



MEASUREMENT OF MUSEUM SOCIAL IMPACT:

RESULTS FROM THE NATIONAL STUDY AND IMPLICATIONS FOR THE MUSEUM FIELD

Michelle A. Mileham, Emily Johnson, and Kari Ross Nelson

Michelle A. Mileham was the Project Manager for the Measurement of Museum Social Impact (MOMSI) study with the Utah Division of Arts and Museums. She is currently the Program Impact Manager at Oregon Zoo in Portland, OR.

Emily Johnson manages the Museum Services program at the Utah Division of Arts and Museums, advancing the value of museums and providing quality professional development, field service, and technical assistance.

Kari Ross Nelson is the Research and Evaluation Associate at Thanksgiving Point Institute, Lehi, Utah and served as a research partner on the MOMSI project.

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INTRODUCTION

When museums talk about impacts, they often refer to the educational, economic, and social dimensions of impact. Of the three, social impact is perhaps the most difficult and elusive to measure with data-based evidence. At this pivotal time in history, advocating for museums, their staff, their collections, and their programs is more important than ever. To do that successfully, though, we cannot simply *say* museums have a social impact based on our gut instinct and intuition. We need to *measure* and demonstrate with data the impact museums have on visitors and their communities. The Measurement of Museum Social Impact (MOMSI) study filled that need.

In 2020, the Utah Division of Arts & Museums, in partnership with Thanksgiving Point Institute, was awarded a National Leadership Grant from the Institute of Museum and Library Services (IMLS) to support the MOMSI research study. Over the course of the three-year grant, MOMSI met three primary goals. First, validate a museum social impact survey. The social impact survey had been used in two pilot studies (Ashton, et al. 2019) and was found to be reliable and valid in Utah. With national data, we tested the survey's validity further. Second, measure museum social impact nationally. The study captured social impact data at 38 museums across the United States. Third, develop and publish a museum social impact toolkit. This toolkit is free for download for museums to use to measure social impact on their own.

To reach these goals, the MOMSI team recruited museums across the U.S. to serve as host museums, and ultimately selected 38 museums into the cohort (Appendix). The experiences and results presented here are aggregated from those 38 museums.

LITERATURE REVIEW

The issue of measuring museums' impact has been a recurring challenge for museums. In 2003, Weil observed that "over time, the museum field will need to develop a vast arsenal of richer and more persuasive ways to document and/or demonstrate the myriad and beneficial outcomes that may occur for their individual visitors and have impact on the community beyond." Museums have struggled to demonstrate their impact, and as such have struggled at times to receive support from their communities.

Over a decade later, Lee and Linett pointed out that while we have no shortage of data, "the field seems to be approaching an inflection point, where the long-term health, sustainability, and effectiveness of cultural organizations depends critically on investment in and collective action around enhancing the field's capacity for using data strategically and thoughtfully to inform decision-making."

The issue persisted when Jacobsen (2016a) stated that "the field needs to adopt a shared framework and language because we still lack an accepted way to measure our impact." The MOMSI study sought to address this need by researching the social impact that museums have on individual members of museums' communities. Jacobsen (2016b) identified 1,025 indicators to measure museum impact and performance. While our work has been informed by Jacobsen's, it is also narrower and deepens the focus on social impact, reflecting on insights from literature in the public administration field.

A first and most important step in measuring social impact is to define it. We recognize that there are multiple ways to define social impact, highly nuanced by the fields in which it is researched. We chose a definition put forward by Philips and Wong (2016) for its plausibility to ways museums contribute to social impact: “The effect of an activity on the social fabric of a community and the wellbeing of the individuals and families who live there.” Next, we explored factors that make communities places where people want to live.

Communities with residents who like where they live are generally more successful, attracting and retaining a talented workforce, which leads to a growing local economy. Drivers of these factors have been studied extensively, and we drew upon survey findings from Knight Foundation and Gallup (2010) and a systematic review by McMillan and Chavis (1986) to, again, consider plausible factors in terms of how museums might impact social well-being.

Two “drivers” identified by the Knight Foundation and Gallup were education and community openness, with the latter particularly referring to how open or welcoming a community is to different types of people, and hence our *Valuing Diverse Communities* construct. The prior driver, education, aligns to a core value of the museum field (American Association of Museums, 1992), and leads to the *Continued Learning and Engagement* construct. McMillan and Chavis discuss a multifaceted “integration and fulfillment of needs” (p.9), implying a sense of meeting the needs of the ‘whole person’ and hence our *Strengthened Relationships* and *Health and Well-Being* constructs. At multiple points of the project leading up to and including MOMSI, the survey instrument was subject to validity and reliability measures including expert review and scale reliability analysis of both the State and MOMSI responses.

