Social-emotional Education in Local Heritage

Patrimonial Activities Outside the Classroom

La educación socio-emocional en el patrimonio local.
Actividades patrimoniales fuera del aula.

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KEYWORDS
Field Trips
Social-emotional Learning
Heritage Education
Teacher Training
Curriculum Development
Community
Local Issues

ABSTRACT
Social-emotional learning is a tendency in education and must be accounted for in all areas of study. Heritage education cannot ignore this reality and must include and its planning and delivery effective strategies to implement and promote social-emotional competencies. The following work, proves patrimonial visits are an innovative approach towards coping with emotions in society. The activity proposed and studied in this investigation demonstrated the opportunities for integer learning during these experiences are real and cause a significant impact in students and society. This study demonstrated the most relevant aspects to consider in patrimonial visits.

PALABRAS CLAVE
Viajes al Campo
Aprendizaje Socio-Emocional
Educación Patrimonial
Formación del Profesorado
Desarrollo del Currículo
Comunidad
Asuntos Locales

RESUMEN
El aprendizaje socio-emocional está cobrando especial relevancia en el área educativa y es necesario en el desarrollo del conocimiento. La educación patrimonial no puede ignorar esta realidad y debe incluir en su planificación estrategias efectivas, que promuevan competencias socio-emocionales. Este trabajo demostró que las visitas patrimoniales son técnicas innovadoras para trabajar con emociones en contextos sociales. La actividad propuesta y estudiada en esta investigación demostró que las oportunidades para el aprendizaje holístico, durante estas experiencias, son reales e impactan significativamente la sociedad. El presente estudio demostró los aspectos más significativos que han de ser considerados en las visitas patrimoniales.

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1. Context

Emotions in learning is an area yet to be utterly structured. Despite the fact that, research has considerably expanded and grown in the last decade, thanks primarily to the work of CASEL (The Collaborative for Academic, Social and Emotional Learning), there are still plenty of opportunities to implement in patrimonial education. The teaching of History and geography in often thought of as traditional and old-fashioned. The need to improve and update the teaching aims and practices is great and must be addressed. Authorities from around the globe have set to establish and promote social-emotional competencies as key elements of success.

The OECD (Organization for Economic Co-operation and Development) has defined as a global challenge in education to promote social-emotional competencies. Shaping conscious citizens that hold an identity, and share values, emotions and ideas about their surroundings is considered a matter of great relevance in the development of a society. Countries, such as Spain, promote these competencies through their most recent curricular reform in mandatory education. The Royal Decree 217/2022, from March 29th, states, as of great relevance, emotional self-regulation, improvements in the social environment, the comprehension of the human being, its society and cultures, and the empathy towards its diversity, when it comes to the evaluation criterions for the integer education of citizens the World.

Thus, this study, seeks to highlight the essentialness of teaching and learning about emotions and feelings, self-esteem, equality and mutual respect in society. The present activity, proves there is a real opportunity in patrimonial visits in the shaping of conscious individuals that care and cherish their community, and promote their local heritage. The main aim of this work is to raise awareness amongst teachers on the need of proper planning, the choosing of content and the strategies and techniques to properly address their community and provide evidence on the imminence of knowing their emotions and coping with them in personal and social contexts.

1.1. Heritage education promotes social-emotional competencies.

It is fundamental to take advantage of the opportunities found in culture and patrimony. Heritage education promotes a sense of identity and belonging in individuals; it makes them aware of the shared values, traditions, responsibilities and such in their community. The curriculum urges teachers to include in their planning social-emotional competencies. It has been proven the study of patrimony aids teachers to transmit a feeling of happiness and satisfaction, when providing scenarios where students come in contact with their origin and History. The knowledge of Historical periods and the modern view of the landmarks in their community allows students to have an intercultural and inter-confessional exchange (Chabal, Baizakova, Utegenova & Alipkyzy, 2019); a matter of crucial relevance in their integral formation; citizens who understand their heritage and work towards the improvement and development of their society.

