



# Measuring the Public & Economic Value of Art Museum Experiences

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**Institute for Learning Innovation**  
March 5, 2023



## EXECUTIVE SUMMARY

This project was an effort to rigorously document the public, well-being-related value as well as the resulting economic value and cost-benefits created by public visit experiences at **The Barnes Foundation, Cleveland Museum of Art, Denver Art Museum, Hillwood Estate, Museum and Gardens, Museum of Fine Arts, Houston, Milwaukee Art Museum, Nelson-Atkins Museum of Art, New Orleans Museum of Art, Oakland Museum of California, Saint Louis Art Museum, and Walters Art Museum.**

Museums create value by catalyzing feelings of wonder, interest, curiosity, enhanced understanding, greater sense of belonging and perceptions of physical safety and serenity. Museums have long been successful when it comes to supporting these very basic, biologically and culturally valuable human needs, needs that can be described as falling within the four primary dimensions of human well-being – physical, social, intellectual and personal well-being. Until recently, efforts to directly measure and quantify the value created by museums when satisfying these basic human needs has been difficult.

Starting in May 2022, a total of 5,499 museum visitors from across these eleven museums were approached and invited to participate in this study. Of these, 70%, or 3,911 individuals agreed, and of these, 50%, or 1,942, fully completed a survey they received one month after their museum visit. Respondents were randomly assigned one of two surveys. One survey asked visitors to rate the degree of well-being they experienced as a consequence of their museum visit by asking them to indicate whether or not they had experienced each of 16 possible well-being-related outcomes – 4 outcome measures for each of the 4 dimensions of well-being, and if they had experienced enhanced well-being, for how long those benefits lasted. The other survey asked individuals to assign a monetary value to each of the same set of 16 possible well-being-related outcomes at each of five possible durations – benefits lasting 1-2 hours, a day, a week, two weeks, or a month or more.

For each of the 16 outcome measures, the vast majority of individuals not only indicated experiencing benefits, most reported that those benefits lasted long beyond the limited 1 to 2 hours of the museum experience itself. On average, museum visitors responded that their couple-hour visit resulted in benefits lasting one or more days, with many reporting that they perceived that the benefits of their museum visit lasted weeks or even a month or longer. The mean social and physical well-being benefits lasted on the order of a day, while the mean personal and intellectual well-being benefits lasted close to a week. However, the full benefits of these museum experiences were not limited to just a single dimension of well-being-related benefit as the vast majority of visitors experienced enhancements in all four dimensions of well-being – personal + intellectual + social + physical well-being. The full importance of this fact became apparent when the monetization results were applied. **On average, the multi-day benefits of an art museum experience were equivalent to \$905/person/visit in economic value.**

Although a value of \$905 in benefit for each adult visitor is truly impressive, the real power and value created by these and other U.S. art museums lies in their *collective* value as each institution serves tens to hundreds of thousands of individuals every year. **On average, each of these museums annually delivered in excess of \$325 million in well-being-related economic value to their users.** Ultimately, though, value cannot be judged merely by the gross benefits created since it takes money to create this value. A cost-benefit analysis showed that the average ratio of benefits created relative to the costs of creating that value was equal to 1,171%, or roughly **\$12 of benefit achieved for every \$1 spent.**

**In conclusion, this study demonstrated that each of these eleven art museums cost-effectively deliver significant societal and economic value to their communities.**



## Measuring the Public Value of Art Museums

### INTRODUCTION

These are stressful times for art museums. Virtually all face challenges to their identity and in some cases, long-term survival, as voices from many quarters criticize past practices and clamor for change. Clearly the challenges art museums now face requires a willingness to think in new ways about existing realities but sometimes the best place to start problem solving is not with deficits, but with assets; not with what is wrong but with the opposite, what is right.

What is right about art museums is that currently and historically, millions of people have perceived that they derive real value from using/visiting these institutions. Despite this fact being well known, it has been challenging to really determine exactly why people perceive this value in museum-going, let alone how much that perceived value might actually be worth. The purpose of this research study was to clarify, define and measure at least one significant aspect of that value, and do so in an empirically verifiable, monetizable way.

The premise of this work is that if one had the ability to better communicate the value of museum experiences to the decision and policy makers and general public who collectively support and fund museums, using an approach that directly spoke to how they themselves define value, then it would be much easier to justify the importance and value of that support. If one truly understood the value that makes so many people currently want to use museums again and again, then it would be much easier to know how to enhance the value that those current users receive. Equally, if not even more importantly, if one better understood why museums create value for some, it should be possible to extend that understanding, that value, to the many individuals who currently are not fully served by current museum offerings.

### BACKGROUND

Historically, it was assumed that the value of art museums primarily resided in their tangible assets like collections and buildings. As has been happening across all organizations, though, tangible assets have come to represent an ever-decreasing percentage of actual value. For example, roughly 40 to 50 years ago, tangible assets such as buildings, machinery and inventory represented two-thirds of the market value of the average for-profit company. Ten years later, those same assets represented only a third of company market value (Kaplan & Norton, 2001), and today, that percentage has been cut in half again (Berman, 2019). Although tangible assets are likely to remain an important part of the asset mix of art museums, intangible assets are becoming an ever-increasing percentage of the museum's public value. In particular, value resides in the ability of museums to use their collections in ways that make accessible to a broader public, vast amounts of knowledge about the past, insights into present-day cultural identities and opportunities for the creation of future creative expression – all of which are made manifest through the varied public experiences museums support.

If, indeed, significant value resides in the museum experiences art museums support, then the question arises, how to convincingly demonstrate this value to policy makers and the public, particularly if these assets are perceived as vague and difficult to measure? This critical question has long been debated by museum professionals and many have attempted to provide an answer, but it is fair to say that to date,



no clear consensus has emerged. However, unlike the many approaches to defining value offered in the past (e.g., ArtsCouncil UK, ND; AEGIS, 2004; AAM, 2020; ASTC, 2018; Ashton, et al., 2019; Bradley, et al., 2014; CASE, 2010; Cronin, 2015; Dafoe, 2020; Department of Culture, Arts and Leisure, 2010; Falk, et al., 2016; 2018; Falk & Needham, 2011; Fujiwara, Kudrna & Dolan, 2014; Groves, 2005; Hull, 2011; Packer & Bond, 2010; Scott, 2011; Selwood, 2002; Stein, 2018a; 2018b; Te Papa National Services, 2001; Teasdale, 2018), the approach used in this research did not begin by defining the value of museum experiences from the inside; by basing value primarily on what art museum professionals thought was valuable. Instead, as recommended by the State of Life Foundation in the U.K. (2021) and a growing number of other leisure economists, our approach began on the outside, with visitors themselves, building off many years of museum audience research that asked visitors themselves, what they believed was valuable about their art museum experiences.

Over the past 40 or more years, a wide variety of investigators have interviewed museum users about their museum experiences (e.g., Anderson, Storksdieck Spock, 2006; Anderson & Shimizu, 2012; Anderson, Shimizu, & Campbell, 2016; Falk, 1988; Falk & Dierking, 1991; 1995; 1997; Falk et al., 2004; Falk & Storksdieck, 2010; Fivush, Hudson & Nelson, 1984; McManus, 1993; Medved & Oatley, 2000; Stevenson, 1991; Wilton, 2006). What these interviews revealed was that the public does indicate that they experienced many of the same outcomes museum professionals value and aspire to achieve, for example, enhanced perceptions of the aesthetic value of the objects on display, or how a particular exhibit helped them learn about some aspect of art or science or culture. However, these are neither the only outcomes visitors talked about nor necessarily even the primary way the public framed what they found valuable about their visit experiences. In fact, two things stand out about the ways people describe the value of their museum experiences – the first is the ubiquity of people’s memories of their experiences and the second is the highly eclectic and often idiosyncratic nature of people’s recollections about what they did and what they found valuable. Although this second finding has made interpretation and generalization difficult, it turns out that the really important finding is actually the first one – that people find their museum experiences to be consistently memorable.

Defying all expectations, virtually everyone who has ever visited a museum remembers the experience and can talk about that experience, regardless of whether the visit in question occurred the day before or even years earlier. This high degree of memorability of museum experiences is highly significant. These results are important because there are precious few short-term experiences that create such lasting memories (Richards, 2017). Museum experiences are clearly special events in people’s lives – they must be, or they would not be so salient, and they would not be remembered.

**Meaning and Memory** In order to fully understand why the fact that museum experiences create such long-term and indelible memories is so significant requires first appreciating that most people only remember the tiniest subset of the things experienced in their lives (Jebelli, 2022; Richards, 2017). Memory is always highly selective, with the result that people only remember those things they perceive as “meaningful”. Evolution, both biological and cultural, has dictated that people judge the ‘meaningfulness’ of something by whether or not it is likely to be advantageous/useful to that person; or to put it more scientifically, human memory systems are optimized to process and retain survival-relevant information (Hesp, et al., 2021; Naime & Pandeirada, 2016). We therefore can conclude that, for some reason, people find museum experiences meaningful because they are somehow related to their survival; if they were not, they would not be so memorable. The question then becomes, what is it about museum experiences that make them meaningful, i.e., supportive of enhanced survival?



We know that the meaningfulness of museum experiences differs between users, that it is always a personally constructed, highly individualized reality. Each visitor's reality is only loosely tethered to the actual, fixed realities of the art museum's space, exhibitions and/or events. Not only can and will two visitors have different visitor experiences despite ostensibly doing and seeing the same things at the museum, but even the same individual on two different days will almost certainly have a different visitor experience because s/he is not exactly the same person on those different days (Falk, 2009; Falk & Dierking, 2019). This is why, depending upon the individual and their needs on the day of a visit, the meanings sought and found during an art museum experience may primarily be personal, intellectual, social or physical in nature.

Places such as art, history, natural history and children's museums, science centers, zoos, aquariums, nature centers, arboretums and botanical gardens are settings in which people get to see and do things entirely out of the ordinary; they are physically unique settings, filled with unique things completely outside of most people's daily experiences. Museums are also one of those rare settings that allow users to discover and learn new things about themselves, their friends and the broader world. Museum experiences are also notable because typically users have tremendous choice and control over what they get to do, what to focus on and who they get to have this experience with. Having the agency to see and do these fundamental, personal-, intellectual-, social- and physical-enhancing types of things, things that make one feel like one has done something truly special, results in perceptions of meaningfulness (cf., Falk 2019). The term that we believe best captures these diverse positive perceptions of meaningfulness is *well-being*.

