill-out. This survey was the main source for gathering data for the current study. Both the creational process and the results of this survey will be discussed in the next subsection.

## 5.4 The surveys

### 5.4.1 Introduction

To gain insight into the sociocultural impact of participating in the *Invisible Monuments* event, a survey was created and put online for participants to fill out. The survey had two foci: the first was to gather data on the sociocultural impacts taking place, necessary for specific analyses for this PhD research. The second focus was to

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31 [http://invisiblemonuments.web.auth.gr/index\\_en.html](http://invisiblemonuments.web.auth.gr/index_en.html)

32 <https://www.facebook.com/events/2084405061785282/>

33 <https://www.instagram.com/invisiblemonuments/>

34 [https://twitter.com/invis\\_monuments](https://twitter.com/invis_monuments)

35 Last date checked: 17-01-2017

gather specific data on visitor responses which the Aristotle University planned to use to evaluate the event and validate both time and monetary investments to the European NEARCH project.

Like in the *DOMunder* and *You(R) Archaeology* case studies, Matarasso's framework (1997) is used to create a set of indicators, divided over seven 'headers'. This means that this subchapter will follow the same lines in terms of structure and content. In the sections 2 and 3 the context of the data were described and the research goals were discussed. In this section, specifically in the next sub-section (5.4.2), the activity goals, set by the Aristotle University, the organizer of the event, will be described. Together, these two sets of goals form the backbone of the methodological consolidation. After the methodology sub-section, the results of the survey will be analysed (section 5). This analysis will mainly focus on the relevant data gathered from the survey and its relation to the methodology; some initial discussions on specific results and their relation to the other case studies will be raised as well, but the full comparison between case studies is done in the next chapter of this thesis (section 6).

### 5.4.2 Methodology

As described, the overarching research goal of this case study was to enlarge the data pool for comparison between the three individual case studies in order to analyse and compare sociocultural impact. To achieve this goal, the same methodological framework as for the other two case studies is used: Francois Matarasso's list of sociocultural indicators (1997). While each case study, including this one, has different activity goals, these can all be translated and applied within the same methodological backing, which is in turn based on the fact that the three case studies share a common research goal: the comparison of data. This means that this case study also makes use of the seven 'headers', but the survey questions are geared specifically to it. Therefore, the questions are different in terms of order and number from the previous two case studies.

The activity goals for the *Invisible Monuments* event were designed make people interact with certain monuments located in Thessaloniki, or, more specifically, to turn this hidden past into a place of living memory. This would lead to a better understanding of people's relation with the hidden past. Aristotle University used the city of Thessaloniki as a test case and seven *Invisible Monuments* where chosen as research markers. The activity goals set up where ranked from strict to wide, from 'main idea', to 'objective', ultimately leading to 'ambition', and vary in degree of complexity and achievability. For this paragraph, these specific goals will be listed ranked from 1 to 3, where the ambition goal is ranked 1; the idea goal ranked 2 and the objective goal ranked 3:

1. According to *Theodoroudi et al. (2016, 1)*, the project's ambition was to turn 'hidden and forgotten sites into places of living memory, connecting them with people's everyday life by exploiting simple, user-friendly, and widely familiar digital technology';
2. The main idea was to 'combine digital social media and mobile phone technology to raise public awareness of antiquities in an innovative and unconventional way' (*Theodoroudi et al. 2016, 1*);

3. The main objective was to ‘re-introduce selected archaeological sites of Thessaloniki’s rich archaeological heritage which remain unnoticed or unknown to the public because they are either hidden under the urban development without any indication of their place or have already been removed, or simply ignored within the chaotic clutter of the urban landscape’ (Theodoroudi *et al.* 2016, 1).

It was noted that the most difficult part of the event would probably be to persuade people to actually get involved with these monuments, or, more specifically, to get them to interact with them (via the QR codes) to get more information and learn about their histories. Only after this was achieved, would it be possible to ‘re-introduce’ these forgotten monuments into the collective memory as active inhabitants of the city’ (Theodoroudi *et al.* 2016, 1). It is interesting that the word ‘inhabitants’ was used in this context because the NEARCH programme connects exploring the meaning of cultural diversity and social exclusion to this case study (NEARCH 2013, 4), but a focus on inhabitants of the city restricts this scope. The focus on residents of Thessaloniki is also made apparent as Theodoroudi, when referring to digital means to communicate and connect to the public, writes that they are ‘preferred by the heritage managers but sadly ignored by the non-touristic public’ (Theodoroudi *et al.* 2016, 1). Theodoroudi also writes that the goal of the survey was to ‘understand the impact of our intervention on the interests of people and the importance of archaeology to them, in particular in this rather unconventional and non-conformist version presented’ (Theodoroudi *et al.* 2016, 1).

We can summarize the above into the goal of raising awareness in the residents of Thessaloniki so that they can learn about, and possibly and hopefully renew, their connection with the city’s history. This fits well within the overall NEARCH project goals, especially those listed under theme A of the project’s programme which focusses on ‘gathering valuable data for a better understanding of the public image of archaeology and heritage and their importance in the daily life of the Europeans’ as well as the suggestion to ‘different mediation actions aiming to attract the attention of the public, both young and adult, towards the archaeological sites that surround them or that they discover during their travels, to stir impressions, emotions, and testimonials’ (NEARCH 2013, 3). However, the inclusion of different groups into this research, such as immigrants and groups of different religion and ethnicity, was not explicitly mentioned, nor made apparent throughout the event, though of course everybody was welcome to attend.

This paragraph deals with the implementation and application of Matarasso’s indicators (1997) on sociocultural actions for the purpose of creating a methodological framework. The way in which these are formed is not different from for the other two case studies, and its use as methodological framework holds the same importance and weight. Matarasso’s headings – Local image and identity, personal development, social cohesion, community empowerment and self-determination, imagination and vision, and health and well-being – are taken as vantage points for the creation of relevant sociocultural indicators and survey questions (table 5.1).

Most of the questions formulated in the last column ended up in the online questionnaire which was hosted on the website of the *Invisible Monuments* event and was open to every participant of the event to fill out. The creation of the survey was a

| <b>Matarasso's headings</b>                         | <b>Tier 1<br/>Applicable actions based on Matarasso's list</b>                                                                                                                                                                                       | <b>Tier 2<br/>Specific Invisible Monuments actions</b>                                                                                                                                                                      | <b>Relevant sociocultural indicators</b>                                                                                                                                                                                                                                                                           | <b>Possible questions</b>                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Local image and identity</i>                     | Develop pride in local traditions and culture.<br><br>Help people feel a sense of belonging and involvement.<br><br>Improve perceptions of marginalized groups.<br><br>Make people feel better about where they live.                                | Involve residents with the city's history<br><br>Increase resident familiarity with the city<br><br>Increase awareness about Thessaloniki's invisible or hidden monuments                                                   | Number of participants and whether they are resident or tourist<br><br>Number of international/national tourists<br><br>Increase in pride for local/national/inter-national archaeology                                                                                                                            | Do you consider yourself to be a tourist or a resident?<br><br>Do you feel proud of (your) local/national or international archaeology after participating in the event?<br><br>Do you feel more connected to local/national/international archaeology after your participation?                               |
| <i>Personal Development</i>                         | Increase people's confidence and sense of self-worth.<br><br>Contribute to education.<br><br>Help build new skills and work experience<br><br>Contribute to people's employability.<br><br>Help people to develop or take up careers in archaeology. | Educate people about the history of Thessaloniki<br><br>Increase knowledge about archaeology in general<br><br>Increase participant skills in using digital media<br><br>Increase understanding of the value of archaeology | Increase in archaeological knowledge<br><br>Level of contribution to personal traits<br><br>Number of participants indicating to want to use technological innovation for new projects as well.<br><br>The number of participants indicating to better understand the value of archaeology<br><br>Time involvement | Did you learn something new during your participation?<br><br>Did you learn more than you expected to?<br><br>How much time did you spend on the event?<br><br>After participating in the event, do you feel that you now better understand the value of archaeology? Are you more confident to talk about it? |
| <i>Social Cohesion</i>                              | Develop community networks and sociability.<br><br>Provide a forum for intercultural understanding and friendship.<br><br>Develop contact between generations.                                                                                       | Stimulate participant connection with the history of the city of Thessaloniki<br><br>Stimulate teamwork on completing the event; facilitate meeting with other people<br><br>(Re)create places of memory                    | Connectedness to the area of the city of Thessaloniki and its people<br><br>Number of participants indicating to have teamed up for the event<br><br>Number of participants meeting new people<br><br>Connectedness to local/national/inter-national archaeology                                                   | Do you feel more connected to the area and its people?<br><br>Did you meet new people during your participation?                                                                                                                                                                                               |
| <i>Community Empowerment and self-determination</i> | Encourage local self-reliance and project management.<br><br>Be a means of gaining insight into political and social ideas.                                                                                                                          | Instill enthusiasm for archaeology and the history of Thessaloniki<br><br>Stimulate completion of the event by introducing a variety of incentives                                                                          | Number of participants indicating to want to learn more about archaeology<br><br>Number of completed trails                                                                                                                                                                                                        | Do you feel that you want to learn more about archaeology after finishing the event?<br><br>Did you complete the event?                                                                                                                                                                                        |
| <i>Imagination and vision</i>                       | Allow people to explore their values, meanings and dreams.                                                                                                                                                                                           | Stimulate artistic and verbal commentary on archaeological monuments, for instance via Social Media                                                                                                                         | Number of comments and photos contributed                                                                                                                                                                                                                                                                          | -                                                                                                                                                                                                                                                                                                              |
| <i>Health and well-being</i>                        | Have a positive impact on how people feel.<br><br>Provide a unique and deep source of enjoyment – part of a person's quality of life.                                                                                                                | Stimulate physical movement<br><br>Increase satisfaction                                                                                                                                                                    | Level of satisfaction<br><br>Level of contribution to personal emotions                                                                                                                                                                                                                                            | How much did participating affect the following emotions [happy/useful/etc.]?<br><br>Did you feel satisfied after your submission?                                                                                                                                                                             |