METHODS

RECRUITING HOST MUSEUMS

In January, 2021 the MOMSI team opened a call for host museums to participate as research sites. The call was posted across platforms, including in blogs and listservs through national and regional museum professional organizations (i.e., American Alliance of Museums, American Association of State and Local History, Association of Zoos and Aquariums, etc.). We shared the call widely across the profession in an effort to have a diverse cohort of host museums – meaning we wanted museums that represented various staff and budget sizes, various content-focus areas, and every region of the U.S.

The 71 applications we received were reviewed by a panel composed of people both internal and external to the study. Panelists scored applications based on the diversity of criteria outlined above. We also took into account whether the applicant museum had an internal research and evaluation department (or staff member) and their admission price. While the IMLS proposal only required the study to accept 30 museums into the cohort, we ultimately accepted 38 museums due to the depth of the applicant pool.

The 38 museums selected as host sites were required to fulfill study expectations, including (1) being open to the public by fall 2021, (2) recruiting at least 100 participants into the study from their community, (3) allowing participants, and at least one guest of each participant, to visit the museum three times free of admission, and (4) offer an incentive to

participants who completed the social impact survey. These were not easy “asks” from host museums given ongoing financial and staff constraints due to the COVID-19 pandemic.

RECRUITING PARTICIPANTS

After a brief training with the MOMSI team, each host museum set out to recruit at least 100 participants into the study at their museum. Recruitment needed to be a local effort. The MOMSI team supplied draft language for e-newsletters, social media posts, and flyers along with the project logo and images, which the host museums could then use to recruit in their city and communities. All host museums were provided a link to an online form, written and managed by the MOMSI study team, to share when recruiting participants. People interested in being part of the study completed that form, which required them to consent to participate in the study, select the host museum they wished to visit as a study participant, and enter their name and contact information. The MOMSI team worked closely with each host museum providing recruitment updates. Each museum received a list of participant names, but other contact information was kept confidential and not shared with host museums. As the MOMSI study was considered human-subjects research, Independent Review Board ethics approval was obtained from an independent IRB service.

Each host museum managed recruitment efforts, with some using traditional means of newsletters and social media and others using apps like Nextdoor or attending community events. One museum recruited by reaching out to lapsed members, another invited friends-of-friends (using the museum’s regular visitors to invite their friends to participate in the study), and yet another worked with existing partners to recruit through their channels. Larger museums, sometimes with international followers on social media, had to focus efforts locally, using flyers at libraries, sending information home with students at Title 1 schools, and emailing participants from museum program lists.

There was no single identified way for museums to recruit participants, nor did the study want to set parameters on *how* or *whom* museums recruited to participate in the study. Some museums attempted to reach first-time visitors, some were focused on racial or socio-economic diversity. These choices were determined by the museums themselves, as the MOMSI team recognized that museums are in different places, both geographically and in their diversity, equity, and inclusion (DEI) initiatives. Therefore, what worked for one museum in this cohort would not necessarily work for another.

Overall, museums recruited between 18 and 1,725 participants. The median number of participants museums selected into the study was 125. The spread of prospective participants recruited at museums is quite large. Of course, not all museums reached the 100 participant threshold the study asked for. That was expected, and helped the MOMSI team understand challenges museums might face when completing a study like this on their own. Seven (18%) of host museums recruited fewer than 100 participants, and many of these museums were in small, more rural communities.

PARTICIPANT ENGAGEMENT

There are two elements to consider here: (1) participants visiting the museum up to three times, and (2) participants receiving and completing the social impact survey. We'll turn first to participant visits to the museum.

Participants were asked to visit their respective museum up to three times during the study period (September 2021-August 2022). The study period was not consistent across all host museums, mostly due to some museums requiring extra time for recruitment. Several outdoor museums (i.e. zoos and gardens) were in the cohort, and opted to extend the study period through the summer months for increased likelihood of participants visiting in more favorable weather.

As indicated above, personal information of participants (specifically email address) was not shared with host museums. Therefore, it fell to the MOMSI project manager to communicate with study participants at each of the 38 museums. Working with museums on language, especially pertaining to how participants would receive free admission (showing their participant status at the gate, through a discount code for online tickets, etc.), the project manager emailed participants first when they were selected as a participant, and then several times throughout the study period with reminders and updates.