**Well-Being** We define well-being as balance, and balance – physical, social, intellectual and personal balance – is something every human constantly strives to achieve every day of their life (cf., Falk, 2019; 2021). Being in balance feels good, being out of balance feels bad. The desire for balance and wholeness, for well-being, is universal, something every cultural group, in every corner of the planet, has embraced. Of course, every culture has viewed and described this idea of balance differently, but each in its own way has incorporated the basic desire for well-being into their philosophies and daily lives (for more detail, see Falk, 2021).

Despite the pervasiveness of these well-being-related ideas in all world cultures, it is surprising to discover that it was only within the past few decades that scientific investigations of well-being only began relatively recently. Beginning several decades ago, a group of Western psychologists resolved to remedy this situation by applying both theoretical and experimental rigor to the understanding of what it means to cultivate and live a satisfying life (cf., (cf., McMahon, 2006; Ryff, 1989). Often referred to as 'positive psychology,' in response to the fact that historically psychology was, and in large measure still is, primarily concerned with the study of human dysfunction and malaise, these researchers focused on better understanding and measuring things like happiness, wellness and well-being (Seligman, 2002). In the ensuing years, hundreds of books and thousands of articles have been written on well-being-related topics. Although these works have helped tremendously in the understanding of well-being, virtually all suffer from a significant flaw. Virtually all began with the assumption that well-being and its related states were a uniquely human, almost exclusively psychological phenomenon (e.g., Cloninger, 2004; Eid & Larsen, 2004; Diener & Biseas-Diener, 2008; Dolan, 2014; Ryff, 2014), as opposed to seeing well-being as a fundamental life process, something all living creatures continually engage in (Falk, 2019); one with significant, but culturally-specific psychological overlays. From this perspective, the desire to maximize



well-being is not some kind of psychological nicety, but rather a basic biological need, not just the “peak” of Maslow’s (1943) Hierarchy of Needs, but all of Maslow’s stages of need, all at once.

Additionally, and also problematically, has been the tendency for many researchers to disproportionately define human well-being from a deficit perspective. From this perspective, well-being is an achievable end state, one that most people currently lack due to the absence of one, or some combination of elusive, but attainable attributes, values or possessions. A classic example of this approach is revealed in the way physical well-being, or health, has commonly been operationalized. Throughout the West, health has primarily been viewed as either the absence of any disease or impairment or as a state that allows the individual to adequately cope with all the demands of daily life (implying also the absence of disease and impairment) (cf., Sartorius, 2006). Although these definitions make it relatively easy to measure the presence or absence of physical well-being, e.g., you either have a disease or you do not, what is lost in this approach, and not just in public health but in all facets of life, is the ability to appreciate that physical and by extension all forms of well-being, are actually not an absolute but rather always relative and dynamic. In reality, peoples’ well-being is always ephemeral and in flux. For example, no one is ever either totally ‘healthy’ or ‘sick,’ totally absent of pathogens or stresses; people are always somewhere in between.

The implication of this reality becomes important when one tries to measure well-being. Because well-being is always ephemeral, it is near impossible to fully determine someone’s long-term state of well-being. The best any measure of well-being can be expected to “capture” is a very context-specific “snapshot” of how one particular event or situation influenced a person’s perceived short-term well-being. For example, how a specific museum experience influenced a person’s well-being over some defined period of time.

Of course, museums are not the only settings that support feelings of well-being. People derive some measure of well-being from the work they do, from good government, public safety, from a well-functioning public health system. However, in our opinion, museums broadly writ, play a particularly unique and critical role in supporting the public’s well-being; a role that few if any other institutions in current society do quite as well. According to Falk (2019), humans have evolved seven semi-independent modalities of well-being, each modality containing thousands of different well-being systems; all of which operate to ensure balance in one or more facets of life. For example, there are hundreds of systems focused on maintaining physiological health, others focused on social relationships and still others designed to support intellectual curiosity and creativity. Although each of these seven modalities has a unique evolutionary origin, virtually all of humanity’s myriad well-being systems share a common set of biochemical, physiological and neurological processes (see Falk, 2019 for more details). For simplicity, Falk (2021) recently reduced these seven modalities into just four dimensions, what he refers to as personal, intellectual, social and physical well-being. Of particular importance here, manifestations of each of these four dimensions of well-being were apparent in the results of the earlier cited research on museum visitor memories.

Specifically, when people reflected back on their museum experiences, days, weeks and even years later, the statements people made about the benefits they received could be readily characterized as falling into one or more of these four areas of enhanced well-being (Falk, 2009; 2021). For example:

Personal Well-Being – people stated that the museum catalyzed a sense of wonder, that it supported their interest and curiosity; all of which fostered a sense of personal power and



identity. They also reported that their museum visit supported a greater sense of personal connectedness, appreciation, belonging and harmony with other humans and the natural world. Intellectual Well-Being – people stated that their museum experiences helped them make intellectual connections, that it allowed them to more clearly comprehend how specific past events and processes worked, as well as better understand art or history or science concepts. They also reported that things they saw and did inspired greater awe and appreciation for the best of human and natural creation, and under the best of circumstances, even said that they learned things that supported their ability able to make, better, more informed and more creative future decisions.

Social Well-Being – many former visitors reported that their museum experience enhanced their social relationships; creating opportunities for connections that would otherwise have been difficult, and by so doing, increase their sense of belonging with their family, group and even their community. Although infrequently directly stated, implicit in many visitor’s comments was the sense that their visit bestowed them with a high degree of status and respect; that others in their social network were impressed by the fact that they had gone to the museum.

Physical Well-Being – common in the recollections of museum visitors are statements about the beauty of the building and grounds, and the fact that they visited the museum in part because of this novelty, plus, they felt safe and secure at the museum. Others have reported that visiting the museum made them feel healthier and more peaceful, that their museum experience was physically and mentally restorative, that it allowed them to gather (physically or virtually) with others and interact, explore, play and enjoy without fear or anxiety.

All of these outcomes are universal well-being-related values, personal, intellectual, social and physical outcomes that research has shown that strongly correlate with perceptions of a satisfying and successful life (cf., Falk, 2019). Of course, not all people feel this way about visiting a museum, but a surprisingly large percentage of the public do perceive that they derive these benefits after a museum visit, and if so, then these are museum experiences benefits that clearly have societal value.

**Monetizing Well-Being** Paralleling the rise in importance of intangible products and services, has been efforts by economists to calculate their monetary value (cf., Towse, Haskel & Westlake, 2020). Broadly speaking, “value” can be calculated in two different ways, either by using “market value” – the specific dollar value, as determined by supply and demand, that people actually pay for something, or by using “economic value” – which is the value of the benefit created by a good or service, and represents the maximum amount someone might consider something might be worth. Intangible products and services typically fall into this latter, economic value domain, since unlike something tangible like a pen or a movie ticket, museum experiences do not have a clear price tag associated with them. That of course has not stopped some economists from trying to use a traditional “use” approach based, for example on the cost of admission to a museum or by putting a price on the time people spend visiting a museum (e.g., Boter, Rouwendal & Wedel, 2005; Marshall, 2022; Paardekoop, 2013; Poor & Smith, 2004; Wisniewska, Budzinski & Czajkowski, 2020). As described in detail by Falk (2021; 2022), we question the validity of this ‘use’ approach for measuring museum experience value. Rarely, if ever, do museum admission prices accurately reflect the true costs of the museum experience delivered, since exhibitions and programs are nearly always partially or fully subsidized by some kind of grant or gift. Even measures of time spent engaging in museum experiences are typically under-estimates, since as pointed out by



Falk (2004; 2009) and Falk & Dierking (2014), museum experiences typically extend hours to days beyond the time of an actual visit.

More recently, some economists have attempted to correlate museum going with one of a variety of large-scale society-wide measures of social well-being such as poverty levels, divorce rates, or annual quality of life or ‘happiness’ measures (cf., Bakshi, et al., 2014; Fujiwara, Kudrna & Dolan, 2014; HRI, 2020; Norton, et al., 2021). We consider this approach, too, to have questionable validity for assessing the well-being-related impact of museum experiences. Museum experiences are typically highly infrequent, often people visit a particular museum only once a year or even less frequently, and those visits normally only last a couple of hours. As a consequence, even assuming that an experience is impactful, as suggested in our earlier discussion of the nature of well-being, the well-being generated by a museum experience is unlikely to be of sufficient intensity to have a significant, causal impact on any of the large-scale, often annually assessed measures utilized in these kinds of studies. Museum-generated well-being is likely to have a more delimited, though still important effect on visitors, e.g., initially quite impactful but with benefits trailing off over time.

These realities suggest a third, and slightly less straightforward but equally accepted approach to measuring value; an approach called “contingent valuation” (cf., Carson, 2012). Contingent valuation approaches utilize monetary values based upon on the ability of people to make inferences about their willingness to pay for a particular good or service; often determined by literally asking people to directly say what they would willing to pay for a particular outcome. This approach has been widely used for assessing the benefits of a range of public outcomes, including environmental preservation and health care (Bayoumi, 2004; Hanemann, 1994; Smith, 2003; Venkatachalam, 2004). In fact, a number of economists have suggested that this approach is particularly preferable when assessing the economic value of intangible commodities/outcomes (see also, Carman, 2014; Arendt, et al., 2020; Orłowski & Wicker, 2015; State of Life, 2021). Thus, we like several others (e.g., Carnwath & Brown, 2014; Choi, et al., 2010; Hull, 2011; Munley, 2018; Tohmo, 2004), utilized a contingent valuation approach for measuring the financial value of museum experiences. However, as we discovered during early pilot testing of this approach, it turns out that because of the strong consumer bias of equating price and value, it was necessary to try as best as possible to separate decisions on economic value from the actual museum visit itself lest visitors equate the cost they paid for museum admission with the value of the museum experience itself. Through a series of pilot efforts, including a full-scale pilot study involving six museums in three countries, including three in the U.S., Falk was able to demonstrate that a delayed, split-sample, contingent valuation approach could be used to validly and reliably assess and monetize the well-being-related economic value of museum experiences (cf., Falk, 2022 for a more detailed summary of this effort).

