Correlations Between Demographic Factors affecting Museum Attendance and Educational Experiences

Madhav Achar, Anna Benson, Brenda Chiang, Emmanuel Gansallo, Jeremy Jones, Huyen Nguyen, Adam Watkins
Abstract

This study hypothesizes that more privileged identities such as white, high socioeconomic status, living in urban/suburban environments, and high parental education levels, would have higher museum attendance. Race, socioeconomic status, type of living environment, and level of parental education were compared to museum attendance. Five articles were used in this study to further understand the relationship between the demographics in the attendance of museums and higher education. Overall, there was a positive trend with museum and educational experiences. This study uses the method of surveys using the site Qualtrics. Results were analyzed with chi-square tests using SPSS software to determine statistical significance with a 5% significance level. The hypotheses were both supported and refuted. The results showed that there was no statistical correlation between race and museum attendance with a significance level of 10.9% and that high parental level of education compared to student museum attendance was also statistically insignificant with a value of 8.5%. However, the hypothesis was supported in that the parent income and student museum attendance was positively correlated with a significance level of 4.6%. Moreover, the students were asked to rank high schools based on the level of college preparation the school provided and the average value was 7.59 (well prepared). There were many limitations to this study such as clear biases, small sample size (n=51), and an incomprehensive survey. Further research should be conducted with one-on-one interviews, analyzing visitation patterns at museums, or collaborating with University of Michigan faculty who conduct research on museum attendance.
Introduction

Our group is interested in the correlation between museum attendance and education and we decided on this topic upon realizing our common interest in children. We brainstormed about what factors play roles in children’s education and started thinking of the advantages and disadvantages children have based on socioeconomic status. Lacking the ability to survey parents and children who attend museums, we have decided to research the impact of demographic factors on museum attendance based on a sample of Michigan students.

We are aware of the biases of this research since our population is of college students seeking a higher education at an elite university; however, we are lucky to attend a diverse university where people of all socioeconomic statuses are accommodated. We also hope to still be able to glean productive information from our results. We believe that museums can be a beneficial part of one’s education because they reinforce the importance of learning while also include a varying range of topics in which anyone can be passionate about. Also, in researching the correlation between the importance of museums and education, we want to be mindful of social justice issues as an avenue of accessibility to museums and comprehensive education. In that sense, we are aware of how privileged social identities and demographics may play out in accessibility of museums. These identities and demographics include race, socioeconomic status, type of living environment, and level of parental education. Specifically, we denote these privileged identities and demographics as being White, having a high socioeconomic status, living in an urban or suburban environment, and having parents with high education levels. We hypothesize that more privileged identities are correlated with having more access to museums and thus enhanced educational experiences.
Literature Review

To begin our research on this issue, we began with a literature search to learn what data and information is already out there. One of the main focal points in our search was to find out if there was a relationship between the demographics in the attendance of museums and higher education in the United States. In each article, we attempted to pick out details that produced data concerning the demographic differences in museum attendance, and included suggestions at what museums should do to appeal more towards minorities. However, some of the authors did not exactly specify the impacts that visiting a museum had on the visitors’ academic or educational values, which is what we hope to find in our data collection.

The article “Demographic Transformation and the Future of Museums,” by Betty Farrell, looks at the demographic makeup of museum attendance and analyzes the reasons for low minority attendance (2010). Farrell explains how the majority of museum-goers are predominantly white and of higher socioeconomic status, and determines that minorities face several barriers to museum participation, including cultural barriers, lack of knowledge, and the influence of social networks. She acknowledges that transportation and convenience are also key, with parents working the majority of the day and museums located in centralized areas of the city far from schools and neighborhoods. Latinos and African Americans, in particular, suffer from historical discrimination rooted in the psychology of social experiences. These experiences are passed on through each generation, forming museum habits such as attending museums with predominantly black and Hispanic culture themes. The motive of these minority groups is to pass on heritage and culture to their children. Demographics also impact attendance at all socioeconomic levels. Higher education is the strongest predictor of museum attendance; however, this attendance is much lower for minority groups as well. The article recommends that
in order for museums to appeal to minorities, they have to break the racial barriers that are characteristic of traditional museums.