Sending reminder emails to participants was an effort to reduce attrition. Still, across all 38 host museums, the MOMSI sample experienced about 75% attrition between the time of participants submitting the form to making their visits and finally completing the social impact survey. This high attrition might be a result of either the emails landing in participant's "junk" inboxes or participants choosing not to visit the museum due to ongoing COVID-19 surges. In some instances, participants expressed the latter. However, the reasons leading to high attrition remain unknown.

As in the previous pilot studies, MOMSI asked participants to visit the same museum up to three times during the study period. MOMSI was designed with three visits in mind for a few reasons. First, we wanted to give participants an opportunity to visit the museum with different guests. The participant might experience different parts of the museum depending on whom they attended with. Second, we wanted participants to have multiple "touch points" with the museum, not just a one-off visit. Finally, visiting numerous times allowed participants to experience any changes in the museum. For instance, a new exhibit or even a different season and weather. Host museums were responsible for tracking participants' visits to their museum, though the MOMSI team created various tracking systems and worked with each museum to make this as streamlined as possible for the host museums.

The second element to consider regarding participant engagement is asking the participants to complete the social impact survey. Like the recruitment form, the MOMSI team created the survey and the project manager was responsible for distributing the social impact survey to participants. A link to the online survey was sent in an initial email to participants, who were then reminded numerous times to complete the survey.

SOCIAL IMPACT SURVEY

The MOMSI museum social impact survey (see the Measurement of Museum Social Impact Toolkit for the full survey) uses a retrospective pre-then-post test (RPT) design. Using this approach requires only one administration of the survey, which for this study is after the participant has visited the museum for the last time during the study period. In social science research, the RPT is a popular way to assess learners' self-reported changes in knowledge, awareness, skills, confidence, and attitudes or behaviors (Klatt and Taylor-Powell, 2005).

Benefits of using RPT include:

- It takes less time than asking participants to complete two surveys (a pre and a post survey).
- It is less burdensome because participants only take one survey.
- It minimizes pretest sensitivity (sensitizing the participant to what to think about during their visits).
- It avoids response shift bias (inaccurate pretest ratings because participants' understanding of survey questions changes because of the visit).

Like any tool, limitations to RPT exist, including:

- RPT survey questions require a different way of thinking that most people are not used to experiencing when taking a survey.
- Inaccuracies in memory when the recall period is long. In the case of this project, participants are asked to recall up to nine months prior.
- Self-reporting in any kind of survey is vulnerable to bias.

Based on feedback from the study's advisory committee, and supported by Falk (2022), the MOMSI project manager emailed the social impact survey to participants approximately two weeks after their third visit to the museum or at the end of the study period, whichever came first. Because many participants only completed 1-2 visits, and we felt it was still important to collect data from them, anyone who completed at least one visit to the museum during the study period was emailed the survey. The survey asked participants to self-report the number of times they visited the museum during the study.

The museum social impact survey was emailed to 2,562 participants, who were asked to respond to 48 social impact indicator statements on a scale of 1-7, where 1= strongly disagree and 7= strongly agree. With the RPT design, participants submitted responses for both before and after their visit to the museum. These indicator statements each align with one of four long-term outcomes: continued learning and engagement, increased health and well-being, strengthened relationships, and valuing diverse communities. In addition to these social impact indicators, participants responded to 12 content-specific questions and six open-ended questions. Included at the end of the survey were demographic questions, including gender, race/ethnicity, age, household income, and zip code.

Along with free admission, each MOMSI host museum identified an incentive to offer study participants who completed the survey. This ranged from a membership to gift cards to gift baskets, and some museums offered the incentives to every person who completed the survey while others facilitated a drawing and announced one or more winners. Participants were given the opportunity to opt-in for the incentive at the end of the social impact survey. At this point in the study, the names and contact information of participants who opted in to

receive the incentive were shared with the host museums. Host museums, then, dispersed the incentives to their respective participants.

DATA ANALYSIS

Of the 2,562 participants who received the survey, 2,042 completed the survey (79% return rate). However, some of those surveys were incomplete. The social impact indicator statements and content-specific questions were analyzed using a Paired Sample t-test in Microsoft Excel. Each host museum received a report of how many indicator statements in each long-term outcome showed a statistically significant (p -value = <0.05) positive change. Indicator statements that were negatively worded were reversed for analysis.