Table 5.1: Sociocultural indicators for the You(R) Archaeology contest. After Matarasso (1997) and the North East Regional Museums Hub Tool.

collaborative effort of the School of History and Archaeology at Aristotle University and the author of this thesis. The former party focussed on getting insights into participants' reaction and opinions on the event, the latter focussed on gaining insight into the sociocultural effects, as described above. Initially, the idea was to host two separate surveys, but in order to make it easier and faster for participants to the event share their ideas, it was decided to merge them into one survey. This meant, however, that the survey was somewhat longer than is generally considered effective for an online survey.<sup>36</sup> The survey had 29 questions in total, including demographics. It was not made clear to the survey participants that there was this difference in focus. The questions were both stated in an open and closed form, with the former geared towards giving respondents an opportunity to annotate a previously given closed question. The survey was put online on 'Google Forms'<sup>37</sup>, an online and free form and survey tool by Google and was prepared in both English and Greek. The survey was open from the 23<sup>rd</sup> of September until the 31<sup>st</sup> of December, giving participants ample opportunity to fill out the survey after their visit in late September and the beginning of October, but giving other people, who for instance could not attend the initial event date, the opportunity to do the event at a later stage and fill out the survey as well. However, most of the survey responses (194 out of 196) were gathered on or between the actual event days.

In contrast to the DOMunder and *You(R) Archaeology*, for this online survey there was no pool of e-mail addresses available to send the survey to. Instead, participants of the event were expected to fill-out the survey. To stimulate participants to fill out the questionnaire it was communicated, both on the website as well as in the intro of the survey, that the first 100 submissions would receive a small gift. However, this meant that there was no clear estimate of how many responses would be gathered ultimately. While we know that the website of the event, which hosted all the necessary information for participants to complete the event, was visited over 5000 times in a span of two weeks, this does not automatically have to result in that number being the actual number of event participants and even less likely the number of participants who actually completed the event and filled out the survey. Unfortunately, it was not noted how many people actually participated in the event. However, there were 5000 visits on the *Invisible Monuments* website, with 68% of the visits performed from a mobile device, such as a tablet or smartphone, during the time of the tour – between the 24<sup>th</sup> of September until the 2<sup>nd</sup> of October. We can assume that those visits were made by people doing the tour, which results in a total number of 3400 visitors. With a total of 196 survey responses (5 in English and 191 in Greek), this means that the survey is not representative of the total visitor population (with a 95% confidence interval this results in a 6.8% error margin).

## 5.5 Results

### 5.5.1 Demographics

Four age groups were chosen for the questionnaire. In total, 196 participants responded to this question (also the total number of participants overall) with 12 participants

36 See [https://www.surveymonkey.com/blog/2011/02/14/survey\\_completion\\_times/](https://www.surveymonkey.com/blog/2011/02/14/survey_completion_times/)

37 <https://docs.google.com>

Figure 5.2 (right): Distribution of age groups (n=196).

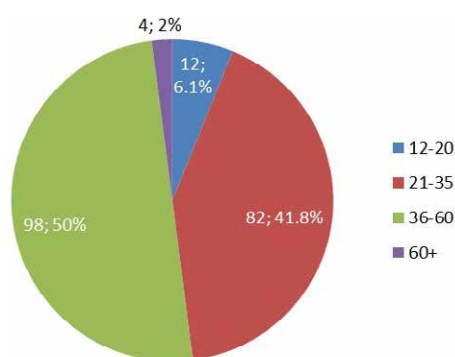
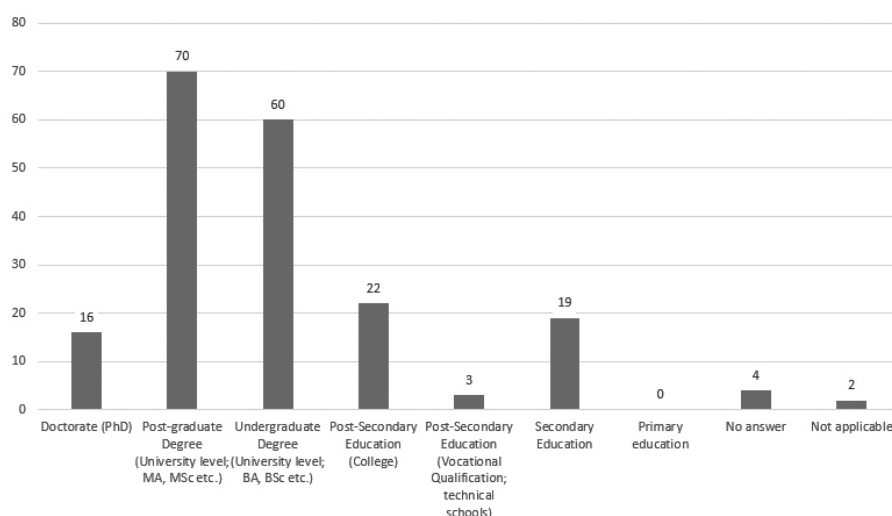


Figure 5.3 (below): Highest education level. Absolute numbers (n=196).



for the age category of 12-20, 82 for 21-35, 98 for 36-60 and 4 for Older than 60. This means that the relative size of the age groups of the participants varied considerably, but the majority was aged between 36 and 60 years old (50%), followed by the age group of 21-35 (42%, figure 5.2). Only 6% was younger and 2% older than those categories. The high number of ‘middle aged’ participants can be the result of the fact that many participants indicated to be students who were informed about the activity through their institution. Indeed, according to the organizers, the four universities of Thessaloniki were the focus of the PR-campaign.<sup>38</sup> Gender-wise it seems that a majority was female (58%) versus 37% male participants; 5% did not want to disclose information about their gender.

The observation that university students were participating in the activity can be supported by the data on education level (figure 5.3). 30.6% (60 participants) had obtained an undergraduate degree, 35.7% (70 participants) had obtained a master’s degree and even 8.2% (16 participants) indicated to have obtained a PhD-level degree. In 2013, there were a total number of 35.457 doctorate holders in Greece, aged under 70, who obtained their degree between 1990-2013 (EKT 2015).

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Compared to the latest census from Greece (2011 – Hellenistic Statistical Authority 2016), this means that about 0.3% of the total Greek population had obtained a PhD degree. There were no statistics found for the total number of Master's degree holders in Greece. However, we can estimate that 36% Master's degree holders and 30.6% Undergraduate degree holders within this survey population is relatively high compared to general population amounts.

In total, 119 people provided information about their profession; 52 professions could be distilled. The number of people working in education and connected to history was quite high: 17 out of 119 (14.3%) indicated to be archaeologists and 20 (16.8%) to be teachers. The 50 other professions mentioned scored single or double numbers, but none of them more than 3 per profession. Included were, for instance, lawyers, doctors, mathematicians, and biologists. These professions are arguably connected to a higher education, but there were, for instance, also a barman and waiter present. While we cannot connect profession with education level directly, these numbers, together with the fact that some respondents indicated to be university students, indicate that higher educated people are more represented than lower educated people in the *Invisible Monuments* activity.

It seems that the activity has reached a new audience in terms of age, as many participants are younger than what is mostly seen in archaeological activities, but in terms of education, the activity fits with the overall picture that mostly higher educated people visit archaeological activities (Kadja *et al.* 2017; Maer *et al.* 2016).

In total, 185 out of 196 participants (94.4%) indicated to have Greece as a country of residence, the other 5% came from a total of 8 other countries and one person (0.5%) gave no answer to this question.

To see the effects of the *Invisible Monuments* event on participant's knowledge of, and connection to, the various monuments located in Thessaloniki, as one of the main goals of the event, we wanted to know how familiar they already were with the monuments before the actual participation. As it turns out, 84.2% (165) of the participants knew one or more of the monuments present; 15.3% (30) did not and 1 person (0.5%) did not know how to answer this question (figure 5.4). The two most well-known monuments were the circus (87.9%, 152 of the participants were familiar) and Basilica of St. Sophia (77.5%, 134 were familiar).

The circus is not visible anymore and hence cannot be visited, but recently the site was part of a reconstruction which was displayed at the info center at the Galerius Palace Complex, and hence saw public exposure through YouTube and social media. The Basilica of St. Sophia is buried under the Byzantine Temple of Hagia Sophia and the surrounding buildings. The remains of the Basilica's baptisteries form part of the Hagia Sophia church which is visible and can be visited, and is even listed, together with other Byzantine and Paleochristian monuments, as World Heritage.<sup>39</sup> This means that visibility of a monument is not necessarily a requirement for it to be known, but rather that public exposure is likely to make it familiar. Perhaps good reconstruction representations or great storytelling prove more efficient and powerful to feed the imagination and the expectations of people rather than the monument itself.

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39 <http://whc.unesco.org/en/list/456>

Figure 5.4 (right): Results for the question “Were you familiar with the monument presented here?” (n=196).