It is through the emotions that arise within these learning opportunities that students reach rational and critical thinking. Once students begin to notice changes in their environments and find the uniqueness and personality in their territory, they will begin to shape their own cultural identity (Cepeda, 2018). Thus, it is fundamental for teachers to provide learning opportunities in which students can see at first hand the heritage in their community. Experts, such as Rite and Cuenca (2017) define heritage education as “getting to know, in its multiple perspectives and variables, the History of societies and their mentality, in order to shape citizens that know their traditions, understand and value them, and make them a part of their own identity”. The main aim is to provide significant experiences for students to feel emotions and explore their thoughts about their surroundings.

Students begin to shape their ideas and feelings about community and society by visiting their patrimony and coming in touch with art and other forms of their cultural heritage. It is through patrimonial art that teachers can transmit to students, emotions and ideas about their culture (Santacana, 2006). Patrimony can promote and foster social-emotional competencies through heritage education. Patrimonial visits prove to be a valuable and innovative resource. Therefore, teachers must include in their planning strategies to cope with this formation and nourish these competencies in the classroom.

1.2. Visiting cultural sites is an innovative technique in patrimonial education.

As stated in this work, teachers must aim to provide integral formation for students, which allows them to keep their focus and motivation, to develop their personalities and shape their identity. Educational planning is bound to consider the needs and demands from each individual, and suggest a way to approach these aspects. An interesting activity took place in CaixaForum, Barcelona, when the exhibit HomoLudens allowed visitors to experience their present lives through a video game experience. This visit, followed the principle that gaming is a recurring activity in life, and that the ludic dimension is crucial for understanding the main factors that make up the world. In fact, after recreating the HomoLudens experience, the researcher Cimiano (2003) stated that “it is only during ludic activities where all the ingredients necessary for the blooming of culture come together”. A key element to include in the planning of patrimonial education is innovation; planning and preparing activities,
which students find relatable and interesting is part of innovating. A visit to a place of historical importance, or any type of cultural relevance is an innovative strategy, and must be approached from all views. The commonly used traditional method cannot take over such an innovative activity as a field trip and visiting heritage.

In the festival *Heritales*, in Portugal, the objective was to “project cinema in public spaces, as well as within the cultural facilities of the city such as churches and cultural associations” (Schiavottiello & Zozaya-Montes, 2018). A very clever way of getting the community in touch with their local heritage and learn about their History. Individuals are shaped in formal and informal situations, in all the environments in which they participate and through the various resources to which they have access (Melgar & Donolo, 2011). Patrimonial education must adapt to current times and provide spaces where significant experiences are formed, and an environment that inspire ideas and emotions in their students. The *Heritales* festival proved “blending urban spaces with cultural screenings from around the world allowed us to show new facades of the city and new faces of the public” (Schiavottiello & Zozaya-Montes, 2018). It is ought to be the school’s main task to make the public interests, the social heritage, a common concern (Domínguez & López, 2015). The local patrimony is a valuable source to transmit social-emotional competencies, and heritage education must promote this source through oracle that attract the interest of students and get them involved.

2. Objectives

First of all, this study is an introduction to a thesis work on social-emotional learning in education, the findings in the results are an invitation for further investigation. This research was oriented towards lighting the way and paving the path for significant findings. The experience provided in this visit is exactly what this project aimed to live, and therefore, it can be stated that, the expectations set for this work were met. The hypothesis stated for the investigation was proven to be true and invites researchers to expand the knowledge on this field.

2.1. General objective

The general objective of this study is:

- To understand in depth the opportunities in patrimonial visits, and promote social-emotional education.

2.2. Specific objectives

The specific objectives of this study are:

- To show the presence of emotions and the intensity felt before, during and after a patrimonial visit.
- To demonstrate that the intensity of positive emotions present during the visit is higher than the intensity of negative emotions.
- To provide evidence of the tendencies in positive and negative emotions before, during and after the visit.
- To encourage researchers to advance in further studies in the field of social-emotional education and heritage.