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This current project was designed to bring together eleven committed U.S. art museums to partner in a study that took these ideas and moved them beyond mere “proof of concept”. This project was an effort to rigorously document the well-being-related value the public perceived they gained from visiting, individually and collectively, The Barnes Foundation, Cleveland Museum of Art, Denver Art Museum, Hillwood Estate, Museum and Gardens, Museum of Fine Arts, Houston, Milwaukee Art Museum, Nelson-Atkins Museum of Art, New Orleans Museum of Art, Oakland Museum of California, Saint Louis Art Museum, and Walters Art Museum, as well as determine the resulting monetary value and cost-benefits created by these museum experiences. The ultimate goal of the project was to support these eleven museums’



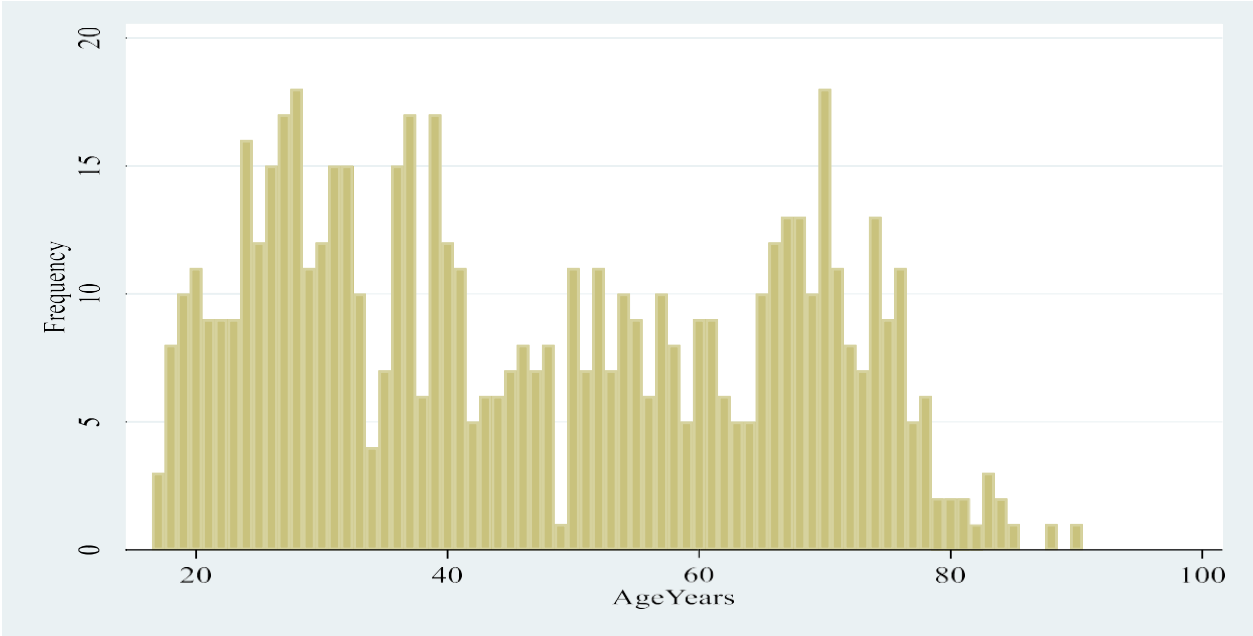


as well as the broader art museum community's, ability to make a strong, data-based case for the true societal value - personally, intellectually, socially, physically and economically - museums generate as a consequence of their core public-facing activities.

## METHODS

**Study Population** Data collection began in July and ended in November 2022. To ensure the highest standards of research, a process was developed for randomly sampling of adult museum users, including representative numbers of daily visitors and program participants. With minor variation, museum staff at each institution approached every third adult visitor crossing an imaginary line near the entrance of the museum and asked if they would be willing to participate in a study of museum value. If they agreed, museum visitors were handed a tablet or similar data entry device and asked to provide their first name, email address and answer a couple simple questions such as their age and postal code. The goal was to recruit a minimum sample of 500 adult museum users/institution willing to commit to completing a 15-minute e-survey at a future date. To ensure that only adults were included in the sample, all respondents were asked to indicate their birthday and the survey software, Qualtrics, automatically excluded any individual under the age of 18 years. The mean age was 47 years, but as shown in Figure 1, the distribution suggests a relatively consistent use by adults across all age ranges with peaks among adults in their late 20s, late 30s and in their early 70s.

Figure 1. Survey 1 respondents by age. Mean age 47 years. NOTE: Survey 2 data was almost identical.



In total, 6,303 museum visitors from across the eleven institutions were approached about participating in the study; approximately 85% of these agreed to participate in the study (n = 5,365). Each of the individuals deemed to be of acceptable age and who agreed to participate was automatically sent an immediate email acknowledging their participation and informing them that they would receive a survey



by email in one month. This population was then randomly divided in half (by the survey software) with roughly 2,700 individuals sent a survey one month after the visit asking them to report on whether or not their museum experience resulted in a series of well-being-related outcomes and the other roughly 2,700 individuals sent a survey one month after the visit asking them to assign a monetary value to these same well-being-related outcomes but without specifically mentioning a museum. The purpose of this ‘split sample’ approach (Anderson & Magruder, 2017, Fafchamps & Labonne, 2017) was to try and help mitigate the price = value bias discussed earlier. The goal was to sample the same population of individuals who had visited the museum but to separate, as much as possible, those individuals who provided monetary valuations of the various well-being-related outcomes from those who were being asked to specifically recollect their earlier museum experience. As discussed above, a split sample approach was found to be an acceptable method for accomplishing this goal (Falk, 2022).

If individuals did not respond to the initial survey request within two weeks, they were automatically sent a reminder. A second and final reminder was automatically sent out to non-respondents two weeks after the first reminder. Of the 5,365 individuals agreeing to complete a survey, only 1,095, about 20%, fully completed one of the two surveys – 685 completed the survey with questions related to their museum experiences and 410 completed the survey asking them to assign a monetary value to the set of possible well-being-related outcomes.<sup>1</sup> Recruitment numbers by institution, acceptances, refusals and final survey participant numbers are summarized in Table 1.

NOTE: Throughout this report, the focus is on the collective results of all eleven museums so museum-specific data are not included. Institution-specific data are provided for each museum as Appendix A.

Table 1. Institutional recruitment, acceptances, refusal and final survey participant numbers.

Number of Visitors			Number of Participants	
Intercepted	Refused	Recruited	Survey 1	Survey 2
6,303	938	5,365	685	410

**Study Instruments** As outlined above, the research involved three separate survey instruments. An initial, short survey that all potential participants took and two, separate but parallel, more involved instruments – Survey 1 focused on measuring users’ perceptions of the outcomes of their specific museum experiences and Survey 2 focused on the perceived dollar value of each of the possible well-being-related experience outcomes. Pilot versions of each of these instruments already existed but these were revisited, expanded and slightly revised for this study, and then further piloted with input from cooperating institutions. Each survey was made available in two languages –English and Spanish.

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<sup>1</sup>This difference in return rate between Survey 1 and Survey 2 was anticipated, since we knew that asking people to assign a monetary value to a specific outcome was a much more difficult and potentially uncomfortable task than was asking people to state whether or not they had experienced a particular outcome. Most people are unaccustomed to assigning monetary values to abstract outcomes, some visitors were even offended at the idea of putting a monetary value on just outcomes. By contrast most people are familiar and comfortable with someone asking them to report on the nature and quality of their past experiences.



The core of Survey 1 was set up as a series of 16 questions, four questions related to each of the four categories of well-being-related museum outcomes – personal, intellectual, social and physical well-being. The order of these 16 items were randomized to avoid order bias (cf., Thau, et al., 2021). Respondents were asked if they had experienced an outcome, and if so, for how long did it last/persist – 1-2 hours, a day, a week, two weeks or four or more weeks. An example of a question was as follows:

Did your visit allow you to satisfy your curiosity about one or more topics you find interesting or important?

NO YES

If yes, for how long did that sense of satisfaction last?

An hour or two

A day

A week

Two weeks

A month or more

As is customary in contingent valuation research, the core of Survey 2 was a series of questions asking participants to assign a dollar value, on a sliding scale from \$0 to \$1,000,<sup>2</sup> for each of the 16 core well-being outcomes, with valuations being asked for each of the five time periods. In other words, what was the DOLLAR value if an experience lasted 1-2 hours? the value if an experience lasted a day? a week? two weeks? or lasted four or more weeks? An example of a question was as follows:

We want to know how much you think each of these benefits would be worth to YOU in Dollars if they occurred.

An experience that allowed a person to switch-off/decompress/de-stress:

If that feeling lasted an hour or two? [slider with dollar values between \$0 and \$1,000]

If that feeling lasted a day? [slider with dollar values between \$0 and \$1,000]

If that feeling lasted a week? [slider with dollar values between \$0 and \$1,000]

If that feeling lasted two weeks? [slider with dollar values between \$0 and \$1,000]

If that feeling lasted a month or longer? [slider with dollar values between \$0 and \$1,000]

Since this represented a total of 80 separate questions (16 outcomes X 5 possible durations), which was deemed to be far too many questions for any one individual to reasonably answer, each respondent was randomly assigned only half of this total, i.e., 40 separate valuations/survey.

In addition to these core questions and the age question mentioned above, each survey included four additional questions – what motivated them to visit the museum on this particular day, what visit experiences, or “amenities”, they were hoping to experience while at the museum, their annual family income and their race/ethnicity. As expected, due to the random assignment of visitors to either Survey

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<sup>2</sup>The decision to create a ceiling of \$1,000 was based on results from pilot study (Falk, 2022). In that study, where the response option was open-ended, less than 1% of respondents valued these outcomes as greater than \$1,000. So rather than asking this as an open-ended questions, which would have increased the difficulty of responding and potentially further depressed response rates, we opted to made each question an easy to use “slider” with totals ranging from \$0 to \$1,000.



1 or 2, despite some minor variability, there were no significant differences between the two surveys in either respondents' answers or their demographic characteristics (Tables 2, 3, 4 & 5).

Table 2. Visitor's Motivation for visiting on the day they were approached at the museum.

Motivation	Survey 1	Survey 2
Spend time alone and be contemplative	14.7%	17.1%
To see/discover something new and interesting	52.1%	61.2%
To learn from a person with expertise	7.6%	7.6%
To spend time with beautiful objects	43.6%	44.4%
To spend high quality time with family members	30.7%	32.0%
To unwind and decompress	20.4%	21.7%
To learn more about artworks I'm interested in	32.4%	33.2%

Table 3. Which of the museum's various visit experiences/"amenities" were visitors hoping to engage with on the day they were approached at the museum.

Visit Experiences	Survey 1	Survey 2
See the galleries	64.8%	60.7%
See a specific exhibition	29.9%	35.6%
Shop in the museum store	8.5%	10.0%
Participate in a free public program	6.4%	7.3%
Visit a special children's area	0.7%	0.2%
Eat at café, restaurant, or food outlet	10.2%	7.8%
Attend a workshop, class, or lecture	0.9%	7.6%
Spend time in a sculpture garden or other outdoor space	16.6%	2.4%

Table 4. Respondent's annual income.