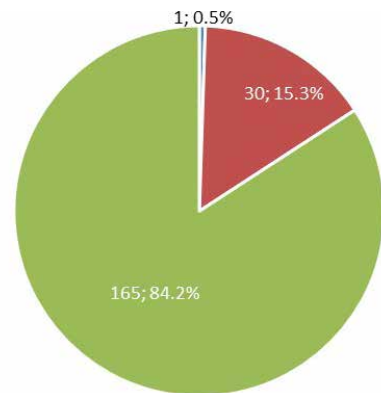
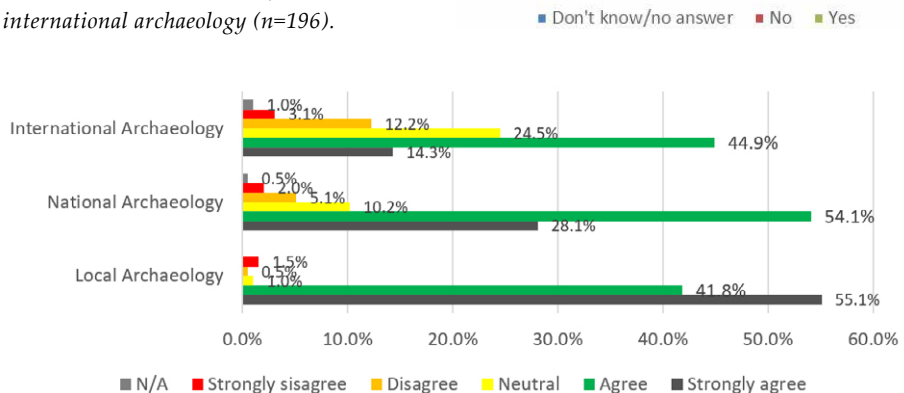


Figure 5.5 (below): Relative scores for connectedness towards local, national and international archaeology (n=196).



### 5.5.2 Local image and identity

Just as in the You(R) Archaeology case study, people were asked whether or not the activity increased their connection, towards local, national, and international archaeology.

Results show that most people felt a stronger connection with local archaeology: 41.8% (82) agreed and 51.5% even Strongly agreed (108) to the statement in connection to Local archaeology (figure 5.5). They felt less of a connection for National archaeology (54.1% Agreed (106) and 28.1% (55) Strongly agreed) and even less for international archaeology (44.9% Agreed and 14.3% Strongly Agreed). This means that the local focus of the event indeed resonated with its participants.

While we already saw that the same pattern occurred in data for ‘pride’, this data makes clear that people felt connected to archaeology much more than they felt proud of it. This could perhaps be related to the same observation noticed for valuation versus confidence in talking, where we also see a difference in handling information, more inward than outward.

The high scores for people’s connection to local archaeology are also apparent when we cross-compare connection with age categories. Overall, it seems that the age groups scored equal, with the exception of the youngest age group, which was stronger in its connection towards International archaeology, scoring no ‘negative’ results. This also counts for the oldest age groups’ scores for National archaeology, although with only 4 people scoring, this image can be distorted.

People who filled out the questionnaire also indicated to feel more connected to the people living in the area of the monuments. Together, more than half of the participants either Strongly agreed (48; 24.5%) or Agreed (82; 41.8%; figure 5.6). Thirty-three (16.8%) were neutral on this; 25 (12.8%) Disagreed and 1.5% (3) Strongly disagreed. 2.6% (5) of the participants thought this question was not applicable to them. This means that these people did not only feel a connection towards a monument, but extended this connection to the people living there. Whether this counts for only the people living close to the monuments, or also for the total population of Thessaloniki we do not know, as the boundaries for this statement were not asked, nor were they commented upon. It seems that an event such as this one, with mostly local participants, set in a local context, actually has the potential to connect not only with objects but also with its people. This is important information for future events, especially taking into consideration that connecting with people in the area was not part of the main goals of the event.

Figure 5.6 shows that in terms of connectedness to Local and National archaeology there were no big differences between the age categories. For International archaeology, however, we see that the youngest generation (12-20) feels much more connected when compared to the older generations (21-35, 36-60) and especially compared to the oldest generation (60+).

Out of the 196 participants (including visitors from abroad), there were 40 (20.4%) who indicated to be tourists; 143 (73%) considered themselves to be residents of Thessaloniki (figure 5.7). The slight majority of female participants is present in both tourist (52.5%, 21 females) and resident (60.1%, 86 females) numbers. The fact that almost three-quarters of the participants hailed from Thessaloniki means that the goal of the activity, namely to catch the Thessalonian ‘passers-by’, was achieved.

As can be seen in the table below, most participants experienced a positive impact in their pride for ‘Local’, ‘National’, and ‘International’ archaeology, as they scored ‘Agree’ the most for the former two on the question “taking part in this activity increased my pride for...” (figure 5.8). ‘Strongly Agree’ followed as second place for both Local and National archaeology, but third for International archaeology. In contrast, people both ‘Disagreed’ and ‘Strongly Disagreed’ least for Local but most for International archaeology, and also felt most neutral for the latter. This strengthens the hypothesis that people felt the strongest impact in pride for Local archaeology in particular and least in International archaeology.

Interestingly, when increase in pride is compared to the age categories, we see that the youngest group shows the strongest impact for International, National, and Local archaeology (figure 5.9). This group indicated to feel the most pride for International archaeology, with 91.7% (11). It seems that this age group connects their heritage, or their identity, with pride more easily and more strongly. However, since only 12 persons belonged to the age group of 12-20, these numbers have to be interpreted with care. The age group of 36-60 was the second highest in score overall. Although the age category of 60+ seems to vary considerably between international and national versus local archaeological regions, this is due to the fact that in total only 4 persons belonged to that age group. The age group of 21-35 seems to have felt the least increase in pride overall. Note that ‘Agreed’ is an accumulation of the scores for Agreed and Strongly Agreed; ‘Disagreed’ an accumulation of the scores for Disagreed and Strongly Disagreed.

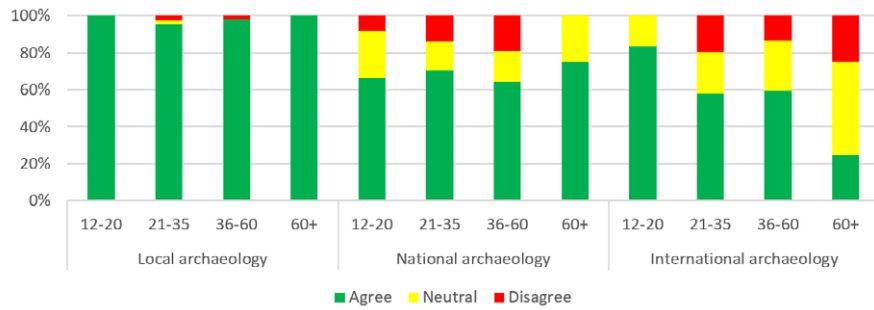


Figure 5.6 (above): Relative scores for age categories versus connectedness (n=196).

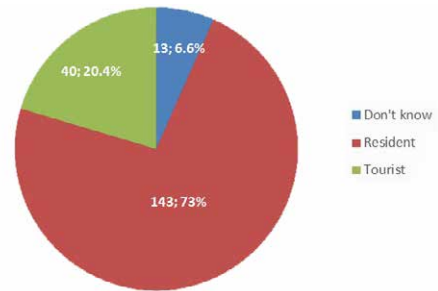


Figure 5.7 (right): Tourists versus resident distribution (n=196).

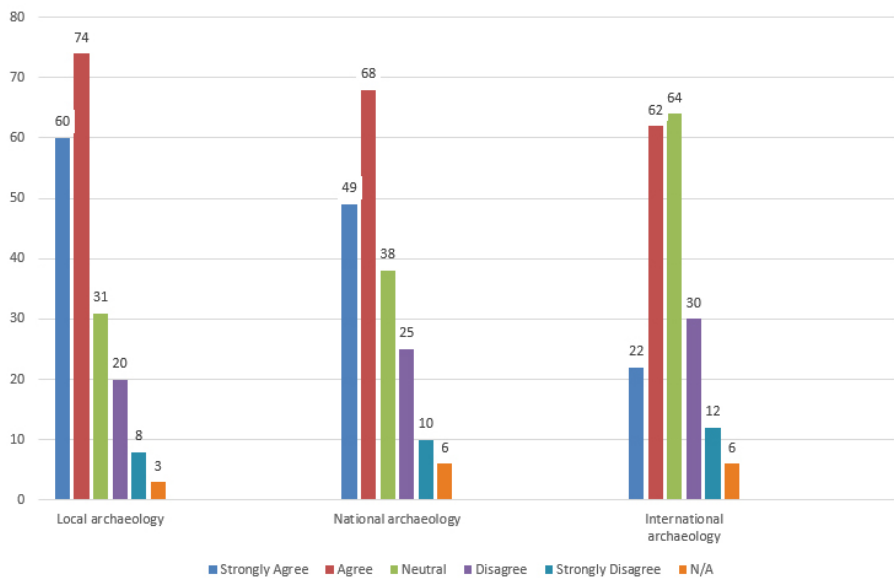


Figure 5.8: Figure showing both absolute numbers for increased pride in archaeology (n=196).

### 5.5.3 Personal development

The seven monuments were located quite close to each other; about two hours were needed to complete the tour. The biggest group of people (92 out of 196; 46.9%) spent less than 1 hour to visit the monuments (figure 5.10), which would probably not be enough to visit all monuments;<sup>40</sup> 71 people (36.2%) spent between 1 and 2 hours;

40 Eleftheria Theodoroudi, personal communication

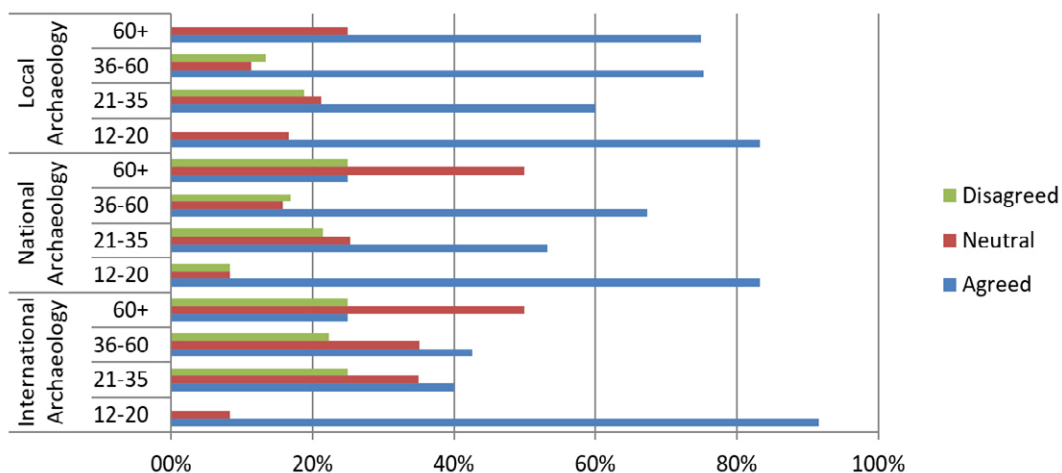


Figure 5.9: Relative increase in pride compared with age categories (n=196).