3. Methodological approach

The methodological design used in this study was descriptive and non-experimental; the study was theoretical and explicative. The study took the form of a mixed method approach, in which there were both qualitative and quantitative characteristics in the process of analysis; this was done on purpose, in order to enhance the quality of the study. The main variables of study were emotions, both positive and negative and the different moments within the visit, before, during and after. The measures of these variables were obtained through attitudinal scales. The values in the study were the means from related variables and the collected data was analyzed thoroughly with statistical software, to ensure its certainty and thorough observation and comments from both the teacher in charge of the groups and the participants.

3.1. Participants

The participants in the study were selected due to the opportunity of working with their group. The visit took place during April, 2022. The sample consisted of 38 future History teachers of primary education; 19 women and 19 men. The entire group belonged to the Education faculty in the University of Extremadura. The participants were chosen on purpose, to obtain the results sought, since they are one of the main audiences to whom this study is directed. The students were all second-year students, between the ages of 17 and 25, taking a course of didactics in History and geography in the University of Extremadura, during the 2021-2022 academic year.

3.2. Materials

The data from the study was collected through a questionnaire in the form of a Likert scale. “A Likert scale is a psychometric scale that has multiple categories from which respondents choose to indicate their opinions, attitudes, or feelings about a particular issue” (Nemoto & Beglar, 2014). Likert scales are widely used in social-emotional learning to analyze single variables, such as emotions. The instrument allows easy collection of data at
a quick rate, its highly reliable, can be used with large quantities of participants and the answers recorded in it can be easily compared, contrasted and combined with qualitative data (Nemoto & Beglar, 2014). The questionnaire was divided into three areas: Emotions before, during and after the visit, and each area was made up of various items, our variables. The before and after the visit areas contain 12 items each and the area that asks about the emotions present during the visit was made up of 16 items; 8 stops in our visit which could generate positive and negative emotions. At the end of the questionnaire, the participants could submit comments about their experiences. All participants agreed to be a part of the study before answering the survey. This questionnaire was the key instrument in the study.

3.3. Procedure

The first step towards realizing the study was selecting a valid questionnaire and adapting it to the needs and the objectives set. An already tested and approved questionnaire was chosen; a Likert scale for emotions. The scale was shaped and adapted to meet the needs and opportunities for the project. The Likert scale was determined as appropriate due to the need of studying the levels of intensity to which emotions were present in the learning experience.

Once the adaptation of the instrument was complete and this was prepared for the visit, the teacher, who was in charge of administering the questionnaire was given a QR code and a direct link to access it and pass it along the students almost effortlessly. The day before the visit, the students were able to access and answer the first part, the emotions before the visit. The day of the visit, part 2 was available and took place during the visit. Students were able to rate the intensity of negative and positive emotions present during the visit and after each interest location in the itinerary. After visiting the heritage site, students had access to the third part of the questionnaire, the emotions after the visit, and were able to rate the intensity of the emotions that were present after their experience. After collecting all the data, it was transferred into the analysis programs selected for the study, SPSS 25 and Gephi 0.9; these programs run statistical analysis and help to associate data and reach descriptive and inferential results. SPSS is a statistical analysis software that allows researchers to answer questions about the collected data in a study; it’s a software specifically created to provide answers through statistical analysis. SPSS treats the responses from the participants as a database with access to a variety of modules and commands, which are structured and related to run statistical procedures in all variables and entries and then provide the required output or reports (Pedroza & Dicovskyi, 2007). The software is very complete and allows a closeness and interaction amongst all variables and commands in the program; they all intertwine to find an answer through statistical analysis, taking all elements into account.

First of all, the data was introduced in SPSS. The answers from the 38 participants was recorded as nominal variables with set categories. The data for the intensity in emotions before and after the visit, as well as, the data for the intensity in positive and negative emotions present during the visit are ranked from 1 to 5 (1-none, 2-low, 3-regular; 4-high, 5-excessive). Once all responses were recorded, the descriptive analysis was conducted and the groups, clusters, relationships, and such other associations between responses, became clearer. A descriptive analysis of the variables provided the statistical means in the three stages of the questionnaire for each variable; this showed tendencies between variables and relativity amongst the answers from participants. Therefore, it was necessary to prove that such relation was significant. Thus, in addition to the descriptive analysis, the variables were also tested with the Friedman’s test, and the Kendall’s coefficient of concordance. According to Siegel (1957) “The Friedman’s test determines whether it is likely that the different columns of ranks (samples) came from the same population”. This test is important to understand the relativity of the variables in the study. “The only assumptions made by the Friedman test are that the test variables are at least ordinal and that their distributions are reasonably similar” (Singh, Roy & Tripathi, 2013). Once we know our variables are related, we run the Kendall’s coefficient of concordance in SPSS. The statistical tests proved how the answers from the participants swirl into unison; this can be better contemplated in the visualization of data provided by Gephi.