The MOMSI team analyzed three of the six open-ended questions. These open-ended questions were more closely tied to measuring social impact and we agreed could draw trends shared nationally, while the other questions were more host museum-specific and tied directly to experiences at that one museum (i.e., visitor satisfaction). The three questions our team analyzed were:

1. How does this museum benefit your community?
2. How did participating in this study change your perspective of museums/cultural sites?
3. In what ways, if any, did [museum] change the way you interact with others?

Thematic analysis was used for each question. A team of three first reviewed responses from a sample of the data. This sample included 20% of *each host museum's* responses, to alleviate biasing the sample with museums who had larger study samples. After identifying codes, the team met to review the codes and come to a consensus on and define themes emerging for each question. During this process, the team established a codebook. Another 20% sample was drawn to test the codebook. Inter-rater reliability was tested using Fleiss' Kappa and results showed there was strong agreement between raters ($\kappa = .767$, $\kappa = .745$, and $\kappa = .806$, respectively for the questions above).

Each host museum received access to their data, with participant information removed, for further analysis.

RESULTS

SURVEY VALIDATION

To meet the first goal of MOMSI, using the data from the national study, we performed psychometric analysis using two different tests for internal consistency reliability, or how closely related a set of items are as a group. Cronbach's Alpha is one measure of this internal consistency. Gutman Split Half looks at half of the data at a time, and assumes that the two halves of the test should yield similar true scores and error variances. For both statistics, acceptable values range from 0.7 to 0.9. Table 1 shows the Chronbach's alpha and Gutman split-half statistics for each long-term outcome for both the pre (before visiting the museum) and post (after visiting the museum) scores.

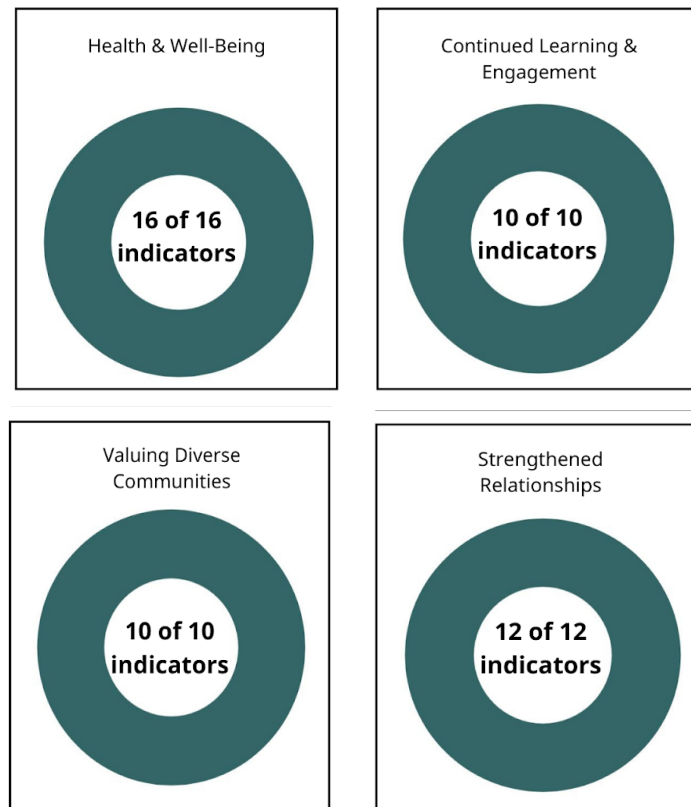
Table 1. Chronbach’s alpha and Gutman split-half statistic for each long-term outcome.

Survey Segment	Statistic
Continued Learning & Engagement	
Cronbach’s Alpha Before / After	.859 / .826
Gutman Split-Half Before/After	.793 / .783
Health and Well-Being	
Cronbach’s Alpha Before / After	.845 / .825
Gutman Split-Half Before/After	.734 / .691
Valuing Diverse Communities	
Cronbach’s Alpha Before / After	.911 / .903
Gutman Split-Half Before/After	.849 / .850
Strengthened Relationships	
Cronbach’s Alpha Before / After	.870 / .858
Gutman Split-Half Before/After	.862 / .847

QUANTITATIVE FINDINGS

In the aggregate, all social impact indicator statements show a statistically significant positive change (Figure 1) after visiting a museum. The large sample size likely influences these results, in the sense that with more data it is easier for the test to find significance.

Figure 1. Charts show all indicator statements have a positive change after visiting a museum.