Income	Survey 1	Survey 2
Under \$4,999	2.0	1.3
\$5,000 - \$9,999	1.1	1.6
\$10,000 - \$14,999	1.2	1.3
\$15,000 - \$24,999	3.9	4.2
\$25,000 - \$34,999	4.5	8.1
\$35,000 - \$49,999	9.9	7.3
\$50,000 - \$74,999	16.7	14.9
\$75,000 - \$99,999	15.4	14.4
\$100,000 - \$149,999	19.8	21.5
\$150,000 or more	25.6	25.39
Total	100.0	100.0



Table 5. Participant Ethnicity.

Race/Ethnicity	Survey 1	Survey 2
American Indian/Alaska Native	0.4	0.0
Asian	5.0	6.8
Biracial	1.3	1.8
Black/African American	2.9	3.4
Black/African American, Asian, Native Hawaiian/Other Pacific Islander	0.1	0.0
Black/African American, Biracial	0.1	0.0
Black/African American, Hispanic	0.1	0.3
Black/African American, Hispanic, Biracial	0.1	0.0
Hispanic	5.6	3.5
Hispanic, Biracial	0.1	0.0
Native Hawaiian/Other Pacific Islander	0.1	0.0
Other: please specify	1.0	1.0
Other: please specify, Prefer not to respond	0.1	0.0
Prefer not to respond	5.6	3.5
White	75.1	75.6
White, American Indian/Alaska Native	0.1	0.0
White, Asian	0.6	1.3
White, Asian, Biracial	0.3	0.0
White, Biracial	0.1	0.0
White, Black/African American	0.1	0.3
White, Hispanic	0.7	1.0
White, Hispanic, Biracial	0.1	0.0
White, Other: please specify	0.3	0.3
White, Prefer not to respond	0.1	0.3
White, American Indian/Alaska Native, Hispanic	0.0	0.3
White, American Indian/Alaska Native, Other: please specify	0.0	0.3
White, Black/African American, Native Hawaiian/Other Pacific Islander, Hispanic	0.0	0.3
Total	100.0	100.0

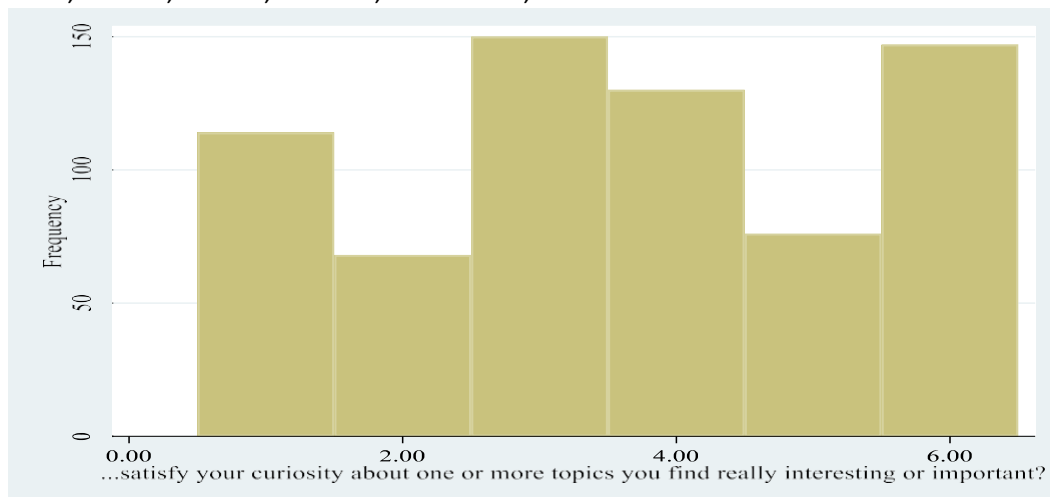
Each museum was also allowed to ask three additional, museum-specific questions. These latter questions were only asked of those individuals who had visited that specific museum. Results for each individual museum are summarized and provided as an institution-specific report (Appendix A). Institution-specific results showing respondent's postal code data is reported in Appendix B.



## RESULTS

**Survey 1** For each of the 16 variables considered – 4 dimensions of well-being, 4 outcomes for each dimension – respondents could indicate whether their specific museum experience resulted in one of six possible outcomes – 1 = no, I did not experience this outcome; 2 = yes, I had this experience and the affects lasted about 1 to 2 hours (presumably, roughly the length of the visit); 3 = yes, I had this experience and the affects lasted about 1 day; 4 = yes, I had this experience and the affects lasted about 1 week; 5 = yes, I had this experience and the affects lasted about 2 weeks; or 6 = yes, I had this experience and the affects lasted about month (or longer). Results were calculated for each of the eleven museums individually, and as well as all responses collectively. An example of the collective distribution for one variable is shown in Figure 2 below. Although there was some variability in the distributions of each of these 16 variables, both in comparison to each other and by museum, all were generally quite similar in distribution to the example below. Thus, only this single example is provided.

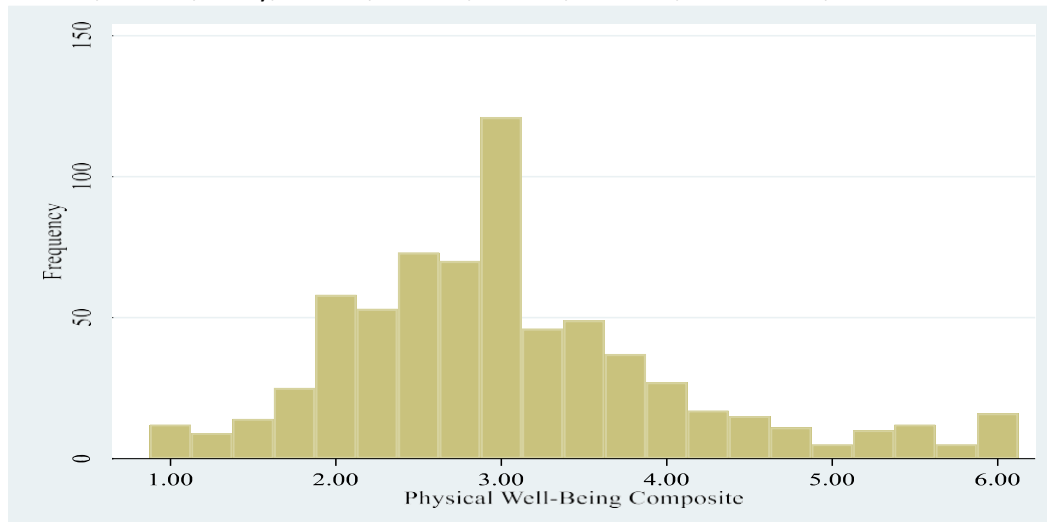
Figure 2. Distribution for the question: “Did your visit allow you to satisfy your curiosity about one or more topics you find really interesting or important?” Where 1 = No; 2 = Yes; 1-2 hours, 3 = Yes, 1 day; 4 = Yes, 1 week; 5 = Yes, 2 weeks; and 6 = Yes, 1 month or more.



Each of the four questions within a dimension were then combined into a “composite” well-being variable, i.e., Composite Personal Well-Being, Composite Intellectual Well-Being, Composite Social Well-Being and Composite Physical Well-Being. As with the 16 individual items, these composite variables too had a roughly normal distribution, with the same 6 possible outcomes – 1 = no, I did not experience this outcome; 2 = yes, I had this experience and the affects lasted about 1 to 2 hours (presumably, roughly the length of the visit); 3 = yes, I had this experience and the affects lasted about 1 day; 4 = yes, I had this experience and the affects lasted about 1 week; 5 = yes, I had this experience and the affects lasted about 2 weeks; or 6 = yes, I had this experience and the affects lasted about month (or longer). Also, as above, results were calculated both for each of the eleven museums individually, and collectively. One example, Composite Personal Well-Being, is shown below (Figure 3) as the distributions of the other three composites were very similar.



Figure 3. Overall distribution for the composite variable: “Physical Well-Being”, where 1 = No; 2 = Yes; 1-2 hours, 3 = Yes, 1 day; 4 = Yes, 1 week; 5 = Yes, 2 weeks; and 6 = Yes, 1 month or more.



Principal Component Analysis was conducted for each of the four composite variables to ensure the validity of combining the four questions into a single, composite variable. As shown in Tables 6 - 9, factor loadings ranged from 0.514 to 0.7796 and the single factor solution for the four items explained over 100% of the variance in item responses for each of the four composites. Internal consistency was high, with a Cronbach’s alpha values ranging from a low of .714 for Social Well-Being to a high of .828 for Personal Well-Being; all levels above what is acceptable for combining variables (Tavakol & Dennick, 2011).

Table 6. Single factor PCA results for Physical Well-Being variables.

Item, “How long did your visit allow to/make you: “	Factor loadings
Q1 switch-off/decompress/de-stress?	.772
Q2 feel safe and secure?	.575
Q3 feel free from work and routine?	.674
Q4 refresh you, feel calm and relaxed?	.779
Eigenvalues	1.988
% of variance	100.00
Cronbach’s $\alpha$	.800

Table 7. Single factor PCA results for Intellectual Well-Being variables.

Item, “How long did your visit allow to/make you: “	Factor loadings
Q1 discover new things about yourself, and your place in the world?	.679
Q2 satisfy your curiosity about one or more topics you find really interesting or important?	.649
Q3 see things that you like?	.578
Q4 think about important issues and see things in new perspectives?	.689
Eigenvalues	1.687
% of variance	100.00
Cronbach’s $\alpha$	.760



Table 8. Single factor PCA results for Personal Well-Being variables.

Item, "How long did your visit allow to/make you: "	Factor loadings
Q1 feel happy?	.700
Q2 fill you with awe and amazement?	.711
Q3 see things you do not usually get to see?	.718
Q4 experience something special/inspiring/valuable?	.757
Eigenvalues	2.083
% of variance	100.00
Cronbach's $\alpha$	.828

Table 9. Single factor PCA results for Social Well-Being variables.

Item, "How long did your visit allow to/make you: "	Factor loadings
Q1 support the learning and joy of your child/companion/partner?	.668
Q2 build a strong and positive relationship with your child, partner, or friend(s)?	.713
Q3 a sense of connection with members of your community?	.524
Q4 increase your awareness/understanding of others?	.514
Eigenvalues	1.493
% of variance	100.00
Cronbach's $\alpha$	.714

Mean, institutional values for each of the four composite dimensions of well-being were calculated, then summed and divided by 11 to arrive at overall, collective mean composite scores. These latter scores, the overall, 11-museum mean composite Personal, Intellectual, Social and Physical Well-Being mean values, are summarized in Table 10, with mean duration of well-being ranging from slightly more than a day (Physical Well-Being) to nearly a week (Personal Well-Being).