Kendall’s Coefficient of Concordance, W, is a measure of the agreement between several judges who have rank ordered a set of entities. In this sense, it is similar to an intraclass correlation for ranked data... Kendall’s statistic represents the ratio of the observed variance of the total ranks of the ranked entities to the maximum possible variance of the total ranks. (Field, 2005)

Gephi is a software that runs statistical analysis on data which groups data and shows how each variable intertwines with the rest in a study; at the end of the analysis, the software provided a visualization of the results obtained and allowed a precise interpretation of them through visual representation.

Gephi is an open source software for graph and network analysis. It uses a 3D render engine to display large networks in real-time and to speed up the exploration. A flexible and multi-task architecture brings new possibilities to work with complex data sets and produce valuable visual results. (Bastian, Heymann & Jacomy, 2009)
The software produced a graph of nodes and edges which showed the grouping of variables. First, the nodes and edges were determined and their association was set according to the weight of the responses in the collected data. After introducing the nodes and edges data in the program, it provided an analysis similar to the Kendall’s coefficient of concordance provided by SPSS, and created a graph of relationships between variables. The graph was then modified into a more visually logical product by applying a value distribution of closeness centrality, a size distribution by modularity class and a filter of weight to the edges. The final result provided a clear and easy to interpret visualization of the grouping in the variables from the study and helped with making conclusions based on the graphs generated by the program.

4. Results

The study provided valuable data to analyze and make conclusions based upon its results. The results demonstrated the presence of emotions during a patrimonial visit and their intensity, according to what was reported by the participants in each part of the itinerary. The data ran in both SPSS and Gephi emitted reports that proved the opportunities present in having these activities in the planning of heritage education, and thus, the need for current and future teachers to implement these strategies in their teaching.

4.1. Data Analysis from SPSS

The statistical analysis ran in SPSS showed patterns of similarity amongst emotions such as joy, trust, happiness, admiration, tranquility and satisfaction (from now on referred to as positive emotions) before and after the visit and a higher level of intensity, compared to the rest of the variables in these areas of the questionnaire. On the other hand, emotions such as angst, shyness, anxiety, fear, disgust and sadness (from now on referred to as negative emotions), also showed patterns of similarity before and after the visit. These emotions reported a lower level of intensity, according to the participants of this study.

The results for the first analysis of data ran in SPSS are portrayed in Table 1. The descriptive analysis in SPSS provided the mean and ranges of the answers reported by the participants. These results showed the difference between the mean for the intensity levels in emotions, reported by students before and after the visit. First of all, notice the patterns in the positive emotions, the mean ranged from 3.87-4.45, this being a high level of intensity in the scale of the questionnaire, and all of the positive emotions displayed an increase in their intensity levels before and after the visit. On the other hand, the mean for negative emotions ranged from 1.21-2.29, this being a low level of intensity in the scale of the questionnaire, and all of the negative emotions displayed a decrease in their intensity level from before to after the visit.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
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<td>Joy pre-visit</td>
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<td>Joy post-visit</td>
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<td>5</td>
<td>2.29</td>
<td>1.137</td>
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<td>5</td>
<td>3.87</td>
<td>0.935</td>
</tr>
<tr>
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<td>5</td>
<td>4.32</td>
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<td>Fear pre-visit</td>
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<td>0.835</td>
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<td>Fear post-visit</td>
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<td>4</td>
<td>1.32</td>
<td>0.702</td>
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<td>5</td>
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<td>Tranquility pre-visit</td>
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<td>Tranquility post-visit</td>
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<td>4.42</td>
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<td>4</td>
<td>1.87</td>
<td>1.044</td>
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<td>Sadness post-visit</td>
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<td>0.781</td>
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<td>Valid N per list</td>
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<td></td>
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</table>
The second analysis ran in SPSS proved the variables in the before and after the visit section of the questionnaire share a high level of association. The Kendall’s coefficient of concordance determined the association degree between these variables was strong. This is shown in Table 2, where the decision of the Friedman’s test in SPSS is to reject the null hypothesis and state that there is a significant difference between the positive emotions and -emotions variables before and after the visit.

