

This is a preprint of an article published by Curator, The Museum Journal:  
Gutwill, J. (2002). "Gaining visitor consent for research: Testing the posted-sign method." *Curator* 45(3): 232-238.

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## **Gaining Visitor Consent for Research: Testing the Posted-Sign Method**

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### **ABSTRACT**

One method for studying visitors in museums is to audiotape their conversations while videotaping their behavior. Many researchers inform visitors of the recordings by posting signs in the areas under scrutiny. This study tests the assumptions underlying that method—that visitors notice, read, and understand such signs. Signs were posted at the entrance to an Exploratorium exhibit which was being audio- and videotaped. Researchers interviewed 213 adult visitors as they exited the exhibit. The interviews revealed that 75 percent of the visitors had read and understood the sign. Of the 52 visitors who had not, 8 reported that they felt bothered to some degree by the recordings being made. The implications of these results are discussed.

### **INTRODUCTION**

Researchers studying museum visitors employ a variety of data collection methods including surveying, interviewing, directly observing, audiotaping conversations, and videotaping visitors'

behaviors. These methods often require that visitors give their consent to participate in the research. Visitors may grant informed consent explicitly or implicitly. Explicit consent means that visitors directly state their consent to participate in the study, typically by signing a consent statement. With implicit consent, the researcher infers visitors' consent based on their behavior in a situation of choice. For instance, visitors might see a sign stating that they will be recorded if they enter a particular room in the museum. If they enter, researchers infer that they have given their consent to be recorded.

Federal guidelines for the treatment of human subjects in social science research mandate that before visitors grant or withhold consent they should know they will be recorded, understand how the recording will be used, and know that they may decline being recorded (U.S. Office for Human Research Protections 2002, Ryan et al. 1979).

This paper describes a study of the effectiveness of one method for gaining implicit consent while audio- and videotaping museum visitors.

**Commonly used methods for obtaining informed consent**—Researchers have been recording museum visitors at exhibits for years, sometimes obtaining explicit consent, while at other times gaining implicit consent. Crowley and Callanan (1998) videotaped visitors at several exhibits throughout the Children’s Discovery Museum of San Jose. They developed a method for obtaining explicit consent by stopping all visitors as they entered the museum, explaining the purpose of the research, and asking visitors to sign a consent form if they wished to participate. Those visitors who granted their consent were given stickers to wear on their clothing. When any visitors wearing stickers entered any one of the exhibits under study, a camera-operator activated the recording equipment.

This method has several advantages beyond obtaining explicit consent. By gaining consent early in the visit, the researchers may reduce the likelihood of self-conscious visitor behavior; by the time visitors reach an exhibit under study, they may have forgotten about the recording or at least have become more comfortable with it. Another benefit of this approach is that the stickers can be color-coded to reveal the ages of children being recorded.

One problem with the method, according to Crowley (2001), is that visitors without stickers often share exhibits with participating, sticker-wearing visitors, thereby forcing the operator to turn off the camera. This underscores the importance of obtaining consent from a large fraction of entering visitors. The cost of hiring researchers to gain informed consent from nearly all visitors at a museum would increase as attendance increases, rendering the method prohibitively expensive for large museums.

Researchers have also gained implicit consent when recording visitors. Lucas, McManus and Thomas (1986) audiotaped visitors in different museums to study learning at exhibits. Concerned about protecting their subjects, the researchers obtained implicit consent by posting a

sign in a prominent place. Posted signs have been used with videotape as well. Tulley and Lucas (1991) audio- and videotaped visitors at the *Lock and Key* exhibit in London's Science Museum. Signs on the exhibit informed visitors of the recordings. More recently, vom Lehn, Heath and Hindmarsh (2002) used videotape in several British museums to capture and analyze visitors' conversations, body language and gestures. They posted signs at the museum and gallery entrances to inform visitors of the recordings. Their method also included direct observation, so a researcher was always present to answer visitors' questions about the video and stop recording if requested.