At the time this report is published, the team is completing statistical analysis to determine if there is a difference in social impact based on participants completing one versus three visits; regional differences; and content-area differences (i.e., art museums, zoos and aquariums, public gardens, science museums, history museums, etc.). These additional results, with lower sample sizes, will help us make meaning out of the social impact museums have on individuals in ways this aggregate data cannot.

QUALITATIVE FINDINGS

As mentioned above, the MOMSI team analyzed the aggregate responses for three open-ended questions. Table 2 shows results for the question “How does this museum benefit your community?” During thematic analysis, the team used an inductive approach; however, it became evident in analyzing responses to this question that the four long-term outcomes of the social impact survey were the themes that emerged.

Table 2. The number of responses coded for each theme in response to the question “How does this museum benefit your community?”

Theme	Number of Responses (n=1651)
Continued Learning and Engagement	1110
Other	435
Valuing Diverse Communities	331
Strengthened Relationships	300
Increased Health and Well-being	206
Not Applicable	79

It is not surprising that *Continued Learning and Engagement* had the most responses – this is by nature what museums do, and is often written into their mission statement. Here, participants mentioned specific things they learned through their visits or exhibits they experienced. Responses often reflect this participant’s response, “This museum provides important history and context of the black population in the area. All cultures should be familiar with this information.”

Over 400 responses were coded into the *Other* theme. As team members started analyzing individual host museum data, certain themes emerged that were specific to that museum – or a small handful of museums in the cohort – that felt important to capture but could not be accurately captured in the aggregate in a way different than grouping them into an *Other* category. Included in these are: free admission, economics and/or bringing tourism, preserving history (i.e., building or what the area used to be), and offering a safe space. As evident from these examples, subcodes of *Other* changed depending on the museum.

Participants also mentioned elements of *Valuing Diverse Communities*:

“It is so important to understand the stories of yesterday that impact us today. The stories being shared at the museum are a gift to the community and a space

of togetherness where we can not only acknowledge our unique differences, but the things that we share in common as well.”

Strengthened Relationships were responses that included bringing the community together, or the museum being a community gathering space, as well as strengthening relationships between parents and children, family groups, or friends.

“It provides a place for the community to gather, hold it's history, and work together to overcome challenges.”

Increased Health and Well-being was evident across museum types, but particularly in those that provided outdoor spaces (i.e., gardens, zoos, or art museums with nature trails). This theme showed up in the data through responses that mentioned both physical and mental health, and the museum providing a space to relax or reflect on life. For instance,

“A fantastic place to go and relax, walk the grounds, and trails.”

“Gives children an escape.”

“It's a wonderful sanctuary from the pressures of every day life.”

Table 3 shows results from analysis of the question “How did participating in this study change your perspective of museums/cultural sites?” Again, the concept of learning emerges in the theme *Places of Learning*. As one participant said,

“Museums are so much more than just an outing with the family. It connects you to new experiences, people and things that we do not see in our daily lives. This is crucial for connecting the community with each other and understanding a different perspective.”

Another theme that emerged from analyzing this question was *Appreciation*. This showed up in two ways: *Internal* and *External*. Responses were coded for the former when they mentioned staff and the work that goes into making the museum what it is. For instance, “It gave me a better understanding of the passion it takes to make a museum run and function” and “I see how hard the staff works to create fun and engaging events that really fit well with the home and history.”

Participating in this study also *Reaffirmed Existing Feelings* – they already liked museums and this study reaffirmed those feelings. In some cases, participants commented on reaffirmed feelings with the absence of visiting museums due to the COVID-19 pandemic. In essence, they had been waiting to visit museums again and this study helped set them on the path. In other cases, participating in the MOMSI study *Increased Interest* in visiting museums. For instance, “Visiting more frequently than normal made me want to continue visiting frequently and to seek out other cultural sites.”

Table 3. The number of responses coded for each theme in response to the question “How did participating in this study change your perspective of museums/cultural sites?”

Theme	Number of Responses (n=1613)
Places of Learning	407
Appreciation-Internal	321
Reaffirmed Existing Feelings	294
Increased Interest	238
Appreciation-External	234
Did Not Change	187
Not Applicable	121
Museums as Spaces for Children/Youth	101
Health and Well-Being	67
Negative	27

Table 4 shows results from analysis of the question “In what ways, if any, did [museum] change the way you interact with others?” As the table shows, the highest number of responses was *Did Not Change*.