Table 2. Hypothesis test summary emotions pre and post visit.

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>Test</th>
<th>Sig.</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>The distributions of Joy Pre, Joy Post, Angst Pre, Angst Post, Trust Pre, Trust Post, Shyness Pre, Shyness Post, Anxiety Pre, Anxiety Post, Happiness Pre, Happiness Post, Fear Pre, Fear Post, Admiration Pre, Admiration Post, Tranquility Pre, Tranquility Post, Disgust Pre, Disgust Post, Satisfaction Pre, Satisfaction Post, Sadness Pre and Sadness Post are the same.</td>
<td>Related Samples Kendall’s Coefficient of Concordance</td>
<td>0.000</td>
<td>Reject the Null Hypothesis</td>
</tr>
</tbody>
</table>

Asymptotic significances are displayed. The significance level is .05.

The results for the third analysis of data ran in SPSS are portrayed in Table 3. The descriptive analysis in SPSS provided the mean and ranges of the answers reported by the participants. These results showed the difference between the mean for the intensity levels in positive and negative emotions, reported by students during the visit in each part of the itinerary. First of all, notice the patterns in the positive emotions during each part of the visit, the mean ranged from 4.03-4.42, this being a high level of intensity in the scale of the questionnaire. On the other hand, the mean for negative emotions during each part of the visit ranged from 1.37-1.63, this being a low level of intensity in the scale of the questionnaire.

Table 3. Positive and negative emotions during the visit

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plaza Mayor Negative Emotions</td>
<td>38</td>
<td>1</td>
<td>4</td>
<td>1.63</td>
<td>0.913</td>
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<td>Plaza Mayor Positive Emotions</td>
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<td>2</td>
<td>5</td>
<td>4.42</td>
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<td>Torre Negative Emotions</td>
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<td>1</td>
<td>4</td>
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<td>Torre Positive Emotions</td>
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<td>Plaza de la Concatedral Negative Emotions</td>
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<td>Plaza Iglesia San Mateo Positive Emotions</td>
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<td>5</td>
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<td>1.044</td>
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<td>Iglesia de Santiago Negative Emotions</td>
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<td>4</td>
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<td>0.751</td>
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<td>5</td>
<td>4.26</td>
<td>1.005</td>
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</tbody>
</table>

Valid N per list: 38

Source: Own elaboration in SPSS 25.

Further analysis ran in SPSS proved the variables in the positive and negative emotions during the visit section of the questionnaire share a high level of association. The Kendall’s coefficient of concordance determined the association degree between these variables was strong. This is shown in Table 4, where the decision of the Friedman’s test in SPSS is to reject the null hypothesis and state that there is a significant difference between the positive and negative emotions variables during the visit.
Table 4. Hypothesis test summary for negative and positive emotions during the visit.

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>Test</th>
<th>Sig.</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 The distributions of Plaza Mayor Negative Emotions, Plaza Mayor Positive Emotions, Torre Negative Emotions, Torre Positive Emotions, Muralla Negative Emotions, Muralla Positive Emotions, Foro Negative Emotions, Foro Positive Emotions, Plaza de la Concatedral Negative Emotions, Plaza de la Concatedral Positive Emotions, Plaza de San Jorge Negative Emotions, Plaza de San Jorge Positive Emotions, Iglesia San Mateo Negative Emotions, Iglesia San Mateo Positive Emotions, Iglesia de Santiago Negative Emotions, Iglesia de Santiago Positive Emotions are the same.</td>
<td>Related Samples Kendall's Coefficient of Concordance</td>
<td>0.000</td>
<td>Reject the Null Hypothesis</td>
</tr>
</tbody>
</table>

Asymptotic significances are displayed. The significance level is .05.