Table 10. Mean Survey 1 composite well-being values for each of the four dimensions of well-being, where 1 = for no time at all, 2 = 1-2 hours, 3 = 1 day; 4 = 1 week, 5 = 2 weeks, and 6 = 1 month or more.

Well-Being	Personal	Intellectual	Social	Physical
Mean	3.80	3.52	3.17	3.05

Based on regression analysis, there were no significant correlations between three of the well-being variables – Physical, Intellectual, and Social – and visitor age. There was a very small but statistically significant positive relationship, with an extremely small effect size ( $r^2$ ) between the Personal Well-Being variable and age ( $t = 3.41$ ,  $p < .05$ ,  $r^2 = 0.019$ ), i.e., the older the individual, the greater the Personal Well-Being experienced. As for the demographic variable "race/ethnicity", there were no significant correlations with any of the four well-being variables. Though as will be noted in the "Study Limitations" sections, lack of correlations may well have been due to sample size issues.

In order to ensure reliable analysis given the small response rate in several categories, we re-grouped the seven visit Motivation statements into a smaller number of categories, each with a sufficient number of people in a category to allow for meaningful statistical testing. Building on the large amount





of prior theoretical and empirical research on this topic (cf., Falk, 2009), we opted to use Falk's Identity-Related Motivations theory as a framework and reduced the original categories into just four categories:

1. Explorer = see/discover new interesting things and learn more about artworks
2. Recharger = spend time alone and unwind and decompress
3. Facilitator = spend high quality time with family
4. Professional/Hobbyist = Spend time with beautiful objects and be contemplative and learn from a person with expertise

Based on a regression analysis, there were statistically significant correlations between Explorers, "see/discover new interesting things and learn more about artworks" and Personal Well-Being ( $t= 2.06$ ,  $p = .040$ ). There were no statistically significant correlations between Rechargers, "spend time alone and unwind and decompress" and any of the four dimensions of Well-Being. There were significant correlations between Facilitators, those wanting "spend high quality time with family" and Social Well-Being ( $t= 3.62$ ,  $p = .000$ ). Finally, there were also significant positive correlations between Professional/Hobbyists, those wanting to "spend time with beautiful objects and be contemplative and learn from a person with expertise" and Physical Well-Being ( $t= 2.55$ ,  $p = .011$ ), Intellectual Well-Being ( $t= 1.98$ ,  $p = .048$ ) and Personal Well-Being ( $t= 3.59$ ,  $p = .000$ ).

As above, for analysis purposes, we re-grouped the eight Visit Experience/"Amenity" statements into four categories:

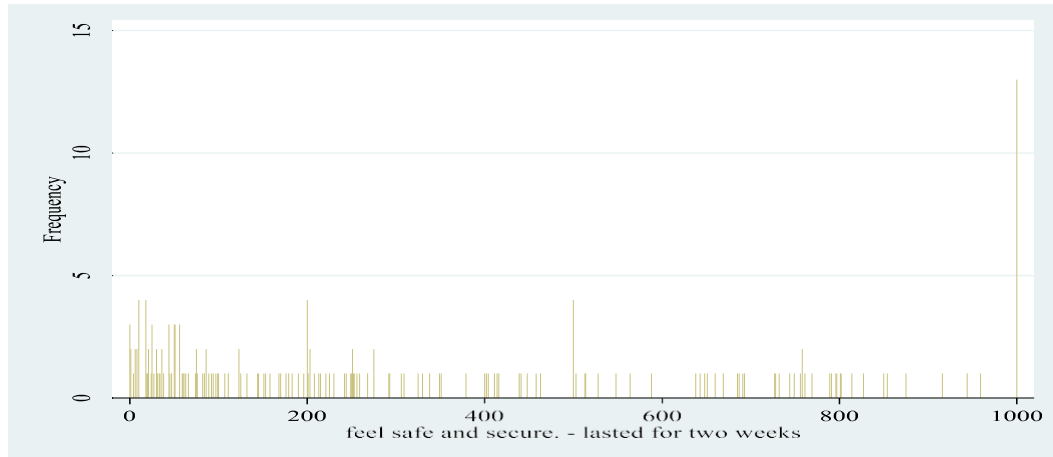
1. Exhibition-General: "see the galleries"
2. Exhibition-Specific: "see specific exhibition";
3. Non-Exhibition: all other categories combined
4. Café-Shop: "eat in café and "visit shop"

Based on a regression analysis, there were statistically significant correlations between a desire to generally visit exhibitions, "see the galleries" and Intellectual Well-Being ( $t= 2.31$ ,  $p = .021$ ) and Personal Well-Being ( $t= 2.84$ ,  $p = .005$ ). There were statistically significant correlations between a desire to visit specific exhibitions, "see specific a exhibition" and all four dimensions of Well-Being Physical ( $t= 2.05$ ,  $p = .041$ ), Intellectual ( $t= 4.83$ ,  $p = .000$ ), Personal ( $t= 3.32$ ,  $p = .001$ ), and Social Well-Being ( $t= 3.71$ ,  $p = .000$ ). The desire to visit other, non-exhibition (combined) museum amenities category, visit the sculpture garden, children's area and/or a program or class, was not significantly correlated with any of the four well-being categories. Finally, there was a significant positive correlation between a desire to visit either the café and/or gift shop with Physical Well-Being ( $t= 2.14$ ,  $p = .033$ ).

**Survey 2** The monetary assessment of well-being on a sliding scale from \$0 to \$1,000 included a total of 80 separate questions/ decisions – 4 dimensions of well-being, 4 outcomes for each dimension, 5 possible time frames ranging from affects lasting 1 or 2 hours to affects lasting 4 or more weeks. [NOTE: Respondents were not asked to assign a value to having no experience since the value of no experience was assumed to be worth \$0.] Results were calculated for each of the eleven museums individually, and as well as all responses collectively. An example of the collective distribution for one variable is shown in Figure 4 below. As shown, and as was typical for all 16 variables, responses were somewhat skewed towards both the low and high ends of the distribution, but relatively evenly distributed in between. Because of this somewhat bimodal distribution, the appropriate measure of central tendency to use was the median (cf., N.A., 2018).



Figure 4. Valuations in dollars for the question: “Feel safe and secure. Lasted for two weeks?”



As with Survey 1 data, results for each of the 80 questions in Survey 2 were combined to create four composite variables – personal well-being financial value, intellectual well-being financial value, social well-being financial value and physical well-being financial value – with valuation results for each of the five durations – 1-2 hours, 1 day, 1 week, 2 weeks, a month or longer (Table 11).

Table 11. Survey 2 composite well-being valuations for each of the four dimensions of well-being for each of five surveyed duration of value times.

	1-2 Hours	1 Day	1 Week	2 Weeks	1 Month +
Personal Well-Being	\$155.77	\$205.27	\$286.18	\$362.46	\$464.47
Intellectual Well-Being	\$140.34	\$190.53	\$260.77	\$330.83	\$433.08
Social Well-Being	\$148.29	\$196.45	\$260.97	\$329.55	\$438.35
Physical Well-Being	\$142.21	\$196.56	\$274.99	\$354.22	\$468.37

**Calculating Value and Analyzing Cost-Benefit** The collective, mean dollar value created for each of the four dimensions of well-being (Table 12) was calculated by multiplying the mean values summarized in Table 10 by the equivalent, Survey 2 financial valuations shown in Table 11. All data points in both surveys were based on assessments about same, actual time periods, separated by known intervals, e.g., the length of time between a day and a week. Thus, results falling between points were calculated by interpolating between the sampled data points. Though it was possible in this way to calculate the average Personal, Intellectual, Social and Physical Well-Being-related economic value an average visitor derived from a particular visit, the total value visitors from their visit experience was not limited to just one of these dimensions of benefit. Although there was variability in the degree of benefit each individual visitor experienced in each dimension as a consequence of their museum experience, both due to individual as well as museum differences, as illustrated by Figure 3, and though not shown, equally true for the other three dimensions of well-being benefits as well, more than 95% of all visitors indicated that their visit resulted in their having experienced some degree of positive benefit from at least one of the four dimensions of well-being, and the vast majority of individuals (85%+) indicated some measure of benefit in all four dimensions of well-being. Thus, the actual value of a museum visit was not limited to the value of just a one single dimension of well-being, but rather each visit resulted in



visitors having benefits equivalent to the sum of the benefits from the four dimensions of well-being. As shown in Table 12, the overall, benefits derived from of a museum experience by an average visitor to these eleven museums lasted a day or longer and was equivalent to \$904.95 in perceived monetary value.

Table 12. The eleven-museum Mean Value/Visit for each of the four dimensions of well-being and the total eleven-museum Mean Total Value/Visit; all Values are in dollars.

Well-Being	Personal	Intellectual	Social	Physical	Total Value
Value/Visit	\$270.00	\$227.05	\$207.42	\$200.48	\$904.95

Finally, Cost-Benefit Analysis provides a standardized way to measure the performance or value of something, and is thus one of the most common ways policy makers and funders use to evaluate the effectiveness of an investment, as well as to compare different investments to each other (Martin, 2020; Stobierski, 2019; Weinstein & Bradburd, 2013). Overall Value is determined by calculating whether the total measured financial benefits of something are greater than or less than the total cost required to create that benefit. The result is expressed as a percentage or a ratio with the overall Value of an experience equaling the sum of the total benefits divided by the sum of total costs:

$$\text{Value} = \frac{\sum \text{Total Benefits}}{\sum \text{Total Costs}}$$

Table 13 summarizes the variables used to calculate the collective Value/Cost-Benefit created by public visits to these eleven museums with Total Value equaling the sum of the Mean Well-Being Value per Visit to one of these eleven museums times the Mean Total Number of Annual Visitors across these eleven museums divided by the Mean Total Average Cost of running these eleven museums for a year. The resulting overall Mean Total Value Created by visits to these eleven U.S. art museums was, on average, \$325,877,925 per institution and the Mean Ratio of Well-Being-Related Value to Cost equal to 1,171%, or nearly \$12 of Benefit for every \$1 of cost.<sup>3</sup>

Table 13. Summary of Cost-Benefit Analysis for the eleven museums.

