

## Conducting Research at a Museum: Advantages and Differences

Running studies in a museum presents a variety of unique opportunities and advantages, compared to running studies in a laboratory, school or daycare. There are also important differences between conducting research at a museum and conducting research in more traditional research sites. This document outlines some of the advantages and differences.

### Advantages:

- 1. Museums allow you to conduct research that might otherwise be difficult to complete in a lab.*

By situating research studies in informal learning settings visited by families, you may be able to recruit pairs of siblings, toddlers or teenagers, parents and their children, or groups of complete strangers to participate in innovative research studies. This would allow you to conduct developmental studies that require large age ranges (e.g., all ages between 6-18), or studies that require multiple people to participate at once in a group. It is also possible to recruit age groups and populations that are traditionally difficult to recruit and schedule in lab settings (e.g., toddlers, teenagers, working parents). If your research already requires these populations, or if you are interested in designing studies that focus on these groups, a museum setting may be a valuable venue for your research. In addition, the questions posed by parents and educators, and the observations that you are able to make in a family learning environment, can suggest interesting new research directions with real-world applications.
- 2. Museums provide a predictable and constant stream of participants.*

A museum is a lower volume operation than other forms of recruitment (online computer system and schools) but you get to work with each subject individually, you have more control over which participants to recruit, and you do not have to compete with other studies to recruit participants. This contrasts with online recruitment systems. Although these systems allow you to recruit a large number of participants, it is more difficult to recruit specific types of subjects, and the people you reach through the system are fairly homogeneous (mainly university students, and mostly psychology university students). Furthermore, lots of studies advertise online and so you might be competing with other labs for access to subjects. Finally, while many individuals sign up for studies many individuals do not show up. In a museum setting, you have more control over who to approach to participate in your study, and you are able to recruit, obtain consent, and collect data in one sitting.
- 3. In comparison to a lab study pool, children who visit the museum are generally more diverse in terms of SES, race, and age range.*

You may be able to recruit a more diverse sample by working with a museum in your community than by testing only subjects who are willing and able to make a trip to your university campus to participate in a research study. Museums can often provide data on the demographics of their visitors, which may be useful if you are called upon to report information about your sample. In addition, many museums have events or programs that aim to increase the diversity of their visiting audience (for example, free nights). Finally, running a study at a museum can provide

new recruitment opportunities for other studies going on at your lab or institution, allowing you to increase the diversity of your other samples.

4. *Compared with schools, recruiting and running participants in the museum is simpler.*  
Obtaining consent from districts, principals, teachers, parents, and students can be a lengthy, difficult process. At a museum, many children visit with their legal guardians, allowing you to obtain consent and conduct the study at once.
5. *You do not need to offer any financial or material incentives for participation (except stickers).*  
Children and adults are often excited to participate in studies in a museum setting and do not need motivation to participate. The study they are participating in gets their full attention as opposed to being something that they are pulled out of class for or something they have to do. There is no expectation of compensation, since it is a free-choice learning environment.
6. *Researchers and their research assistants gain more experience in communicating their work to museum educators and the general public.*  
Together with museum educators, researchers can help to convey science information to the visitors who participate in the studies in the museum. In the process, researchers at any level of study benefit from practicing their explanations of their work. Researchers often gain confidence describing the importance of their research to lay audiences, which can help in their teaching, grant writing, and manuscript editing.
7. *Partnering with a museum increases the visibility of a lab and a university and thus helps to build long-term public support for cognitive science research.*  
The families you recruit at a museum may never have thought about participating in a research study before, might be unlikely to hear about your research, and might not even be aware of what cognitive scientists study. Meeting a scientist and observing a research study in action may change their perception about what cognitive science research entails. In addition, after seeing one study at the museum, they may be interested in hearing about other projects at your lab or others, increasing the visibility and perceived trustworthiness of your lab and your institution in the community.

## Differences:

1. *Some museums may have restrictions on certain aspects of research studies to ensure a positive visitor experience.*

Museums may establish parameters on study length, procedures, topic, etc. Museums focus on providing enjoyable experiences for families. Because families approached to participate in a research study may not be familiar with research participation, it is important for studies to be transparent and nonthreatening. Studies which take a long time to finish, that separate children from their parents, or that involve upsetting or controversial subjects may not be appropriate for a family's visit, especially if they are not familiar with research in general. Therefore, museums may set guidelines for what types of studies are appropriate for their environment and audience.

It is important for researchers to realize that museums are not questioning the value of any individual research question or method, but instead must consider each study from a naïve visitor's point of view -- having entered the museum with a set of expectations about their visit. Ensuring that visitors have a positive first experience with research participation is equally vital for laboratories interested in changing the public's beliefs about the process of research, and those who wish to encourage visitors to participate in other studies in the future.

2. *The research space at a museum differs from a laboratory space.*

Research spaces within museums are typically not "designed" for research, especially if setup within an already existing, dynamic exhibit environment. This may create different opportunities and challenges in creating study protocols or materials. Some of the unique opportunities of family learning environments are described above. Challenges include: noise, chances of interruption (by other family members or visitors), distraction by nearby exhibits, limited space, etc.

3. *Studies in a museum setting tend to be shorter than studies in a laboratory setting, and visitors can usually be recruited only once.*

To ensure a positive visitor experience, studies run in a museum setting are usually less than fifteen minutes long. This can make long protocols or those that involve extensive surveys or paper-based tasks impractical or impossible to conduct in a museum. In addition, unlike studies in schools or laboratory, it is less feasible (although not impossible) to conduct research that requires multiple sessions with participants. Researchers who require these types of methods may wish instead to use short museum-based studies as an opportunity to spread the word about longer, more complex studies taking place in their labs.

\*To suggest additions or updates to this resource, please email [livinglab@mos.org](mailto:livinglab@mos.org)