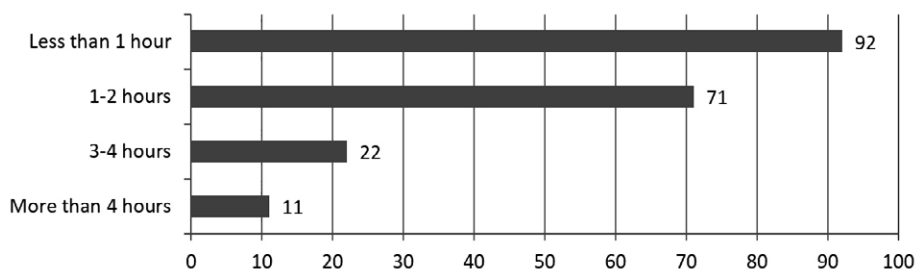


Figure 5.10: Time people spent on the activity. Absolute numbers (n=196).

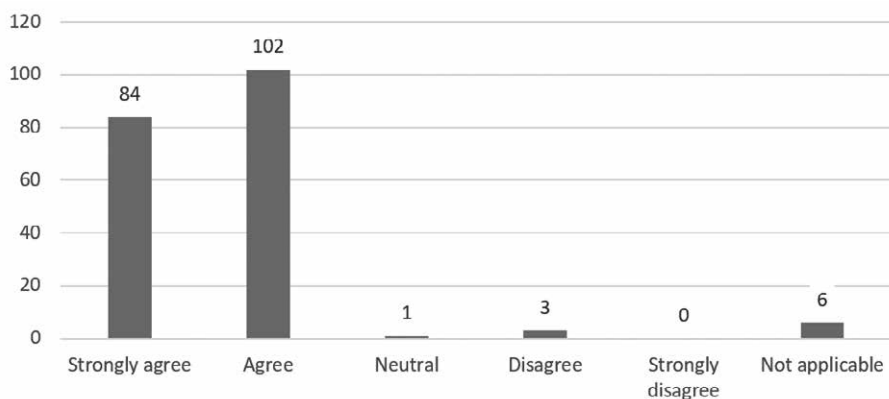


Figure 5.11: Absolute scores for knowledge increase (n=196).

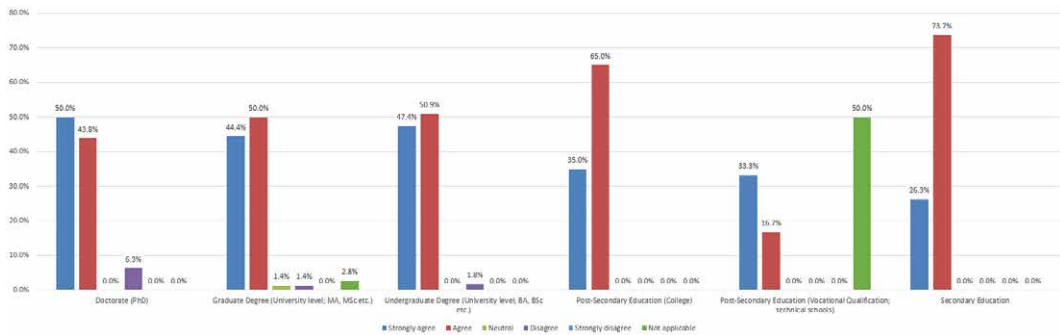


Figure 5.12: Relative scores for knowledge increase versus education level (n=190).

22 people (23.9%) between 3 and 4 hours and only 11 people (5.6%) spent more than 4 hours in total. There was virtually no difference between the gender groups.

The question asked about time spent on the activity, and not how long it took to complete it. Hence, this data cannot be used to see if people actually completed the activity within the given time or if they quit prematurely. The relatively fast pace of the event fits well with the objective to use digital and mobile media to raise awareness in a unique way: people were able to directly search for the relevant information on their mobile phones using QR codes and a specifically tailored website. The amount of information on the individual monument pages was restricted to about 150 words per monument, including links to other websites for more information.

Although increasing the knowledge of participants of the *Invisible Monuments* activity was not specifically mentioned in any of the three goals, it can be considered to be part of the goal to raise public awareness on antiquities. Furthermore, increase in knowledge is included in this survey as it provides data for comparison with the other case studies. Just as in the *You(R) Archaeology* contest, participants of the survey were asked to answer to the statement ‘Participating in this activity increased my knowledge of archaeology’ and could answer through a 5-point Likert scale, ranging from Strongly disagree to Strongly agree.

Results show that most participants learned something about archaeology, totalling 94,9% (186) with Strongly Agree scoring 42.9% (84) and Agree 52% (102; figure 5.11).

For the *Invisible Monuments* activity, it seems that people indicating to have learned the most are the ones that have a higher level of education (figure 5.12), those with a doctorate scoring 50% on Strongly Agree. This observation is strengthened by the fact that there seems to be a difference in scores between academics (Doctorate, Post-graduate, and Undergraduate) and non-academics (Secondary, Post-Secondary and Vocational) with the former scoring more Strongly agree than the latter.

The numbers shown in figure 5.12 are relative for each education level, meaning that the difference in number of people per category has been taken into account. However, one would expect that the relative high number of highly educated people, including those working in archaeology and the museum world – as indicated in the survey – would have a better knowledge than those not working in the sector. This would lead to the idea that people with a lower ‘general knowledge’ about the city and

its history could in principle learn most. According to the numbers shown here, this assumption is disproven.

People who indicated to have learned the most (in other words, strongly agreed), also spent the most time on the activity, compared to those less positive in their educational increase: 14.1% indicated to have participated between 3-4 hours and 9% more than 4 hours (figure 5.13). People who agreed scored higher in the 'Less than 1 hour' category and lower in the '3-4 hours' and 'More than 4 hours' categories; 77.8% of the Neutral people spent less than 1 hour; 66.7% of the people who disagreed spent less than 1 hour and the 1 person who Strongly disagreed spent between 1 and 2 hours. The above means that although people who Strongly agreed spent the most time in total, it doesn't mean that spending more time was more effective; 41%, the largest section of that group, spent less than 1 hour. As the majority of the people scored in the 'Less than 1 hour' category, regardless of score level, it shows that time, in this case study and contrary to the *You(R) Archaeology* case study, is not a great indicator of the perceived educational impact of the experience. Furthermore, the number of people who scored Neutral, Disagree, and Strongly disagree was low, possibly skewing the results.

Results for the question discussed above – "Participating in this activity increased my knowledge of archaeology" – was included in the survey specifically because the exact same question was asked of participants for the *You(R) Archaeology* activity, meaning that resulting data can be easily compared. This comparison will be made in chapter six of this thesis. The *DOMunder* survey included a similar subject, linked to the personal development but stated in a different way. Participants were asked if they learned something new and if this was more than expected.

Interestingly, people scored lower than for the other, comparable, question about knowledge. However, this is probably due the fact that the categories here are different. People were given only two 'positive' options in the 'knowledge increase' question (Strongly Agree and Agree), whereas here they had the option to be more nuanced as they had four 'positive' answers at their disposal (Extremely, Moderately, Somewhat, and Slightly). As discussed in the *DOMunder* chapter, these particular categories included as Likert-scale have their problems, but it is interesting to see that when people are given more options to answer, as in more nuanced categories, they take that opportunity. Because of the difference in scales and interpretation, and because the question itself is phrased differently, the 'Strongly agree' and 'Extremely' categories for both questions, for instance, cannot be compared directly but should be treated individually.

In this sense, with 27% (53) of the people scoring the highest category possible and with 56.6% (111) second highest for 'learning something new', people are still overall quite positive about the impact on learning (figure 5.14).

Almost the same scores were noted for 'learning more than expected', although these were overall slightly less positive, with more scores in the Somewhat and Slightly categories. Indeed, a Wilcoxon Signed Ranks test between 'learning something new' and 'learning more than expected' with  $n=196$  and  $p<0.001$  gives a  $Z=-3.272$ , meaning that there is a no statistically significant difference. This means that the content provided by the activity organizers about the monuments was quite new for the participants, even while they indicated to be familiar with them as discussed previously.

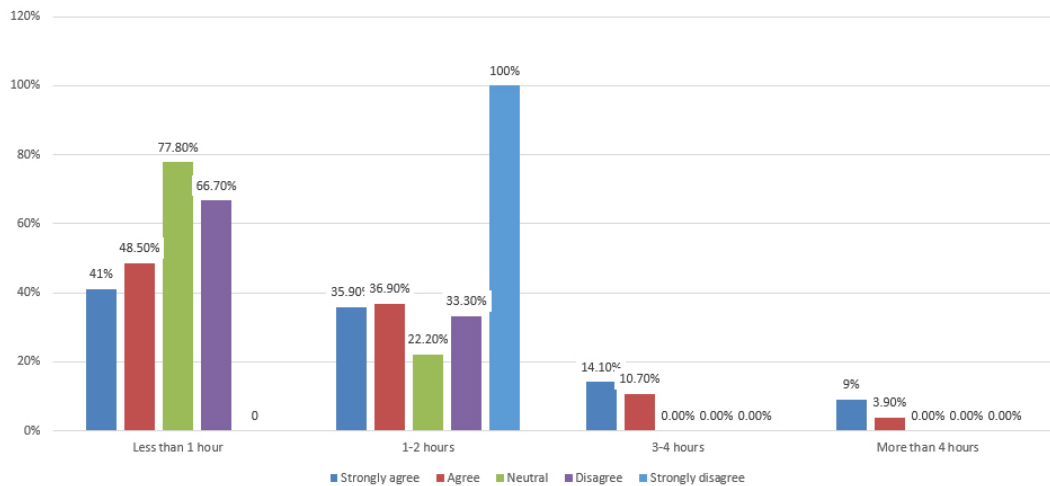


Figure 5.13: Relative scores for knowledge increase versus time spent (n=194).