Mean Value/Visit	Mean Total # Visitors <sup>1</sup>	Mean Total Value Created	Mean Total Cost <sup>1</sup>	Mean Value
\$904.95	360,106	\$325,877,925	\$27,821,020	1,171%

1. Total # Visitors and Total Cost figures were in most cases based on 2022 data, but in some cases due to the timing of this report at the end of the 2022 fiscal year, or due to the unusual circumstances created by the Covid-19 pandemic, it was deemed that best/most comparable/complete data came from pre-pandemic years, e.g., 2019 or in one case 2018.

<sup>3</sup> NOTE: This calculation represents a conservative estimate of museum value as it uses as 'Total Value Created' in the numerator only the well-being-related values created by adult visitor experiences and does not include the potential values of other outcomes the museum might have generated, e.g., scholarship related to collections not on display or school programs, similarly 'Total Cost' in the denominator includes all annual museum costs, regardless of whether or not they directly related to supporting adult museum visitors.



## DISCUSSION

This project brought together eleven art museums – The Barnes Foundation, Cleveland Museum of Art, Denver Art Museum, Hillwood Estate, Museum and Gardens, Museum of Fine Arts, Houston, Milwaukee Art Museum, Nelson-Atkins Museum of Art, New Orleans Museum of Art, Oakland Museum of California, Saint Louis Art Museum, and Walters Art Museum – in an effort to rigorously measure the well-being- related value the adults perceived they gained from visiting an art museum. In addition, the project measured the monetary value the public perceived these outcomes were worth and then used these

two sources of data to calculate the overall value created by each museum’s adult visitor experiences as well as the overall value these museums generated annually through their public exhibition programs. Results showed that these eleven museums individually and collectively did indeed create significant benefits for their adult visitors and their communities.

Although for each of the 16 outcome measures – 4 outcome measures for each of 4 dimensions of well-being – there were always a handful of individuals (approximately 5-10%) who reported experiencing no benefit from their museum visit in one or more of the four dimensions of well-being (see Figure 3), the overwhelming majority of individuals (95%+) not only reported experiencing some benefits, but reported that those benefits lasted long beyond the limited 1 to 2 hours of the museum experience itself. On average, museum visitors reported that their couple-hour visit resulted in benefits lasting one or more days, with many reporting that the benefits of their visit lasted weeks or even a month or longer. Just to put this in perspective, typically, a person would expect that the benefits of a leisure experience would last about the length of time of that experience, or if longer, perhaps twice the length of time of the experience (Zawadzki, Smyth & Costigan, 2015). For example, a recent study on bird-watching proudly proclaimed that for some people, the well-being benefits of encounters with birdlife lasted as long as 8 hours (Hammoud, et al., 2022). In comparison, the benefits of museum-going seem quite long-lasting. The mean social and physical well-being benefits lasted a day or slightly longer, while the mean intellectual well-being benefits lasted on the order of three days and personal well-being benefits lasted, on average, nearly a week. However, important to appreciate, was that the full benefits of a museum experience were not just those associated with a single dimension of well-being-related benefit, e.g., just personal or social well-being. Visitors consistently reported experiencing long-lasting enhancements to all four dimensions of their well-being, thus the overall benefit of a museum experience was the sum of the four well-being-related benefits – personal well-being benefits + intellectual well-being benefits + social well-being benefits + physical well-being benefits. The importance of this fact became clearly apparent when the monetary value of a typical museum experience was calculated.

Using data from the second survey, it was possible to independently assign a dollar value to each of the multiple outcomes ascribed to museum experiences. As shown in Table 12, collectively adult visitors to these eleven art museums perceived that the benefits of visiting a museum visit resulted in long-lasting perceived value – with total benefits enjoyed, e.g., economic value, being significantly greater than the actual direct costs associated with visiting any one of these museums, e.g., the market value associated with the cost of admission, parking, transportation, etc. The mean economic value of enhanced Personal Well-Being created by a museum visit was equal to roughly \$270, the mean economic value of enhanced Intellectual Well-Being created by a museum visit was equal to \$227, the mean economic value of enhanced Social Well-Being created by a museum visit was equal to \$207, and the mean economic value of enhanced Physical Well-Being created by a museum visit was also equal to \$200. As suggested above,



since virtually all visitors derived value from all four of these dimensions of well-being, the overall perceived economic value of a museum experience was appropriately the sum of all four valuations combined, with a perceived, mean economic value of \$905 per person per visit.

Nearly a thousand dollars in value for a museum visit might seem inordinately high to some. However, helping to validate and put into perspective this number, a range of recent research studies have attempted to put a financial value on peoples' time and attention. According to a recent summary by Marshall (2022), the current advertising value of 8-hours of a person's time, basically a full day's worth of a person's focused attention, is equal to \$816. Given that the average visitor in this study perceived that the benefits they derived from visiting a museum persisted for anywhere from a day to nearly a week, a calculated value of \$905 per museum visit does not seem so unreasonable. In fact, it seems quite consistent with this independent method of valuation.

Of course, \$905 worth of public value created, on average, every time an adult visited one of these eleven art museums, represents just a 'snapshot' of the value of a museum experience; the self-reported perceptions of nearly a thousand adult individuals about what they experienced on one particular day in their lives. Collectively, though, these hundreds of 'snapshots' arguably provide a reasonably valid and reliable representation of what occurred during a typical adult visit to these eleven art museums. We can make this assertion based on the fact that the sample was a large, randomly selected sampling of adult visitors to each museum. Further validating this finding, were recent results of a parallel study conducted in Finland involving nearly 4,000 individuals from across eight museums (Falk, Claudio & Meier, 2023). That study determined that the average economic value created by a visit to a museum was \$915/visit (€864/visit) – a virtually identical result to that found in this study.

Collectively these eleven art museums ranged in size and in geography – with museums located in all regions of the U.S. Although, the eleven art museums in this sample were all well-established, moderate to large, prominent museums, it should not be assumed that this means they provided their visiting public with the best museum experiences – bigger is not always better. We, of course, cannot know at the moment how "typical" or not was the quality of visitor experiences provided at these eleven museums, nor how comparable such visit experience were to with those at other U.S. art museums. However, assuming for the moment they are comparable, then these findings provide a preliminary picture of what the value of an art museum visit experience might be like for a typical U.S. adult museum visitor anywhere in the country. Obviously, further research will be required to determine whether or not this is a valid assumption.

Although a value of \$905 benefit/individual adult visitor is truly impressive, the real power and value created by these and other museums lies in the *cumulative* value they create over time as each institution serves not just a handful of visitors but tens to hundreds of thousands of visitors every year. As shown in Table 13, the average annual value created by each of these eleven museums is enormous, in excess of \$325 million/institution. So again, making the assumption that the other, roughly 200 art museums in the U.S (AAMD, 2016) are creating similar levels of public value, then it can be projected that collectively, based on 2017 annual visit data (NEA, 2019), in which 24% of the American public, or roughly 57.5 million people, visited an art museum or gallery, that art museums annually generate on the order of \$52 billion in public, well-being-related, economic value. Again, the ability to fully make this generalization is subject to further study, but findings from this study lay the foundation for making this claim. What can be claimed, is that the financial value generated by these specific eleven museums is substantial. These findings will allow these eleven museums to make a strong case to the decision



makers and policy makers who support and fund their museums, that their institution does indeed create significant societal value.

However, ultimately value cannot be judged merely by the gross benefits created since it costs money to create this value – enter cost-benefit analysis. As the cost-benefit analysis data shown in Table 13 reveal, each of these eleven museums, are creating this value in an amazingly cost-effective manner. The average ratio of benefits to costs of these eleven museums was 1,171%, or roughly \$12 of benefit generated for every \$1 spent. This is a very significant cost-benefit ratio. For example, social economist David Martin (2020) advocates using a significantly more stringent formula for deriving cost-benefits; one that halves the benefit and doubles the costs. After studying hundreds of public sector and non-profit organizations, Martin has found that any public service that delivers a total value in excess of 200% is creating significant public value. Others have come to similar conclusions (e.g., Clark, 2006; Weinstein & Bradburd, 2013). Using this more stringent formula, the eleven museums in this study delivered a public value of 293%, more than 1.5 times Martin’s threshold for cost-effectiveness. This fact, too, is something that U.S. art museums can use in justifying the value of the experiences they support for the public.

Influence of Entering Motivations & Intentions There was evidence that the visitor’s entering “agenda”, both their conceptual goals for visiting – “motivations” – and concrete visit goals of what they hoped to do or see – “visit experience/amenity” – influenced their visit outcomes. For analytical purposes related to sample size, as well as theoretical reasons, we regrouped the seven motivation statements into four categories using Falk’s (2009) Identity-Related Motivations framework (Explorer = see/discover new interesting things and learn more about artworks; Recharger = spend time alone and unwind and decompress; Facilitator = spend high quality time with family; and Professional/Hobbyist = Spend time with beautiful objects and be contemplative and learn from a person with expertise). Using this framework, as expected, visitors who arrived as Facilitators, hoping to spend quality time with family, were significantly more likely to report that their museum experience resulted in longer-lasting feelings of Social Well-Being than did other visitors. Not surprisingly, visitors who entered with a Professional/Hobbyist motivation – individuals most likely to be frequent, highly knowledgeable and highly art-motivated visitors – derived significant and highly significant well-being-related benefits from their museum experiences with higher than average durations of Personal, Intellectual and Physical Well-Being. Explorers, those hoping to see/discover new interesting things and learn more about artworks, were significantly more likely to report that their museum experience resulted in longer-lasting feelings of Personal Well-Being than did other visitors, but surprisingly not significantly greater/longer lasting perceptions of Intellectual Well-Being, though of course the analysis was not about whether or not these individuals achieved well-being-related benefits, only whether this group’s duration of benefit significantly exceeded that of others. Finally, it would have been expected that Rechargers, those hoping to spend time alone and unwind and decompress, would have reported that their museum experience resulted in longer-lasting feelings of Physical Well-Being than did other visitors, but that was not in fact the case. As above, the nature of the analysis only revealed whether or not this group’s duration of benefit significantly exceeded that of others, which seemingly it did not.