The article, “Museums are for the Rich,” is centered on the price of museums, which dictates, along with education, the type of people who attend museums. It highlights one artist in particular who has built an exhibit at a local museum but cannot afford to take his family. I think that in our research it is important to not only talk about why there is this breakdown of different people who attend museums but also how museums can fix this problem. The article very interestingly compares and contrasts the price of attending a museum to that of a movie ticket and even the price of feeding one’s family. People with lower levels of education usually have lower paying jobs. These people should not have to choose between feeding their families versus having the ability to take their families to the local museum. Who is to say that a child whose parents are educated will be more inspired and get more out of the Air and Space Museum, for example, than one whose parents are not educated (Walhimer, 2012). There should be an emphasis on especially getting children of undedicated parents into these museums, solely for inspiration, which will fuel their determination and cause them to put a focus on education in the future.

In "A review of Latin American perspectives on museums and museum learning," the writers of the article explored the current roles of museums in the Latin American society (Briseño-Garzón & Anderson, 2012). They argue that it is possible to understand museum visitors' learning experiences if socio-cultural aspects are taken into consideration. This article explores the relationship between the uniqueness of Latin American tradition (such as their interactions with each other, understanding of the world, and notion of learning) and how it might relate to their interest in visiting museums and their experiences. Overall, the article was
very informative on discussing ways that Latin American audiences could benefit as learners when visiting museums, such as gaining new socio-cultural perspectives and learning in an informal environment. It also mentioned that museum visitation has the potential to facilitate children's learning and their education. However, the article failed to describe a correlation between the Latin American visiting experience and education. This article relates to our topic in one significant way. It addresses how Latin Americans’ visiting experience affects their learning and social perspectives on life, in other words describing how a minority audience experience relates to personal values.

In the article, ‘School field trips: Assessing their long-term impact,’ the authors analyze research into the long-term impact of school field trips to museums and other hands-on learning experiences (Falk & Dierking, 1997). It includes testimonies from a number of high school students and adults that recall their positive learning experiences from elementary school and finds that memories of these experiences still have a positive influence on these people years later. This article supports the idea that museum learning at a young age can have a positive influence on a person’s education and attitude towards learning. Thus, this also says something about those that are disadvantaged and don’t have access to these experiences. This could aid our research into the link between museum attendance and education, and help support the fact that an effort needs to be made to improve the accessibility of museums for disadvantaged groups.

The article on “The James Irvine Foundation: Museum Youth Initiative,” is about an initiative to help strengthen education in today’s youth through the use of museums (Horn, 2004). They used many different methods to observe and collect data (surveys, interviews, etc.) This initiative also targeted groups with disadvantages in regards to education. This relates a lot to our overall project. They have pinpointed issues that need to be addressed about education and
how museums (after school educational program) can help to improve education. This is one example of how an interactive educational program can promote education if made more available despite many factors that can be seen as a disadvantage in regards to achieving an education.

There were five research articles that pertained to the correlation of museums and education and what factors may affect the attendance rates. Overall, we saw a generally positive trend with museums and educational experience. Museum attendance can be heavily associated with socioeconomic status, which tends to disenfranchise minority children. There are initiatives that are working to overcome the disparity, such as the Museum Youth Initiative and the creation of new museums for African American and Latin American culture. Since these initiatives will continue to support a positive increase in minority attendance and education, as long as these initiatives continue, we will only see further benefits to minority youth.