Table 4. The number of responses coded for each theme in response to the question “In what ways, if any, did [museum] change the way you interact with others?”

Theme	Number of Responses (n=1545)
Did Not Change	389
Shared Experience	367
Conversation Catalyst	272
Social-Emotional Experience	261
Not Applicable	245
New Connections with Others	108
Centering/Restorative	96
Negative	13

However, other common themes included *Shared Experience*, where participants explained how they shared the museum experience with others. In some cases participants mentioned who they visited with, and in other cases they mentioned interactions in the museum, either within their own group or with other visitors. For example,

“The [museum] allows children to play and create art in a safe and comfortable environment. This allowed my nephew to interact with other children his age

while visiting different art stations inspired by different art styles and nature.”

“It allowed us to get out and spend time together that we would otherwise not do.”

Participants also mentioned that visiting the museum was a *Conversation Catalyst*, providing them new and interesting things to talk about when interacting with others, both during and after their museum visits. Participants also commented on *Social-emotional Experiences*, including

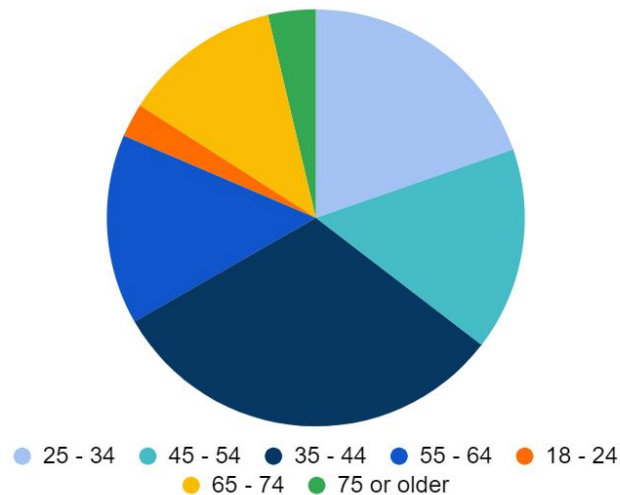
“We all come from different backgrounds. But seeing kids all play together after just meeting each other, it's a great example of how we should all be.”

“It helped me to unwind and relax and with a relaxed mindset it indirectly helped me to calmly react to situations which I would've been a little passive aggressive.”

PARTICIPANT DEMOGRAPHICS

As part of the social impact survey, participants were given the option to report demographic information, and we collected demographics from 1,709 participants. Of those who completed the survey, 75% were not members at the museum they visited. Eighty-three percent (83%) identified as female, 15% identified as male, 0.6% identified as another category, and 1% preferred not to respond. Thirty-one percent (31%) of those who completed the survey were between the ages of 35-44. Ages are shown in Figure 2 below.

Figure 2. Age distribution of participants who completed the social impact survey.



The survey also captured race/ethnicity (Figure 3), which shows the majority (70%) identified as White or Caucasian. Finally, household income was reported by participants who completed the survey. Household incomes were reported below \$10,000 to \$150,000 or higher (Figure 4), with just over about half (53%) reporting a household income of at or under \$89,999.

Figure 3. Race/Ethnicity of participants who completed the social impact survey.

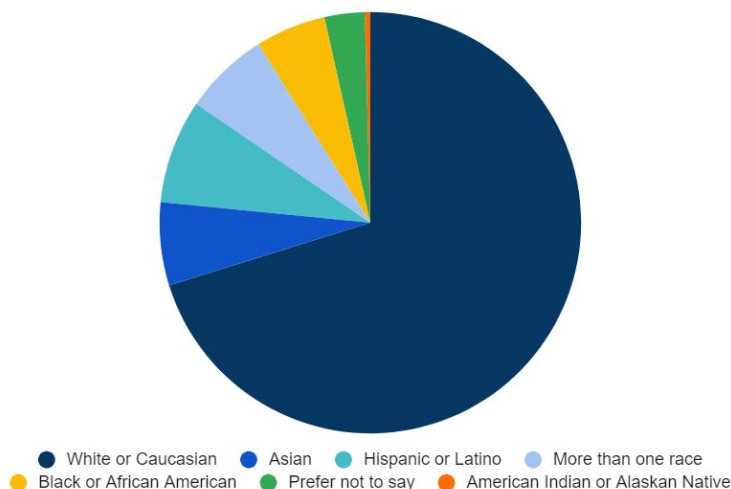
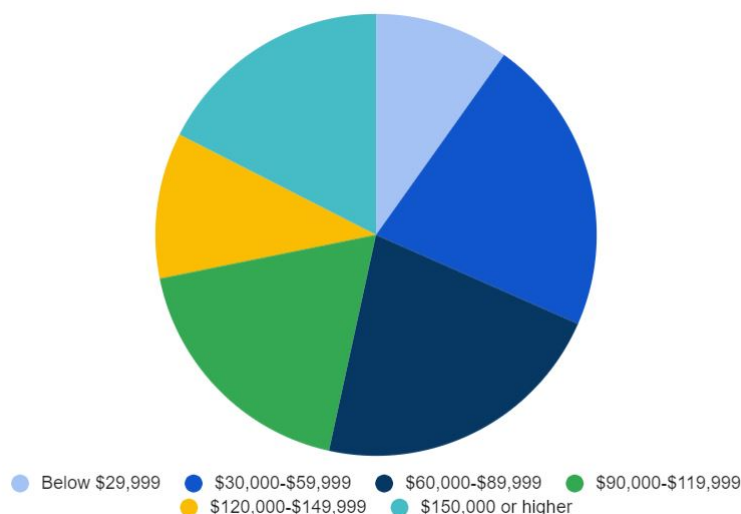