Asking visitors to indicate the specific museum experiences, or amenities they wished to see/utilize was an alternative way to understand visitors pre-visit agendas, and these too ended up revealing some interesting patterns of differing degrees of benefits received. As with motivations, for analysis purposes, we re-grouped the eight Visit Experience/“Amenity” statements into four categories (Exhibition-



General: “see the galleries”; Exhibition-Specific: “see specific exhibition”; Non-Exhibition: all other categories combined; Café-Shop: “eat in café and “visit shop”), some of these categories loosely related to Falk’s (2009) Identity-Related Motivations framework, for example the first category was generally descriptive of the interests expressed by Explorers and the second category generally descriptive of the interests expressed by Professional/Hobbyists. The other two categories are harder to place within this framework. As might be predicted by Falk’s model, there were statistically significant correlations between those Explorer-like visitors who, upon entering the museum, expressed a generic desire to visit exhibitions and just “see the galleries” and Intellectual Well-Being and Personal Well-Being. There were also statistically significant correlations between those Professional/Hobbyist-like visits who desired to visit specific exhibitions, and all four dimensions of Well-Being – Personal, Intellectual, Social and Physical. The desire to visit other, non-exhibition (combined) museum amenities category, such as visiting the sculpture garden, children’s area and/or participate in a program or class was not significantly correlated with any of the four well-being categories, but that may well have been because this was a too much a mixed bag of categories. Unfortunately, none of the categories were, in and of themselves, sufficiently large, i.e., enough people in that category, to allow reliable analysis. Finally, there was also a significant positive correlation between a desire to visit either the café and/or gift shop and the duration of Physical Well-Being benefits. This is an interesting, and reasonable finding, in and of itself as it strongly justifies supporting and encouraging the public to visit the museum with these kinds of motivations.

Demographic Variables In general, the results did not indicate that demographic variables such as age, income and race/ethnicity strongly influenced results, though as discussed more fully in the “Limitations” section below, sample sizes were insufficiently robust to allow firm conclusions for some of these variables, in particular race/ethnicity. As measured and analyzed in this study, there were no statistically significant evidence that visitor’s race/ethnicity or family income influenced perceptions of the well-being-related value of a museum experience, and the one significant finding related to age and Personal Well-Being had such a small effect size, it was as likely caused by sampling error as indicating a real effect. Taken at face value, the data from this study suggests that all visitors who participated in this study, regardless of background, were capable of having a positive museum experience and all, again regardless of income, race/ethnicity or age, found that the experience afforded them with an enhanced sense of well-being.

Study Limitations All research, no matter how elaborate or thought-out, has biases and limitations. This study was no exception. To begin with, this study was not intended to measure the full value of museums, but only that aspect of museums related to public visitation. Museums obviously create value in many ways beyond public visits. However, as stated in the introduction, this form is value is becoming increasingly important and arguably of prime importance, particularly in the mind of many funders, politicians and the public.

Second, the study was not designed to assess the *upper bounds* of possible value of museum experiences, i.e., how much value would it be possible to create for visitors should the museum be able to maximize its full experiential potential or was able to attract and meaningfully support all of the diverse visitor populations they aspire to serve. This study was very clearly and specifically designed to *only* assess the perceived value those individuals who *currently* visit museums, and to based that assessment of value on historical assumptions/data related to what past visitors have indicated constituted a valuable museum experience. In this respect, this study represents a very conservative,



backwards looking “value floor”, a baseline on which to build, rather than an assessment of the museum’s “value ceiling”, the potential value possible to create. Implicit in this “floor” were the realities of who currently visits museums, as well as who, for whatever reasons, was willing to agree to participate in this study and then actually did respond.

In this latter respect, the study suffered from both a less-than-expected survey response rate and a potentially skewed racial/ethnic representation; both of which impacted the ways in which the various independent variables could be statistically analyzed. Beginning with the issue of overall sample size, the assumption going into the study was that on the order of 50% of those agreeing to participate in the study would follow-through and complete the surveys sent to them one month later. This assumption was based on considerable prior experience by the project lead and based on this assumption, it was recommended that each museum shoot for a recruitment target number of 500 individuals/institution. Ultimately, roughly half of the expected visitors completed surveys resulting in a significantly smaller study population than hoped for. Why this was the case, is not clear. For example, the parallel study conducted in Finland (Falk, Claudio & Meier, 2023) saw response rates at the expected level of 50%. It should be noted that study sample size, in particular a Survey 1 sample size of 685, was more than sufficient to validly and reliably answer the primary questions posed in the study – what was the perceived public and economic value of a museum visit – but its size inhibited us from confidently analyzing more than four variables simultaneously. This was particularly a problem with variables like entering motivation and race/ethnicity.

The issue of whether race/ethnicity impacted the results was particularly problematic for two reasons, both related to sample size. There is considerable evidence that museums in general, and art museums in particular, have historically attracted a disproportionately White (also older and more affluent) visitor population (cf., LaPlaca Cohen, et al., 2021). Though many museums, including notably each of the eleven institutions involved in this study, are assiduously working to change these realities, and in many cases have significantly changed the racial/ethnic of their visiting population, the sample who self-selected to fully participate in this study by completing one of the two delayed surveys was more reflective historical use patterns than potentially current use patterns. Three-quarters of respondents to the two surveys self-identified as White. Because we only collected race/ethnicity data on the delayed surveys, we do not know whether this demographic distribution reflected who was randomly recruited at the museum or whether it represented who was willing to complete the surveys. What we do know is that we allowed respondents to indicate their race/ethnicity using more than two dozen categories, and that with the exception of the category “White”, none of the other categories were sufficiently large enough to allow us to meaningfully analyze them as an independent variable. Thus, when we reported there were no significant correlations as a function of race/ethnicity, all we were actually reporting was that the ¼ of individuals who reported being people of color did not significantly differ from the ¾ of individuals reporting that they were White – this is clearly meaningless data. Thus, based on this study, this particular data set, we do not actually know if race/ethnicity impacted public perceptions of well-being or the financial value individuals from different communities might have ascribed to those outcomes.

Finally, an additional limitation of the study was the decision to only sample individuals over 18 years of age, i.e., “adults”. This decision was driven by two, very practical considerations. The first was a data-driven decision. As stated in the Introduction, there are decades of research on how visitors recall and value their museum experiences; unfortunately, virtually all of this has been research conducted with





adults. Despite an equally long history of research on the outcomes of children’s museum experiences, that research is tainted – virtually all such studies only investigated the outcomes adults, e.g., museum professionals or school educators, deemed important. In other words, we have a deep understanding of the value adults perceive they gain from museum experiences but very limited understanding of what children perceive they gain from such experiences. Thus, despite the fact that children represent a relatively small but still significant percent of all art museum visitors, we did not feel we could adequately address their potential interests and value. In addition, there were methodological constraints on including children in the study. Children require different instruments as well as very different levels of permission and approval, i.e., Institutional Review Board approval. For all these reasons, we concluded that including children in the study would have made the project much more challenging to complete, conceptually, logistically and economically.

## CONCLUSIONS

So where do we stand at the conclusion of this investigation? We certainly stand more informed about the current nature and extent of the collective public and economic value created by a group of eleven, medium to large U.S. art museums. It is also possible, depending upon the validity of assumptions about the comparability of these eleven art museums to other U.S. art museums, we have a greater overall sense of the potential scale of the public and economic value created by the roughly 200 art museums in the U.S. as a whole. Though there is certainly room to disagree about how value was measured in this study, e.g., whether these were the right outcomes to assess, and if so, whether these were the most appropriate methods for assessing those outcomes, there can be no disagreement that this study advances how the museum field’s in general, and in particular, the art museum field’s understanding of how to better understand and measure the potential public and economic value generated by visitor experiences. The strong theoretical and empirical basis for selecting these particular outcomes, combined with the rigorous way in which those outcomes were measured, provides not only a robust foundation for any future study but clearly substantiates the hypothesis that museum-going is a valuable experience for those adults who partake in it, in particular, that each of the eleven participating museums generated significant, long-lasting, well-being-related value to their using public.

This data can now be used to more carefully examine how each institution serves its public. Although the data clearly has limitations as outlined in the previous section, it does provide a general profile of the perceived well-being-related value the majority of current adult museum-users perceive they gain from visiting each institution; which broad areas of well-being – Personal, Intellectual, Social and Physical – each institution excels at delivering to its adult audiences and in which areas they currently are perceived to provide less value. It also provides some initial, albeit limited data on which categories of adult visitors, and to what degree, perceived that their museum experience resulted in appreciable value-generation. The fact that there was a distribution of perceived value across the four domains of well-being suggests that there is room for improvement and that it should be possible to shift perceptions towards higher and longer values.

This study should also help each of the participating museums make a stronger financial case for the significant and vital role they play in supporting their community’s public’s well-being. Each museum, as well as potentially the broader art and museum field, can use the findings from this study to talk about the significant economic benefits they deliver to their community as a consequence of their core public-facing activities; both as measured per visit and most significantly, as measured cumulatively as a



consequence of the thousands of people visiting over the course of an entire year. Further, the data from this study can be used to make that case that each museum not only delivers significant and important societal and economic benefits, but that they do so in a highly cost-effective manner.

Of course, it is apparent to all, both within and outside of the museum, that not all people currently benefit from these museum experiences. We would suggest, in the asset-based spirit in which this study was framed, that rather than dwelling on this fact as a deficiency, it should be viewed as an opportunity. As demonstrated by this study, museums, through the experiences they create for the public, have the potential to create significant benefits for the public. By supporting greater visitation by ever broader and more diverse segments of the public, museums have the potential to create significant well-being-related public benefits. Making this kind of change is neither easy, nor free, but again data from this research should help to support the case that the both the time and financial investment in this goal is likely to be worthwhile. What needs to be emphasized is that the goal of enhanced well-being is not an exclusively white, upper class pursuit, but a universal, never-ending human quest. Though museums cannot expect to unilaterally satisfy all the people's well-being-related needs, all the time, with greater support, art museums could both broaden who they serve, increase the number of people served and improve how they deliver well-being-related value to society. The findings from this research strongly suggest that doing so not only makes sense socially but also financially.

## NEXT STEPS

What follows are some initial thoughts on possible next steps. We will divide these into two sections, the first related to improved practice and the second related to future investigations.

Practice Although there is always the hope that a research study will reveal clear insights into how to improve practice, in reality, fundamental research studies such as this rarely deliver on this desire. That is in large part due to the fact that the actual focus and design of such studies are not on facilitating change, or even as is typical of evaluation studies, on determining what is or is not working. Instead, this study, and others of a similar scope and nature, are intended to advance the field's most fundamental understandings about the nature of the museum experience, as well as in the current case, how one might assign value to that experience. Certainly, this study accomplished that. Arguably, there were two major take-aways from this study. The first that value can indeed be measured, with value – both public and economic – being influenced both by quality of the experience people have and by the number of people who have that experience. The second big take-away was that it reinforced the growing understanding that people who visit museums arrive with multiple agendas and motivations for visiting, and, as a consequence of their visit experience, derive multiple, relatively long-lasting benefits; benefits consistent with those multiple agendas and visit motivations. One certainly cannot say that either of these insights into the nature of the value of art museum experiences was unknown prior to this study, but one can certainly say that not all art museum practice reflected these insights. The new and enhanced ways this study provides for concretely thinking about, as well as defining and measuring the nature of the benefits people derived from their museum experiences creates new opportunities for improving practice.