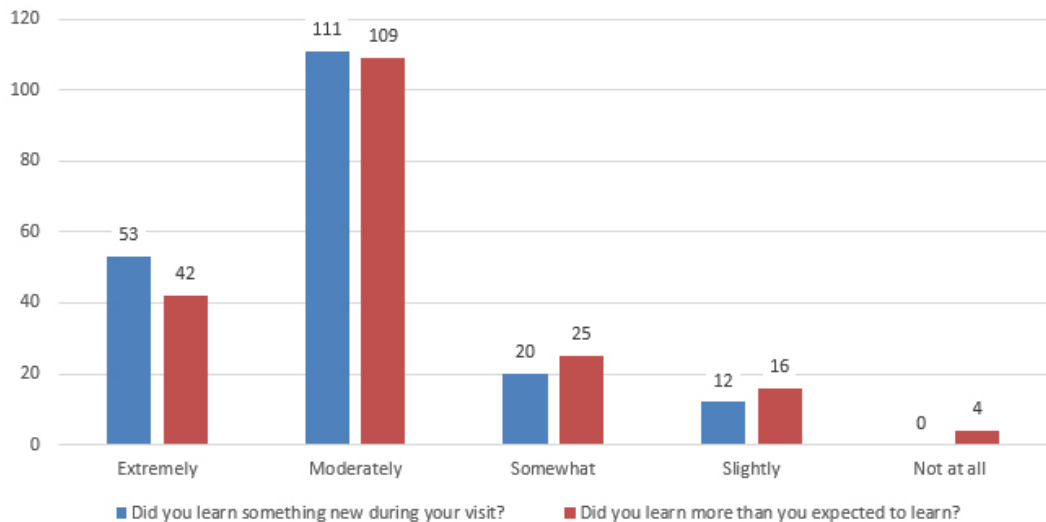


Figure 5.14: Absolute and relative scores for the statements “Did you learn something new during your visit?” and “Did you learn more than you expected to learn?” (n=196).

As with the other case studies, here too, people were asked about the impact of participating on their personal attributes, such as views on religion and self-confidence. Just as the in the other case studies, to come to a comparable and easy to interpret figure, answer categories (Not at all, Slightly, Somewhat, Moderately and Extremely) were given weight from 1 to 5, respectively, and were multiplied by their individual counts per attribute. Results per attribute were then cumulated and divided by 196 – the total number of answers to this question, giving a weighted average for each attribute. ‘Understanding of the past’ scored highest with a 3.8 on average (table 5.2). ‘Sense of Involvement’ also scored relatively high with a 3.5, as well ‘Self-consciousness’ (3.4). A second group can be noticed ranging from 2.4 to 3.0 on average, including ‘Views on

|                           | 12-20 years | 21-35 years | 36-60 years | Older than 60 | Average    |
|---------------------------|-------------|-------------|-------------|---------------|------------|
| Motivation                | 3.2         | 3.4         | 2.2         | 3.3           | 3.0        |
| Self-consciousness        | 3.4         | 3.2         | 3.0         | 4.0           | 3.4        |
| Creativity                | 3.0         | 3.3         | 2.8         | 2.8           | 2.9        |
| Self-confidence           | 3.3         | 2.7         | 2.6         | 3.3           | 3.0        |
| Sense of involvement      | 3.5         | 3.4         | 3.5         | 3.5           | 3.5        |
| Self-acceptance           | 2.8         | 2.2         | 2.0         | 2.5           | 2.4        |
| Views on life             | 2.9         | 3.0         | 2.6         | 2.8           | 2.8        |
| Views on religion         | 2.5         | 2.2         | 2.5         | 2.3           | 2.4        |
| Understanding of the past | 3.5         | 3.9         | 4.0         | 4.0           | 3.8        |
| <b>Average</b>            | <b>3.1</b>  | <b>3.0</b>  | <b>2.8</b>  | <b>3.2</b>    | <b>3.0</b> |

Table 5.2: Weighted average scores for personal attributes versus age category (n=196).

religion' (2.4), 'Self-acceptance' (2.4), 'Self-confidence' (3.0), and 'Views on life' (2.8). These results seem to fit well with the goals of this activity, which were geared towards creating an educational experience, where people feel involved with the monuments and the history of Thessaloniki. It seems that the activity was effective in positively impacting on these attributes, and with a 3.0 score on self-consciousness, it seems that most people also reflected on the new information, assimilating it on a deeper level. The attributes not addressed in the activity goals scored lower.

The age groups of 60+ scored highest with a 3.2 point weighted average. This was followed by the age group 12-20 with 3.1; 21-35 scored a 3.0 and lastly the age group 36-60 with a 2.8 average weighted score. There were also some interesting differences visible in the attributes between the age categories, most notably for motivation, self-consciousness, self-acceptance, and self-confidence. The largest, a 1.2 difference in weighted average, is found within the motivation attribute between the age categories 21-35 and 36-60.

The fact that the age group 36-60 scored lowest on average for almost all categories, and indeed lowest overall, is interesting. It could mean that people in that age category were simply not so easily affected in general, but it could also be because of the type of activity – a digital and perhaps non-traditional form of education. Maybe people from those age groups find these types of activities less impactful than others. However, as this was not asked specifically in the survey, at this moment such hypotheses must remain speculation.

The last question linked to personal development included in this survey is about whether the activity contributed to people understanding the value of archaeology better, and if people felt more confident to talk about archaeology afterwards.

The *Invisible Monuments* event seemed to have increased peoples' ability to better understand the value of archaeology, as the majority agreed to this statement with 63.3% (124 – figure 5.15); 25% (49) Strongly agreed, 9.2% (18) was Neutral and only 2.6% (5) Disagreed.

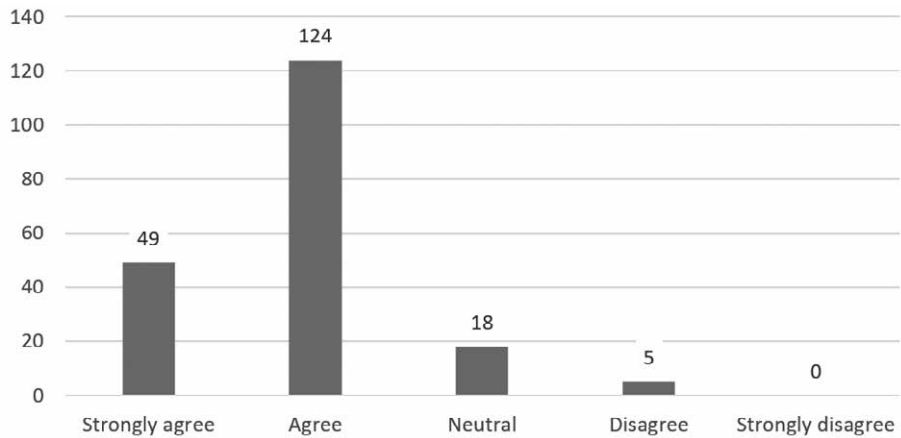


Figure 5.15: Absolute scores for the statement “This activity contributed to your ability to better understand the value of archaeology” (n=196).

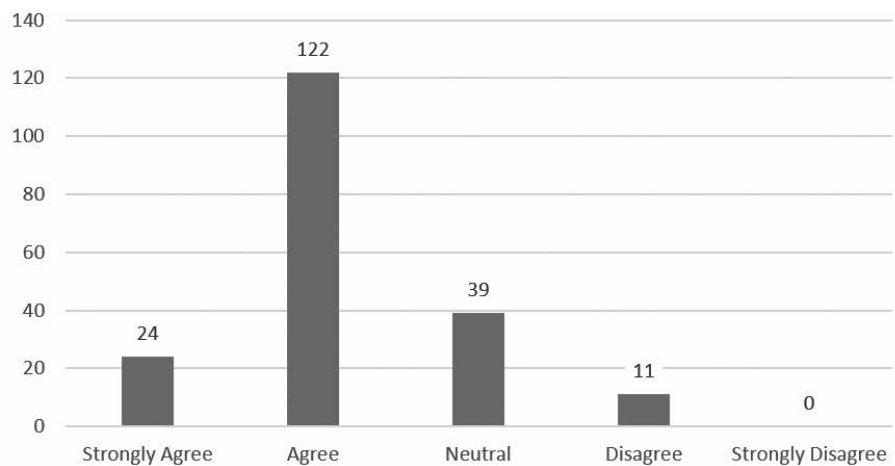


Figure 5.16: Absolute scores for the statement “You feel more confident talking about archaeology after this activity” (n=196).

People scored somewhat less positive on this statement than on the one about knowledge increase. This could indicate that people understood the difference between the two: knowledge increase is about education and factual information, valuation is about seeing the larger potential, use, and value of archaeology in a wider context. While people scored a little less positive on the latter, a large majority – 88.3% – still indicates that they now have a better understanding of the value of archaeology. While this was not one of the explicit goals of the event, valuating archaeology is woven into raising awareness and the creation of a personal connection with the monuments, as valuation is personal and connected to people’s views and identity.