Figure 4. Household income of participants who completed the social impact survey.



CONCLUSIONS

Working with 38 museums across the United States, MOMSI was able to not only validate a social impact survey but also generate data about the social impact museums have on individuals. Results show that museums have a positive impact on visitors' learning and engagement, health and well-being, relationships, and valuing diverse communities. All indicator statements in these four long-term outcomes showed statistically significant positive change.

MOMSI participants were also able to articulate the benefit the museum has to the community, how their perspectives about museums/cultural sites changed as a result of participating in this national study, and how their interactions with others changed as a result of

the study. Overwhelmingly, participants identified that museums support learning. This is through specific exhibits or programs. Alongside that learning, are the interactions participants had with others, either within their own group, with museum staff or volunteers, or with other visitors. These shared experiences are not only a benefit of museums but also factor into the social impact museums have on individuals and communities through strengthened relationships.

Museums play an important role in providing spaces for individuals to relax, reflect, and exercise – supporting mental and physical health. Those experiences would not be possible without the dedicated staff in museums, an appreciation which was specifically called out by MOMSI participants.

Results from this national research study on museum social impact indicates that museums do have a social impact on visitors. Of course, data for each of the 38 host museums shows more nuance than the large sample and aggregate data represented here.

Along with measuring social impact, MOMSI evaluated the experience of staff from the host museums navigating this research study. Participating in a national study increased capacity for staff to engage in audience research and evaluation while supporting efforts to collect rigorous data. While each host museum faced unique challenges, they felt supported by the project team and fellow cohort museums. Host museums also have plans to act on the social impact results for their individual organizations, with some beginning to share results internally and externally to community members. Plans to use the social impact data for strategic and interpretive planning, DEI efforts, and more are already in the works.

The successes and challenges identified by both the MOMSI team and the host museums are captured in the Measurement of Museum Social Impact Toolkit. This toolkit, a direct result of the funding and the study, guides museums on how to measure social impact, and includes tips, resources, and the validated social impact survey.

As this work continues to progress, we look forward to seeing how – with social impact data – museums can improve their practices and leverage funding to continue this kind of socially strengthening work.

LIMITATIONS

Every study has its limitations. We recognize MOMSI, and the social impact survey, is not perfect. This is our attempt at a shared definition and practice for museums to *measure* social impact, something long talked about but never achieved at this scale. During the national study, the phrasing of one long-term outcome, Valuing Diverse Communities, was changed (previously Intercultural Competence). We continue to reflect on the language we use in the field and in audience research; therefore, it is worth noting that some indicator statements may or may not resonate with certain audiences. Additionally, indicator statements were not rooted in prior vetted instruments, but rather articulated through an iterative process of literature familiarity, expert consultation, host museum review, and psychometric analysis. We encourage the museum field to take what has been created here and challenge it, continue to improve upon the work, and ultimately make an even better instrument.

There are some limitations to how this study was managed, one of those being tracking participants. This required, especially at museums with free admission, participants to indicate

they were part of the study, and for staff to know and use the tracking system in place. There was a lot of room for error in this phase of the study, which might have caused us to overlook participants who were engaging but we did not have an indication that they were.