Source: Own elaboration in SPSS 25.

4.2. Data Analysis from Gephi

In order to further compare and contrast the collected data, the software Gephi 0.9 ran grouping techniques through statistical analysis and portrayed the information from the results in a visualization of nodes and edges which inferred relativity and patterns of similarity amongst groups of emotions before, during and after the visit. The results for the first analysis can be seen on Figure 1. This is the visualization provided by Gephi on the study of the intensity in emotions before and after the visit. The positive emotions all scaled mainly around the excessive level of intensity node, and also around the high intensity node. Whereas, the negative emotions all scaled mainly around the none level of intensity node, and also around the low level of intensity node. This proves the weight of the answers on positive emotions ranked around the excessive and high intensity levels before and after the visit, and the weight of the answers on negative emotions ranked around the none or low intensity levels before and after the visit.

Figure 1. Intensity of emotions before and after the visit

Source: Own elaboration in Gephi 0.9

Subsequently, the Gephi software produced a visualization for the collected data on negative emotions during the visit. In Figure 2, the nodes represent the levels of intensity for negative emotions felt during each point of
interest in the itinerary for the visit. The participants reported none level of intensity in negative emotions felt during the visit or a low level of intensity in negative emotions felt during the visit. The visualization provided by Gephi on the study of the intensity in negative emotions during the visit showed how each part of the itinerary ranged mainly around the none level of intensity node, and some around the low level of intensity node for negative emotions felt during the visit. The rest of the nodes are in the outside area due to the distribution of closeness centrality; the collected data did not show attraction towards these nodes in the reported answers for this set of variables. This proves the weight of the answers on negative emotions ranked around the none or low intensity levels during the visit.

Figure 2. Intensity in negative emotions during the visit

Finally, the Gephi software produced a visualization for the collected data on positive emotions during the visit. In Figure 3, the nodes represent the levels of intensity for positive emotions felt during each point of interest in the itinerary for the visit. The participants reported an excessive level of intensity in positive emotions felt during the visit or at least a high level of intensity in positive emotions felt during the visit. The visualization provided by Gephi on the study of the intensity in positive emotions during the visit showed how each part of the itinerary ranged mainly around the excessive level of intensity node, and some around the high level of intensity node for this set of variables. The rest of the nodes are in the outside area due to the distribution of closeness centrality; the collected data did not show attraction towards these nodes in the reported answers for this set of variables. This proves the weight of the answers on positive emotions ranked around the excessive or high intensity levels during the visit.

Figure 3. Intensity in positive emotions during the visit
5. Discussion

The aim was to prove emotions were present in outside the classroom activities such as patrimonial visits, thus, must be included in the planning of heritage education. Teachers’ ought to be aware of the opportunities in having the presence of emotions during the learning process and must take advantage of them in their teaching. The studies ran showed activities outside the classroom, such as patrimonial visits, have an excessive level of intensity in emotions such as joy, happiness, admiration, satisfaction and others that can be categorized as positive emotions. In addition, the intensity of these emotions can increase after the activity. The positive emotions present during the visit scaled in an excessive level of intensity during the visit, which proves students approve and benefit from this type of activities. If teachers introduce these practices in their planning, and do so effectively, they can make a real difference in their classrooms and provide a meaningful experience for their students.

First of all, it is necessary to establish that the presence of emotions, while learning in such scenarios, is a remarkable opportunity for integer learning. Learning in patrimony allows students to live and experience the traits and characteristics that make a place unique, that shapes its identity. (Cepeda, 2018). It is through patrimonial art that teachers can transmit ideas and emotions (Santacana, 2006). Thus, authorities and all ought to make these practices a fundamental part of the integer learning process. Consequently, teachers must adapt content and plan accordingly to make the most out of such experiences. It is fundamental to have such planning. It has been proven that the relationship between emotions and content is high, (Mellado, Garritz & Brígido, 2009), and thus, teachers must prepare specific content to take advantage of the possible opportunities.