The formula on p.19 utilized to calculate overall value reveals two basic ways an institution can maximize the well-being-related value it delivers. Overall value goes up when either: 1) The *quantity* of



people utilizing the experience increases; and/or 2) The average perceived *quality* of the benefits accrued from an experience increase and result in longer lasting benefits. For some, it is no doubt reassuring that this measure of value incorporates traditional user number metrics; the assumption that the greater the number of users an institution serves, the greater is the impact delivered. However, it should also be reassuring that numbers alone do not equal impact. Quality also matters. Regardless of how many people pass through the front door, no matter how long people stand in front of an exhibition, no matter how many page-clicks a website receives, if these experiences do not result in visitor outcomes, benefits lasting days and weeks, then the overall result is minimal. The opposite is also true, a museum can create significant value even if their user numbers are limited. As long as museum users perceive that they derive great, long-lasting benefits from their experiences, the resulting value will be high. Although quantity and quality are theoretically not mutually exclusive, in reality, it is difficult to maximize both simultaneously. Different institutions are likely to choose different approaches; with some favoring the quantity approach and others coming down on the side of quality. More typically, most institutions currently employ a mix of both approaches, with some experiences aimed at ensuring a basic level of value for large numbers of users and others attempting to provide small number of users with maximal benefits. To accurately capture these kinds of mixed approaches it will be necessary and important to both separately assess and calculate value achieved for each type of experiences and only then sum them together when calculating overall value, rather than as done in this study, lumping all experiences together and utilizing a single mean value.

Moving on to the second major outcome, it is hoped that as a consequence of this study, future art museum practice will more fully acknowledge and accommodate the diversity in visitor agendas and motivations, as well as place greater value on all of the possible benefits art museums support. Today, museums support a wide variety of visitor experiences delivered in multiple ways and covering innumerable topics. In the future, these experiences are likely to become even more diverse, potentially morphing into totally new and yet to be envisioned forms. Currently, most museum primarily serve a relatively small demographic slice of American society, that too is and will continue to change as museums assiduously strive to expand and diversify their audiences. However, no matter what the content or style of delivery of a museum experience, no matter if physical or virtual, no matter whether visitors are young or old, poor or wealthy, white or people of color, as highlighted in this study, the desire of people to satisfy their personal, intellectual, social and physical well-being-related needs is unlikely to appreciably diminish. People are people, and what it is that makes people feel satisfied and supported has always been satisfaction of these well-being-related needs, and as reinforced by the findings of this research study, successful museum experiences, any museum experience, first and foremost must satisfy and support these types of user needs. However, what is likely to change and morph over time as the culture changes and audiences diversify is how people wish to satisfy their well-being-related needs, as well as potentially what it takes to satisfy those needs. This aspect of well-being is quite volatile and becoming more so every day as new forms of entertainment and education emerge with different affordances and public awareness and status.

Keeping on top of and ahead of changing ideas about how best to support the public's well-being is clearly easier said than done. In fact, a key next step for this project will be the development of a "Public Report" version of this research, co-created by the project's research team and by leaders from each of the participating museums. A focus on how these findings can be used to improve practice will hopefully be part of that effort, or perhaps as an additional co-created effort beyond the writing of the Public Report.



That said, we will complete this section with some possible take-away/suggestions for improved practice. What should be apparent from this research is that critical to creating enhanced museum experiences is envisioning the museum experience more holistically. The museum visit does not begin at the front door of the museum nor does it end at the exit, but rather the museum experience extends out in time and space far beyond the physical and temporal boundaries of the museum. Enhancing the museum experience involves appreciating that seeing and appreciating art, feeling welcomed by staff, and enjoying a high degree of physical comfort while in the museum are not separate and unrelated outcomes, best assigned to different museum departments. Supporting all dimensions of well-being needs to be the goal and the responsibilities of all staff, regardless of their title or responsibility.

Borrowing from the final chapter of Falk's (2021) recent book *The Value of Museums*, two short examples of how museums can enhance visitor well-being are: 1) Begin the visit experience before the visitor even arrives at the museum by understanding the range of possible agendas/motivations visitors might have for their visit and finding ways to connect to all of those differing needs and interests; and 2) Extend the impact of the museum experience by supporting experiences even after the visitor has left the building. Both of these efforts require extending how one thinks about the boundaries of the museum experience, requiring efforts beyond the "box" of the museum itself.

Although museums often create experiences in order to accomplish specific goals, such as illustrating the oeuvre of a particular artist or facilitating understanding of a particular principles related to aesthetic appreciation, these goals only have meaning to the extent that they actually connect, in some way, to the users' prior knowledge, experience, interests, and most particularly each user's specific motivations for engaging in a museum experience on any given day. Finding out more about a topic and learning more about that topic are far from the only reason people engage in museum experiences. As discussed in the introduction and made evident by the data collected in this study, people engage in museum experiences for a multiple, often mutually reinforcing reasons; all of which ultimately relate to and effect whether they perceive that they experienced a sense of enhanced well-being. Hence quality museum experiences need to be designed in ways that not only allow for, but celebrate and encourage multiple reasons for using them, including reasons that deepen and enhance the user's Personal, Intellectual, Social and/or Physical Well-Being.

The hallmark of great museum experiences is that they invite participation by diverse people with diverse backgrounds, interests and motivations. However not only should the actual experiences themselves invite such diversity, so too should the descriptions and promotions of the experience. Not surprisingly, virtually all art museum websites feature images, but currently the images displayed on most museum websites feature art, not people. Although, some people go to museums exclusively because of the art, as this research highlights, not all people do. Some people go to the museum primarily to be with other people. Others, come to find quiet spaces and to be contemplative. Some come for the gift shop or café, and still others are motivated to come because they hope to be inspired by the architecture or the grounds. Thus, museum websites, brochures, paid and unpaid advertising, and social media should seek to communicate with all of these different potential audiences. Marketing and promotion materials should seek to feature people visiting the museum, including people who look different than the typical old, white, female. Efforts should be made to actively show images and create copy that expands the public's ideas about what is possible to experience at the museum, and by so doing, encouraging visitors to come for multiple reasons and seeding the possibility



for enhancing multiple dimensions of well-being. Ideally, outreach and marketing should be designed to target specific audiences with specific messages as the days of mass marketing and one-size-fits-all approaches are over.

As emphasized in the introduction, one of the most notable aspects of museum experiences is how memorable they are, and one of the major findings of this research was the fact that museum experiences resulted in long-lasting feelings of enhanced well-being. Even when little or no follow-up occurred, people tended to positively recall their museum experiences. Previous research showed that when queried, most museum users readily and without hesitation connected what they did during a museum experience with other events and experiences they have had; often connecting experiences that happened weeks or even months and years apart. In other words, the fact that these events were temporally and spatially removed from the actual museum use only reinforces the idea that most people, unlike many museum professionals, do not neatly compartmentalize their experiences as being “in” or “outside” of the museum; “museum experiences” are more usefully thought of as “life experiences”. Based on this study, we now have evidence that museum experiences result in meaningful, positive, long-term impacts outcomes, but this does not mean that the impact museums currently achieve could not be even greater. In fact, we would assert that if museums purposefully and systematically attempted to extend experiences beyond the traditional physical and temporal boundaries of the museum, they could almost certainly increase their impact and value. Historically, though, few museums have actually committed to such efforts.

Considerable research now supports the potential value of supporting post-use experiences (e.g., Ballantyne, et al., 2018; DeWitt & Storksdieck, 2008). These subsequent, related experiences serve to reinforce and build on and cement prior, in-museum experiences, and can be particularly helpful in ensuring that more experiences, become more memorable, more often. After all, even the most impactful experiences tend to diminish with time if they are not continuously recalled and refreshed through associations with new experiences (Cooper, Kensinger & Ritchey, 2019). In the absence of purposeful follow-up and reinforcement by the museum, many of the details of most people’s museum experiences tend to fall away with time, leaving only a broad-brush recollection of the most salient things the person saw or did. This may be okay, but it is far from ideal. To ensure that users continue to think positively and specifically about their museum experiences long after the initial experience, there is no substitute for follow-up, and then additional follow-up, and then even more follow-up. Follow-up is the ticket for building both fidelity and loyalty, particularly if the follow-up is targeted to support and extend the user original interest, experiences and user motivations.

Such follow-up is never easy, but it is possible. Examples of successful efforts include efforts that allow for people to post pictures of themselves, engage in post-visit experiences on website, social media posts and blogs, and actual follow-up programs and events specifically targeted at past museum visitors. In theory, it should be possible to extend the timeframe of enhanced well-being from days to weeks and months. Perhaps the place to start is with contacting those individuals who self-reported that their museum experience resulted in feelings of enhanced well-being lasting a month or longer. Which leads us to next steps for research.

Future Research        There are clearly many areas in which future research could be, and likely should be pursued. Below, in bulleted fashion, are several areas for further investigation.

- Certainly, rectifying the glaring limitations of this study with regards to race/ethnicity should



be a high priority. More work needs to be done on how individuals with different lived experiences experience and benefit, or not, from museum experiences. Rather than using the “blunt tool” of a quantitative study like this, it would probably be far more profitable to conduct, at least initial studies using some kind of systematic, but qualitatively-driven methodology so that both the richness and diversity of responses can be successfully captured. These studies might then be followed-up with smaller quantitative studies, perhaps modeled after this current study, targeting specific audience segments.

- Also calling out for further qualitative research would be a more in-depth exploration of the exact nature of what and how different adult visitors find valuable about their museum experience. Such a study could hope to better and more meaningfully unpack what prompts a person to say they had a satisfying and enhancing Personal, Intellectual, Social and Physical well-being-related outcome.
- Since an effort was made to generalize the findings of this research to art museums in general, investigating comparable outcomes at both smaller, and potentially larger, institutions might help to clarify the actual generalizability of these findings.
- As also pointed out in the Limitations section, the absence of children from this research is a significant deficiency. It should be noted, that the project team has an IMLS research proposal pending designed to specifically address this issue, which, if funded, would go along way towards filling this gap.
- Finding ways to extend the theoretical and methodological approach of this research to better accommodate a broader array of possible user outcomes might be well worth considering, e.g., including as outcomes not just “backwards” looking benefits but equally “forward-looking” and hoped for benefits.
- Finally, it would be productive to extend the economic value analysis to include other dimensions of museum value, e.g., research and collections, which also represent important aspects of museum financial value.

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