Results show that the event helped increase people’s ability to better understand the value of archaeology, but they were not so confident to talk about it; 12.2% (24) of the people Strongly agreed and 62.2% (122) Agreed to the statement ‘You feel more confident talking about archaeology after this activity’. While less positive than for the

previous statement, it still means that for almost three quarters of the total population the activity helped them to talk more confidently about archaeology (figure 5.16).

This increase in confidence can be connected to the fact that many people indicated to have learned a considerable amount about the archaeological and historical monuments of Thessaloniki, and to have a better understanding of its value. In other words, there seems to be a relation between the fact that people indicate to better understand the value of archaeology and their confidence in talking about it. A spearman's Rho correlation test confirms this notion and shows a correlation co-efficient of .526 with very high statistical significance ( $p < 0.0001$ ,  $n = 196$ ).

#### 5.5.4 Social cohesion

People were asked if they participated in the event alone or with others; 196 responded. The majority of the participants of the questionnaire went to the event alone (64.8%); 35.2% went with others (23% with one other, 5.1% with two others and 7.1% with more than two others). Furthermore, 19.9% did indicate to have met new people during the event, 80.1% indicated to not have done so. While the event was not organised as a social event in and by itself – rather it was focussed on personal connection with the monuments – it is interesting that some people took the opportunity to go with someone else. In fact, almost 20% actually met other people during this event and as this question specifically stated “new people” we can assume that these ‘new people’ were not part of their initial company. It would be interesting to see if these numbers would change if an archaeological activity was geared more towards social inclusion rather than individual development. A comparison with the *DOMunder* activity, in this sense comparable to the *Invisible Monuments* event as that event was also geared towards individual development, and the *You(R) Archaeology* event, is done in the next chapter.

#### 5.5.5 Community empowerment and self-determination

People were asked about their reasons for joining and were given the freedom to answer openly. Not all survey participants responded to this question; 156 (79.6%) did, 40 did not (20.4%); 3 answers were not connected to the question, leaving a total of 153 answers to be analysed. The remaining answers were categorized into 6 different categories (figure 5.17).

The largest group of people, 68 (44.5%), indicated to have joined because of a general interest in the activity. 21 people specifically mentioned that they wanted to

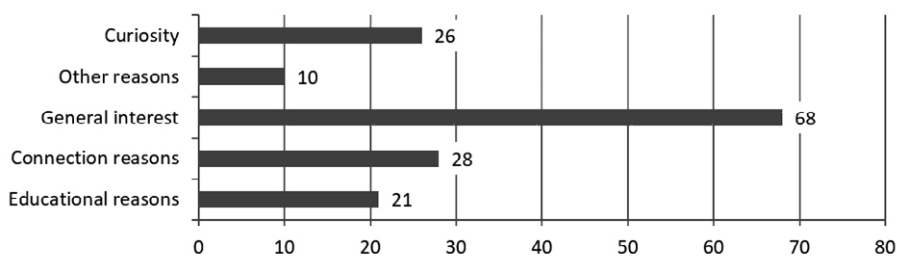


Figure 5.17: Reasons for joining. Absolute numbers ( $n = 153$ ).

learn something from the activity (13.7%), 28 (18.3%) indicated that they joined because they were specifically interested in the history of the city or wished to become more familiar with the monuments; they seemed to have joined because they felt some sort of (pre-existing) connection to the city. Twenty-six people joined out of curiosity (17%) and 10 (6.5%) had other reasons, including one person who joined because of “enjoyment” (Anonymous respondent, participant questionnaire). No one indicated to have joined because of social reasons, such as that going together seemed fun, which is mirrored in the fact that most people went alone, or that they wanted to meet new people. Health was also not part of people’s motivation to join. The reasons for people to join are different than those we saw for the *DOMunder* case study where people seemed to join mostly because of educational reasons, and in that sense scores presented here do not reflect the primarily educational value given by European citizens to archaeology and archaeological heritage (Kadja *et al.* 2017). Scores are also different in comparison to the *Invisible Monuments* case study, where a large group of people indicated to join because of social reasons. However, the general interest in, or fascination for the subject of archaeology is present in all three case studies. With most people having indicated to have a ‘general interest’ in the topic, and being residents of Thessaloniki (73%), we can state that, while the activity reached a new audience in terms of age, it did not succeed in attracting people with no or little prior knowledge or interest in archaeology. Rather, the activity attracted an audience which was already involved with archaeology and heritage. A more detailed analysis will be done in chapter six.

The data show that people were very eager to learn more after their participation in the *Invisible Monuments* activity. More specifically, 39.8% Strongly agreed and 52.6% Agreed to this, meaning that for more than 90% of the people the activity triggered their eagerness to learn more about archaeology (figure 5.18).

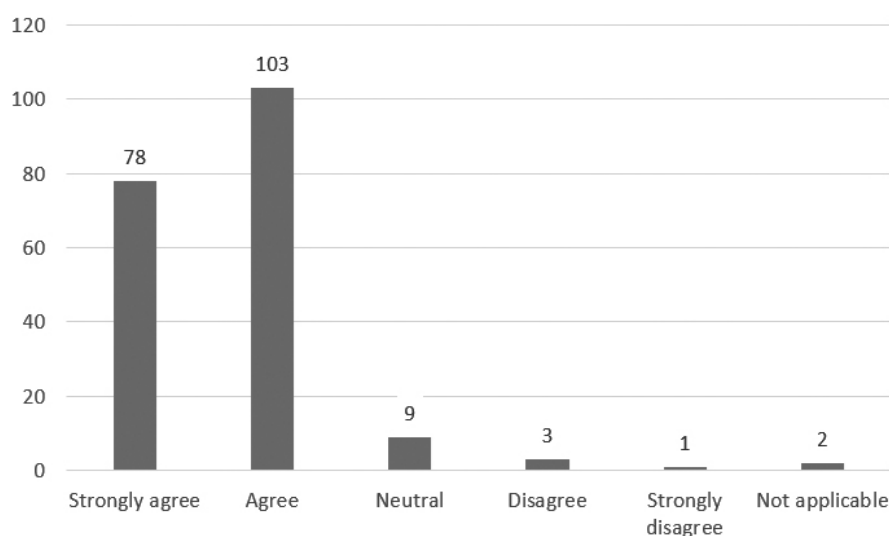


Figure 5.18: Absolute scores for the statement “After completing the activity, I still want to know more about archaeology” (n=196).

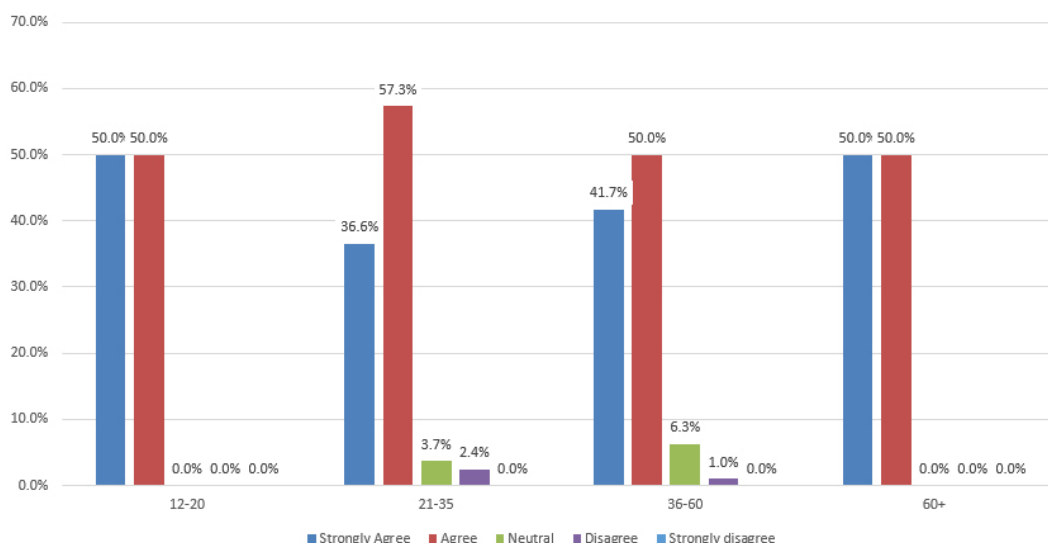


Figure 5.19: Relative comparison between age categories and the eagerness to learn more (n=194).

This is an important outcome, since it shows that the activity was successful in raising awareness and motivating people to learn more about Thessaloniki's archaeological history. Perhaps this is the start of what the initiators aimed to achieve, the creation of a 'living memory'.

A cross-comparison with age categories shows that the youngest age group was, together with the oldest age group, strongest in their enthusiasm to learn more about the archaeological history of the monuments; 50% Strongly agreed to this statement (figure 5.19). However, as with the other comparisons with age categories, we have to keep in mind that the age group of 60+ only consists of 4 results.

### 5.5.6 Imagination and vision

This event was designed to allow for fast-paced and easy access to information about the monuments on the internet, using the latest in technological means. The main idea was to combine digital social media and mobile phone technology to raise public awareness. While social media was part of the communication and outreach tools (the impact of this in terms of 'Likes' etc., is mentioned at the beginning of this chapter), starting a discussion about the contents of the activity was not specifically mentioned as a goal. Rather, these social media were mostly used to 'spread the word' and to post photos and comments by the activity organizers during the activity weekend. However, social media inherently invites and allows people to join or start a discussion and for some participants of the activity this was enough incentive to post a comment, rate the activity, or post photos.