**Methodology**

This project focused on museum attendance and a variety of other factors that may correlate with education. It was determined early that the most efficient and beneficial way to gather data would be a survey distributed online through social media. Through this method, the survey could reach fellow Michigan students in a more convenient way and thus provide data from more willing participants. The survey itself was composed of questions deemed relevant to this project. The questions needed to pertain to factors that could possibly limit and/or promote access and attendance to museums. Although there are many factors that may have an effect, the questions were limited to 9 that would best fit this project (Appendix 1). All the questions provided in this project were compiled through Qualtrics where answers could be easily gathered and analyzed. The results gathered were entered into SPSS and then chi-square tests were used to
determine statistical significance. Statistical significance was based on a 5% significance level. Therefore, if results showed a significance level of 5% or lower, we deemed the results to be statistically significant.

Results

We hypothesized that students who racially identified as white would be more likely to attend museums than students of other races. Our study showed that out of 51 students at the University of Michigan, there was no statistical correlation between race and museum attendance for this subject pool with a significance level of 10.9%. We also hypothesized that going to museums would have a positive effect on one’s educational experiences; the study showed that this was true for 74.5% of students.

We surveyed students on their parent’s highest level of education and compared that to the student’s museum attendance. This factor while seeming significant to us, was not within the 5% significance level; it was 8.5%. However, after analyzing the survey results, we found that the parent’s income and the student’s museum attendance were in fact correlated with a significant level of 4.6%. We hypothesized that living environment and museum attendance would not be directly correlated. The data showed that 53% of the students were from a suburban living environment; however, this factor was also not statistically correlated with museum attendance. Finally, we asked the students to rate their high school based on how well they felt the school had prepared them for college. Based on a scale of (1) to (10), (10) being “excellent preparation” and (1) being no preparation at all, the average score for the schools was 7.59; we have classified this value as “well prepared.”

Discussion
As discussed above, the results showed only one correlation within the data regarding the frequency of museum attendance. We had hypothesized that all factors (living environment, parent education level, race, and socioeconomic status) would correlate with museum attendance, however only socioeconomic status revealed any statistically significant relationship. Since the majority of the data is contrary to our hypothesis, it can be surmised that our methodology for securing the data was flawed for several reasons.

First, the sample we pulled from had clear biases. The majority of university students come from upper income families with parents who had a college degree. Additionally, our sample is more racially diverse than the population of the United States. The majority of students in our sample are generally from enriched educational backgrounds, leading them to attend a selective university. This understanding transcends the other factors that could lead to decreased museum attendance, such as race, parental education level, and living environment. The fact that our survey pool only had 51 students made it difficult to record trends in the data.

Second, the fact that socioeconomic status *did correlate* with museum attendance reveals that our data samples is faulty. In reality, socioeconomic status correlates with other factors like race and living environment. Since there is no correlation between socioeconomic status and the other social factors, we can conclude that our data is not very representative of the population and we must not draw too many conclusions from the data.

A major limitation of our action is that it may not have been comprehensive enough. Using only a survey for data provides a narrow scope of all of the complex variables and situations that are involved in the issue of availability of museums for educational purposes. An improvement could be made in this area through supplementing our survey with additional action components and ways of collecting data. Some examples would be having one-on-one
interviews, analyzing visitation patterns at museums, or collaborating with University of Michigan faculty who were researching museum attendance.

After reflecting on the results of our survey, we now have a clearer perspective on how having a privileged socioeconomic status may allow for more accessibility of museums, and thus increased experiential and interactive avenues for education. We acknowledge that generally people with higher socioeconomic status have greater access to all forms of education, such as better schools, more books in the home, etc. However, we want to stress that we recognize that the data does not reveal a correlation between attending museums and the level of education, only a correlation.

Implications

After analyzing the outcome of this survey one can see that the results can be used to offer additional information about educational experiences among children and young teens. By examining the relationship between education and museum attendance, analysts can get a closer look at how parent and family involvement and also schools are related to the education level achieved by the next generation. Our results can also impact the way our teachers and professors explain their curricula. Museums offer another way of learning new material, through a much more visual and interactive style. Overall the result of the survey could provide another option for students to take in and process information.