On the second hand, this study allowed researchers to realize the fact that patrimonial visits are well seen by students, and should venture in properly preparing these activities and make the most out of the experiences. As it was previously stated, it is the duty of education to make of common interest the elements that make up a society, the local surroundings, the public and social aspects of a community (Almansa & Facal, 2015). Teaching authorities must seek to include social-emotional learning in all aspects of education. The emotional aspect of education has proven to be of decisive importance, as in the results shown in this study, when it comes to teaching strategies, itineraries and practices (Santacana & Martínez, 2018).

Finally, this study seeks to urge teachers and researchers to continue contributing in the field of social-emotional learning through heritage. It has been proven formation does not only occur with individuals in formal and determined spaces, but almost in every space people interact, and through a wide variety of resources (Melgar & Donolo, 2011). Thus, emotions in patrimonial visits cannot be ignored and must be addressed. These activities provide opportunities for integer learning, the development of social and emotional competencies, the shaping of identity and culture, and overall, significant learning experiences. Teachers’ ought to seek ways for including practices, such as the one described in this project, in their planning. Educational authorities must make sure the curriculum seeks the development of social-emotional competencies and aims to shape individuals holistically.

6. Conclusions

This study contains valuable analysis to support and prove the need of social-emotional learning in heritage education. The results obtained from the collected data agreed with the objectives set for the study. The analysis ran for all the variables showed relationships and association between positive emotions that must be considered and considered in order to cause a real effect in the learning process, and promote integer learning for society.

The results showed the presence of emotions in activities such as patrimonial visits. The intensity reported from the collected data proved positive emotions produce a higher level of intensity before, during and after the visit. Negative emotions are also present, even if it is on a lower scale, nevertheless, must be considered. The knowledge on the presence of emotions is key to affirm that social-emotional learning is fundamental in shaping society. In addition, the presence of emotions in patrimonial visits reassures the idea of culture and heritage as effective agents in the transmission of emotions and ideas.

Furthermore, the analysis ran in the study of variables proved that positive emotions increased their level of intensity after the visit and the intensity in negative emotions decreased after the visit. These results can make teachers realize that such activities have a true impact in students, and thus, the experience might improve and be more significant, if the planning, delivering and evaluation stages are planned accordingly for the needs of a specific group. The more prepared and ready teachers are to cope with the emotions that arise in situations as the one from this study, can be crucial when it comes to the shaping and promoting of social-emotional competencies.

Finally, as it has been one of the main aims of this study, the results obtained after analyzing the collected data ought to encourage teachers and academic communities to continue researching in the field of heritage education, and the inclusion of social-emotional competencies. The results showed that patrimonial activities can be of great benefit, and thus, teachers ought to keep seeking for this type of opportunities and be prepared to take advantage of them. The content must be appropriate as well as the techniques and strategies used to deliver such activities. Teachers must first learn and understand about emotions and their presence in educational contexts to further promote their benefits and learning opportunities.
7. Acknowledgements

First and most of all, nothing is done without Thy will and purpose, and for it, I am thankful.

Thus, I would like to dedicate this to:

God and Life, my parents, my brothers and sister, my thesis director and teacher Dr. Magdalena López Pérez, Dr. David Porrinas, the University of Extremadura, Kids&Us Badajoz, and lastly, Universidad Pedagógica Nacional Francisco Morazán, Honduras.

The present study is a sequel for some previous research papers done on the role of emotions in learning. This is the beginning for a thesis dissertation in the teacher formation program from the University of Extremadura.
References


Santacana & Martínez, (2018). El patrimonio cultural y el sistema emocional: Un estado de la cuestión desde la didáctica. *Arbor*, 194(788), 446. shorturl.at/dFT03


Singh, Roy & Tripathi, (2013). Non-parametric tests: hands on SPSS. *ICAR Research Complex for NEH Region, Umiam, Meghalaya*. shorturl.at/abfIR