The Facebook page consisted of two different sections: The *Invisible Monuments* page itself, which describes the idea of the activity, allows for posting by the organizer, and collecting 'Likes' and 'Rates/Reviews' from visitors – and the Event page which is connected to the actual event, displaying the date and time and which allows for people to comment and post their own photos. The *Invisible Monuments* Page gathered

over 1200 likes, but more importantly received 15 reviews. In these reviews, some people creatively expressed their opinion on the monuments. One person, for instance, wrote “The rationale of the action/activity is original. The material given was quite informative for a first contact, at least for the least not or even unknown monuments (such as the Antigonids Roman Bath, the Temple of Sergios Pragamas or the Neolithic settlement of TIF). Experiential memory is often painful, as you try to follow the footsteps of history hidden in dirt, garbage and mud (the end of the Hippodrome, behind the sanctuary of the new temple of Mary, as it looks, if you get out of the small door of... Masouti's Butcher. As for the stele of snakes, surrendered to the nightmarish traffic of Agiou Dimitriou street). Feelings are mixed as with your digital memory you hunt the ‘invisible’ in a visible, horrible reality of an ‘ugly’ and dirty city, abandoned by OASTH and its governors, a city that you love so much, and hurts you so much... [Translated from Greek by Aris Politopoulos]” (Νταούνη 2016). Another person wrote “Bravo!!!! and something new and innovative!!!! Makes the “invisible” Visible! Great idea!!!! [...] Seven points which constitute bridges between the present and the past [Translated from Greek by Aris Politopoulos] (Isaakidis 2016).

Others simply rated the *Invisible Monuments* Page: in total 15 reviewers rated 5 stars (out of 5), meaning they were very enthusiastic and positive about their experience. The Event page allowed for visitors to make comments and post photo's. In total 7 persons made their own posts, consisting of either a text, or a text plus photos on the Event page; 36 photos were posted by non-organising people in total.

Twitter and Instagram did not get much active attention from participants. While Twitter does allow for people to write short messages, even using hashtags to create a specific topic-filter, only 1 person made use of this. Instagram also allows for people to make comments, but on specific photos posted by the organiser of the activity. This happened once, where one person congratulated on the photo, without giving any hints at ‘creative interpretation’ of the archaeological content.

Although the number of Facebook Likes and followers on Twitter and Instagram are quite substantial, especially for the former, this did not result in a high social media participation. People seemed to be passive rather than active. This dissonance could be because the organizers of the activity did not perform audience research in order to create participatory motivations. Especially in relation to the top-down models of public archaeology, associated issues of using social media, such as digital literacy and online authority need careful consideration (Richardson 2014). While perhaps not many in total, the posts that were made did provide a window into the interpretation of the event and how the monuments are perceived. Some people were quite creative in their comments on this. This means that the event did provide a platform for participants to express their ideas about archaeology, though it was not stimulated as such.

### 5.5.7 Health and Well-being

Participants of the *Invisible Monuments* activity were asked if participation affected their emotions. There were 9 ‘positive’ and 5 ‘negative’ emotions presented in the questionnaire and participants could rate how much they were affected through a 5-point Likert-scale, ranging from ‘Not at all’ to ‘Extremely’.

The results for each emotion were weighted (Not at all = x.1; Slightly =x.2, etc.), averaged per Likert-scale level, and compared to the age categories. It seems that the

|                   |                | 12-20      | 21-35      | 36-60      | 60+        | Average    |
|-------------------|----------------|------------|------------|------------|------------|------------|
| Positive emotions | Relaxed        | 3.7        | 3.7        | 3.7        | 2,0        | 3,3        |
|                   | Safe           | 3.9        | 3.3        | 3,3        | 2,0        | 3,1        |
|                   | Happy          | 3.8        | 4.0        | 3,9        | 3,3        | 3,8        |
|                   | Useful         | 4.2        | 3.7        | 3,6        | 4,3        | 3,9        |
|                   | Capable        | 3.8        | 3.5        | 3,2        | 3,0        | 3,4        |
|                   | Inspired       | 4.1        | 4.1        | 3,5        | 3,0        | 3,7        |
|                   | Energetic      | 4.1        | 4.0        | 3,5        | 3,0        | 3,7        |
|                   | Healthy        | 3.8        | 3.3        | 3,1        | 2,5        | 3,2        |
|                   | Positive       | 3.8        | 3.8        | 3,4        | 2,7        | 3,4        |
|                   | <b>Average</b> | <b>3.9</b> | <b>3.7</b> | <b>3,5</b> | <b>2,9</b> | <b>3,5</b> |
| Negative emotions | Anxious        | 2.2        | 2.5        | 2,2        | 1,5        | 2,1        |
|                   | Angry          | 2.0        | 1.8        | 2,0        | 2,0        | 2,0        |
|                   | Depressed      | 2.1        | 2.1        | 2,1        | 1,0        | 1,8        |
|                   | Insecure       | 1.8        | 1.5        | 1,5        | 2,7        | 1,9        |
|                   | Judged         | 1.8        | 1.5        | 1,5        | 1,0        | 1,5        |
|                   | <b>Average</b> | <b>2.0</b> | <b>1.9</b> | <b>1,8</b> | <b>1,6</b> | <b>1,8</b> |

Table 5.3: Weighted average scores for personal emotions per age category (n=188 for Relaxed, n=183 for Safe, n=186 for Happy, n=189 for Useful, n=185 for Capable, n=187 for Inspired, n=188 for Energetic, n=177 for Healthy, n=183 for Positive, n=184 for Anxious, n=186 for Angry, n=185 for Depressed, n=184 for Insecure, and n=182 for Judged).

age category of 12-20 years felt the most impact on positive emotions – on average, scoring a 3.9 (in green, table 5.3); the age group of 60+ felt the least impact in positive emotions, scoring a 2.9 on average (however, together these age groups only count 16 respondents, possibly not representing the total number of participants). This divide between the age groups of 12-20 and 60+ is something also noticed for the *You(R) Archaeology* contest and will be further discussed in the next chapter. Overall, people scored highest on average for the Useful emotion (3.9 on average, in green) and least high for the Safe emotion (3.1 on average, in red).

Looking at the negative emotions, we see that people felt mostly anxious (2.1 on average, in red) and least judged (1.5 on average, in green) during the event. Interestingly, the age group 12-20 scored highest for the *negative* emotions as well and the oldest age group lowest. Although we have to be careful with interpreting this data, as the number of respondents for those categories are quite low (11 for the age group 12-20 and 4 for the 60+ age group), the other age groups seem to fit perfectly in between these two outliers: the older the age group, the lower the scores on both positive as well as negative emotions.

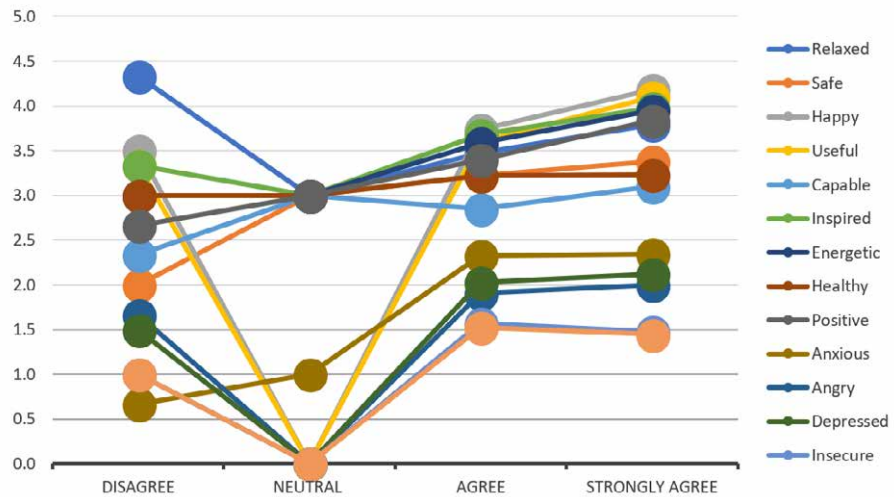


Figure 5.20: Weighted averages of personal emotions versus scores for impact in knowledge ( $n=182$  for Relaxed,  $n=179$  for Safe,  $n=181$  for Happy,  $n=184$  for Useful,  $n=180$  for Capable,  $n=182$  for Inspired,  $n=183$  for Energetic,  $n=172$  for Healthy,  $n=178$  for Positive,  $n=179$  for Anxious,  $n=181$  for Angry,  $n=180$  for Depressed,  $n=179$  for Insecure, and  $n=177$  for Judged).

The differences between the oldest and youngest age groups can be interpreted in a variety of ways. Firstly, it could imply that we see a reflection of the fact that positive effects seem to increase with age, but rapidly decline when people reach the age of 70+ (Mroczek 2001). Furthermore, this outcome might reflect the findings of a recent study which shows that American adolescents perceive a higher Subjective Well-being than people aged 30+ (Twenge *et al.* 2016). According to the authors, the cultural shift towards individualism in which the youth takes more risks, and seeks novelty and information for future purposes, promotes higher Subjective Well-being for adolescents. In contrast, the weakening of social ties, the Great Recession, and growing income inequality engenders a negative effect on the Subjective Well-being of adults (Twenge *et al.* 2016). Secondly, the age groups could have different levels of expressing emotion and this would then also count for the negative emotions. Lastly, we can take these outcomes at face value, an option bolstered by the fact that indeed the oldest age group sometimes scores higher than the youngest age group, for instance for the Useful positive emotion and especially for the Insecure negative emotion (with a 0.9 difference). The latter could perhaps mean that the oldest age group feels more uncomfortable using mobile technology, whereas the youth is much more at ease with it.