Unfortunately, we did not have the proper resources to visit different museums in our region and ask the necessary questions that were required to obtain data for our study. As a result, our group decided that the best way to obtain this information was through a survey. There were three main objectives we had in mind while composing the questions in our survey. One objective was to determine if there was a relationship between socioeconomic standing while
attending museums when growing up. The second objective was to determine if there was a relationship between the quality of school system an individual attended and museum attendance. Lastly, we wanted to determine if there was a connection between the race/ethnicity of an individual and museum attendance. These areas of interest were well represented in our survey.

Unfortunately, there were only 51 students that participated in this survey who all attended the University of Michigan. As a result, the outcomes from the survey can be very biased towards individuals who most likely had a strong academic and economic background coming from high school. To make our study/research more effective, a more hands on approach should be taken. We can actually take a group of kids to a museum or art gallery and ask them individually what they've learned or new skills that they acquired. For example, a visit to an art gallery might improve an individual’s perception on how to draw different objects.

Reflection

The approach we took to formulating our topic was the strength of our group. We brainstormed extensively and talked about unique and interesting topics that did not fit the obvious mold for social justice projects. In the end, we chose the topic of museums and children, based on a synthesis of several ideas. We wanted to make sure everyone’s input was included from the start so that each group member would have a vested interest in researching the topic.

Our group did well in dividing tasks in both collecting and analyzing data and writing. We divided tasks based on people’s strengths, and we also collaborated on the editing process of our paper. We also did well in meeting our deadlines and staying on schedule. However, we did occasionally have long gaps between meetings, which made it more difficult to maintain focus
on our project. We also could have improved group attendance, which was inconsistent week to week.

**Conclusion**

Our initial research idea was to find the impact of how museum attendance and access affected education. After exploring literature on the topic of museum access, it became increasingly clear that our group needed to consider several intermediary demographic factors that may have had a significant effect on whether individuals were able to go to museums in school, as well as the quality of their primary and secondary education. The literature also specified that socioeconomic status in particular would be an indicative of museum access, which our survey results ended up supporting. Although our results did not end up supporting our full hypothesis, which was that all targeted social identities would have less museum access than privileged social identities, the correlation of low socioeconomic status and museum access was a cause of concern. Though our sampling and methodology may have been flawed, we think that our results do bear significance, and indicate how museum access should be made more widely available in areas with fewer resources.
References


[<http://museumplanner.org/museums-are-for-the-rich/>](http://museumplanner.org/museums-are-for-the-rich)/.
APPENDIX 1

1) What gender do you identify with?
- Female
- Male
- Other (fill in)
- Prefer not to answer

2) What is your Race/Ethnicity?
- White (Non-Hispanic)
- Black or African American
- American Indian or Alaska Native
- Asian
- Native Hawaiian Other Pacific Islander
- Other (fill in)

3) Socioeconomic status (Values based on a family of four) Source
- lower economic class [avg. $29,000/yr and below]
- lower middle economic class [avg. $30,000/yr - $59,000/yr]
- upper middle economic class [avg. $60,000/yr - $149,000/yr]
- upper economic class [avg. $150,000/yr and above]

4) What type of environment did you grow up in?
- Rural
- Suburban
- Urban

5) What is the highest level of education your parents have received?
- less than high school
- Highschool
- Some college
- Bachelors
- Postgraduate

6) When you were younger did you attend museums at all?
- Yes
- No

** If yes, how frequently
- Less than once a year
- Once a year
- 2 to 4 times a year
- 5 or more times a year

7) If you attended museums, through what medium? (check all that apply)
   - Parents
   - School system
   - Other---------------------- (fill in)

8) Did attending museums have a positive effect on your educational experiences?
   - Yes
   - No
   - Not sure

9) Rate your previous school system based on preparedness for college on a scale of 1-10 (10 being the most prepared)
   - 1.........10
** Why? What resources were/weren’t provided? (educational field trips/ school funding/ etc.)