Having the MOMSI project manager communicate with participants was another limitation. This decision was made based on the Institutional Review Board (IRB); however, participants might have responded differently if the emails about the study, completing visits, and completing the social impact survey were coming from a museum-based email address as opposed to a project email address.

At the time of this report, we are still working on analyzing segmented data. As those results are discovered and shared, the conclusions we draw here might change based on the number of visits, content-focus area, and region.

IMPLICATIONS

The MOMSI research study reached its three goals. Not only did we give a glimpse of what museum social impact looks like on a national level, we validated a museum social impact survey, and published a social impact toolkit. The latter two pieces are critical in advancing the museum field's work in this area. We hope that museum staff feel inspired and use the social impact toolkit after reading this report and seeing the possibilities.

REFERENCES

- American Association of Museums. Task Force on Museum Education. (1992). *Excellence and Equity: Education and the Public Dimension of Museums; a Report from the American Association of Museums, 1992*. American Association of Museums.
- Ashton, S., Johnson, E., Nelson, K. R., Ortiz, J., & Wicai, D. (2019). Brace for Impact: Utah is Conducting a Pilot Study to Show the Social Impact of the State's Museums. *Museum*, May–June, 26-31.
- Falk, J.H. (2022). *The value of museums: Enhancing societal well-being*. Rowman & Littlefield.
- Jacobsen, J. W. (2016a). Museums need shared definitions. *Museums*, 95(6), 16-17.
- Jacobsen, J. W. (2016b). *Measuring museum impact and performance: Theory and practice*. Rowman & Littlefield.
- Klatt, J., & Taylor-Powell, E. (2005). Synthesis of literature relative to the retrospective pretest design. *Presentation to the American Evaluation Association*. Accessed June 23, 2023. <https://comm.eval.org/teaching/viewdocument/synthesis-of-literat>
- Lee, Sarah, and Peter Linett. (2013). "New Data Directions for the Cultural Landscape: Toward a Better Informed, Stronger Sector." Cultural Data Project. Accessed November 16, 2016. <http://culturaldata.org/learn/data-at-work/2014/new-data-directions-for-the-cultural-landscape/>.
- McMillan, D. W., & Chavis, D. M. (1986). Sense of community: A definition and theory. *Journal of community psychology*, 14(1), 6-23.
- Phillips, R., & Wong, C. (Eds.). (2016). *Handbook of community well-being research*. Springer.
- Weil, S. E. (2007). Beyond big and awesome: Outcome-based evaluation. In *Museum management and marketing* (pp. 195-204). Routledge.

APPENDIX

HOST MUSEUMS, MEASUREMENT OF MUSEUM SOCIAL IMPACT (MOMSI) STUDY

Arkansas State University Museum ([website](#))
Atlanta History Center ([website](#))
Bellevue Botanical Garden ([website](#))
Calaboose African American History Museum ([website](#))
Carter County Museum ([website](#))
Chazen Art Museum ([website](#))
Conner Prairie ([website](#))
Cradle of Aviation Museum and Education Center ([website](#))
Crystal Bridges Museum of American Art ([website](#))
Desert Botanical Garden ([website](#))
Florence Griswold Museum ([website](#))
Franklin Park Conservatory and Botanical Garden ([website](#))
Fresno Chaffee Zoo ([website](#))
Gallery One ([website](#))
Greensboro History Museum ([website](#))
Jackson Hole Children’s Museum ([website](#))
Jule Collins Smith Museum of Fine Arts at Auburn University ([website](#))
Kemper Museum of Contemporary Art ([website](#))
Los Angeles Zoo and Botanical Gardens ([website](#))
Minneapolis Institute of Art ([website](#))
Minnesota Historical Society, Minnesota History Center ([website](#))
Molly Brown House Museum ([website](#))
Montshire Museum of Science ([website](#))
Museum of Science, Boston ([website](#))
National Aquarium ([website](#))
Oklahoma City Zoo and Botanical Garden ([website](#))
Pérez Art Museum Miami ([website](#))
Plains Art Museum ([website](#))
Queens Botanical Garden ([website](#))
Rochester Museum and Science Center ([website](#))
Rockwell Museum ([website](#))
San Diego Chinese Historical Society and Museum ([website](#))
Saint Louis Zoo ([website](#))
The Children’s Museum of Indianapolis ([website](#))
The Glazer Children’s Museum ([website](#))
The Morton Arboretum ([website](#))
University of Michigan Museum of Natural History ([website](#))
Utah Museum of Contemporary Art ([website](#))