Just as with the *You(R) Archaeology* case study, here too personal emotions were cross-compared with increase in knowledge. In this case study, too, there seems to be a connection with people's perceived increase in knowledge and the impact on their emotions. More specifically, it seems that people who indicated to have learned the most (in other words 'Strongly agreed') had the highest weighted average scores for impact in emotions (figure 5.20). This means that people who indicated to have learned the most were also the ones who felt most happy, relaxed, safe, capable etc. The two *positive* emotions not increasing between 'Agree' and 'Strongly agree' were Health, which

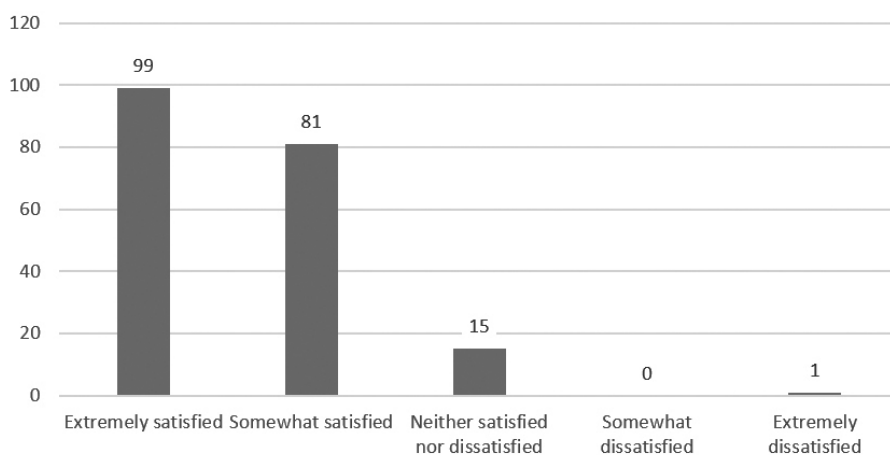


Figure 5.21: Participants' satisfaction (n=196).

stayed the same at 3.0 average, and 'Relaxed', which actually scored lower (4.3 at the 'Disagree' level and 3.8 at the 'Strongly agree' level). Perhaps people felt less relaxed because of the intensity of the activity in which they both had to search for and absorb knowledge. Apparently, a positive impact on learning has a somewhat negative impact on people's state of relaxation. From the *negative* emotions, 'Angry' and 'Depressed' scored higher for those people noticing an impact on knowledge (scoring 'Agree' and 'Strongly agree'), but that increase was very slight; Insecure and Judged actually declined and Anxious stayed at the same score.

Because most of the knowledge increase scores were given in the 'Agree' and 'Strongly agree' levels, the image for those two levels displayed here is arguably the most reliable. Data from Disagree (there were no scores in Strongly Disagree) and Neutral were very low, with about 1 to 3 scores per emotion (compared to about 175 for Agreed and Strongly Agreed). This means that the image displayed in figure 5.20 is possibly distorted for the lower Likert-scale categories, but is included for completeness nonetheless. Taken at face value, it seems the *negative* emotion scores were lower when people indicated to perceive less impact in learning.

Of course, these numbers do not give us an insight into the causal relation between the two variables, only that there seems to be one. In other words: we don't know whether the feeling like you have learned more resulted in a happy feeling, or vice versa, that people who felt happy were perhaps more open to learn about archaeology, to give just one example. Nonetheless, the relation between these emotions and the perceived increase in knowledge is important, as it shows the potential sociocultural value of public activities in archaeology and can help in the decision-making process of future events.

As part of the Health and Well-being header, satisfaction describes how the *Invisible Monuments* activity impacted the sense of accomplishment and overall fulfillment of the participants. In total, 91.8% of the people were satisfied after their visit; 50.5% 'Extremely satisfied' and 41.3% 'Somewhat satisfied' (figure 5.21). Fifteen respondents

(7.7%) scored 'Neither satisfied nor dissatisfied' on the subject and one person was 'Extremely dissatisfied' (0.5%).

This topic was also included in the *You(R) Archaeology* survey, but there that question specifically referred to participants' satisfaction with their art submission, and not satisfaction after completing the activity. Here, however, people were specifically asked about their satisfaction after completing the activity and with over 90% of the people indicating to be satisfied, it can be stated that the activities' goals and people's expectations were not far apart. In other words; it seems that people got what they came for.

Though overall all age groups, except the 60+ age group, scored about 90% satisfaction ('Extremely satisfied' and 'Somewhat satisfied'), we can argue that people in the age category of 21-35 were the most positive: 57.3% scored Extremely satisfied, followed by the age group 36-60 (48%), 12-20 (33.3%), and 60+ (25%). The oldest age group was least satisfied after their participation as they scored the most neutral (Neither satisfied nor dissatisfied) with 25%. Although we have again to keep in mind that the total number of participants for that age group is 4, which is a low number and probably does not speak for the total number of participants.

There seems to be no strong relation between the scores for satisfaction and the perceived increase of knowledge: Spearman's Rho test shows a correlation co-efficient of .323 with very high statistical significance ( $p < 0.0001$ ,  $n = 196$ ). In this test, the 'non-applicable' answers were omitted. In other words, an increase in knowledge alone is not the reason for people to feel satisfied. Apparently, it is a combination of factors that impact that emotion.

## 5.6 Wrapping up results

### 5.6.1 Research goals

This case study was built on several goals, 5 of which were set up by the author of this thesis in order to investigate particular research questions.

The first, and most general, goal was to create a commensurable dataset for analysis of sociocultural impact and comparison with the other two case studies (discussed in chapter 6). This goal has been met, as the questions were asked and data gathered in a similar way, based on Matarasso's framework (1997), meaning that for several of the topics included a comparison can be made.

The first specific goal was to see whether participants were motivated enough to finish such an activity, and whether or not the trail actually increased their motivation. While we know that 196 people filled out the questionnaire, and 194 people gave an insight into how much time they spent, there was no question included asking people whether they actually finished the event. From the amount of people indicating to have spent less than 1 hour on the activity, we can infer that not all who started actually finished the whole trail. What we do know, however, is that motivation scored a weighted average of 3.2 points, third highest of the personal attributes, and in particular the age groups 12-20, 21-35 and 60+ years old were motivated. This means that the activity raised enough momentum, regardless of time spent, for people to feel motivated.

The second specific goal was to see whether such an activity increases participants' knowledge. This goal was met with high marks; 94.9% indicated that the *Invisible*

*Monuments* activity impacted their knowledge. This increase was noted mostly among higher educated people. Interestingly, it did not greatly matter how much time people spent on the activity, as there was no connection found between knowledge increase and time spent. This could mean that the scope of the activity met the expectations of the participants: learning can be done quite quickly indeed, and the organizers of the activity stimulated this idea by providing short and concise texts. Furthermore, it seems that there is a connection between knowledge increase and the impact on people's emotions: the more people indicated to have learned, the higher their impact on emotions. We do not know in which direction this relation runs (whether increase in knowledge influences emotions, or whether impact in emotions influences perceived knowledge increase). However, from various studies we know that positive emotions enhance a range of cognitive and social functions, for instance memory, concentration, and communication, and broadens student's attention (Rowe *et al.* 2015; Fredrickson 2004; Isen 2000). Perhaps what we observe here are these workings in an archaeologically educational setting.

The third goal was to see if there is a difference between tourists and residential participants. We know that 40 (20.4%) out of the 196 participants indicated to see themselves as tourists and that only 5% came from other countries. This means that while most of the participants were Greek, people from outside Thessaloniki still considered themselves to be tourists.

The fourth specific research goal was to see if there is a difference in data between the age categories. This goal was set because the activity is quite heavily focused on technological know-how. First of all, it is important to note, again, that we only had 4 participants from the oldest age group of 60+, meaning that the data and subsequent analysis can be distorted. Although the oldest age group seemed to be most self-conscious of all the age groups, they also noted to have the highest understanding of the past after their visit. This means that the use of mobile devices did not seem to be a hindrance for them in learning, although perhaps they felt a bit more self-conscious using them. The 60+ age group also indicated to be motivated and eager to learn more about the history of the city afterwards, indicating that at least the activity, while perhaps focused on the latest technology, was interesting enough for them to want to learn more.

### 5.6.2 Activity goals

The questions included in the survey were also based on activity goals set by the Aristotle University. These goals were created based on three levels, from 'objective, to 'main idea', to 'ambition'. It was not made clear by the organizer whether achieving (part of) these goals would lead to them considering the activity to be a success. Here, these goals will be described from narrow (objective) to wide (ambition).

The first goal, the objective, was to 're-introduce selected archaeological sites of Thessaloniki's rich archaeological heritage which remain unnoticed or unknown to the public either because they are hidden under the urban development without any indication of their place, have already been removed, or are simply ignored within the chaotic clutter of the urban landscape (Theodoroudi *et al.* 2016, 1)'. This goal was met, as most of the people indicated to have learned about the monuments (although a considerable amount – 84.2% – did already know about at least part of the monuments). More importantly however, people indicated to have learned more than that

they expected to, 42 (21.4%) of them even extremely so. This means that while people had prior knowledge of the monuments, the activity helped them to learn more about them and ‘uncover’ their hidden histories.

The second goal, the main idea, was to ‘combine digital social media and mobile phone technology to raise public awareness on antiquities in an innovative and unconventional way (Theodoroudi *et al.* 2016, 1)’. As discussed previously, it seems that the fast pace, inherent in the use of digital mobile technology, did not prevent participants from learning about the monuments or connecting them to the local archaeology. Rather, it seemed to stimulate participants to follow the trail and learn. The fact that the website reached over 5000 hits and the Facebook page of the event over 1200 ‘Likes’ means that the organizers were quite successful in raising public awareness in general as well. The fact that many people indicate to want to do the trail again, or another time, means that the activity was also a success in that sense.

The third and last goal, the ambition, was the basis of the activity and aimed to turn ‘hidden and forgotten sites into places of living memory, connecting them with people’s everyday life by exploiting simple, user-friendly and widely familiar digital technology’ (Theodoroudi *et al.* 2016, 1). While it is difficult to answer whether or not the activity stimulated the participants to see the monuments as places of ‘living memory’ we can say that it increased their connection to them. It seems that such an activity, located in a city and focused on specific and local archaeological monuments, successfully helps people with connecting to their past, and even, for some, to the (other) inhabitants of the city. People also indicated to have learned about the monuments, but more importantly that they are eager to learn more about them. This indicates that the activity created a longer lasting impact on the participants than merely the ad-hoc learning experience, hopefully leading towards a lasting impression and a ‘living memory’.