These examples illustrate different methods researchers have used to obtain informed consent from visitors who were being recorded. To my knowledge, no one has tested the effectiveness of signs for informing visitors that they are being recorded. How many visitors notice, read and understand such signs? If they do not see the signs, are they upset that they were recorded? This interview study on the effectiveness of posting signs was undertaken to answer these questions.

## METHODS

Researchers audio- and videotaped visitors at the "Downhill Race" exhibit at the Exploratorium, posting signs to inform visitors of the recording. The signs had been iteratively designed and revised for clarity through several rounds of formative evaluation before being employed in the study. Featuring a large photograph of a video camera, the signs were bilingual in English and Spanish. The first sign was posted at the museum's entrance, stating: "You may be videotaped in certain areas of the museum today. Signs will be posted in the research areas that will be videotaped." The purpose of this sign was to allow visitors to avoid the entire museum if they did not want to risk being recorded. Two other signs were posted near the exhibit itself, stating:

“You are being videotaped at this exhibit—now.” The exhibit signs contained further information about the purpose and uses of the research data (Figure 1). The camera, unattended but running continuously, was placed in plain sight to one side of the exhibit, and the microphones were on stands directly behind the exhibit.



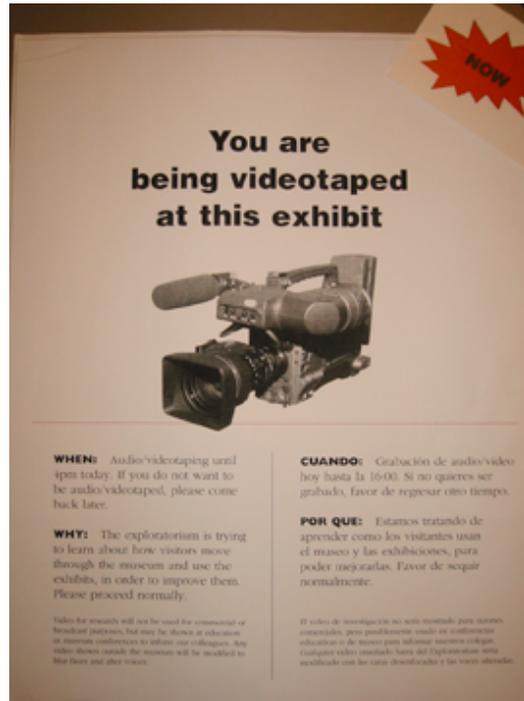
The full English text of the sign posted at the entrance to the museum was:

You may be videotaped in certain areas of the museum today. Signs will be posted in the research areas that will be videotaped

When: Audio/videotaping until 4pm today.

Why: The Exploratorium is trying to learn about how visitors move through the museum and use the exhibits, in order to improve them. Please proceed normally.

Video for research will not be used for commercial or broadcast purposes, but may be shown at education or museum conferences to inform our colleagues. Any video shown outside the museum will be modified to blur faces and alter voices.



The full English text of the sign posted at the entrance to the exhibit area was:

You are being videotaped at this exhibit — now.

When: Audio/videotaping until 4pm today. If you do not want to be videotaped, please come back later.

Why: The Exploratorium is trying to learn about how visitors move through the museum and use the exhibits, in order to improve them. Please proceed normally.

Video for research will not be used for commercial or broadcast purposes, but may be shown at education or museum conferences to inform our colleagues. Any video shown outside the museum will be modified to blur faces and alter voices.

Figure 1. Signs posted to inform visitors.

Initially, only the signs near the exhibit were installed, but a pilot study showed that only 9 out of 18 visitors noticed the sign, and only 3 of those visitors said that they had read and understood it. To make the signs more noticeable, we placed stanchions with theater-rope to cordon the area around the exhibit, creating two discrete entrances with one sign at each entrance (Figure 2). This barrier improved the chances of visitors noticing and understanding the signs for two reasons. First, it creates a specific entry point, funneling visitors past the signs, making it more likely that they will notice them. Second, the stanchions and ropes demarcated the specific area being videotaped.

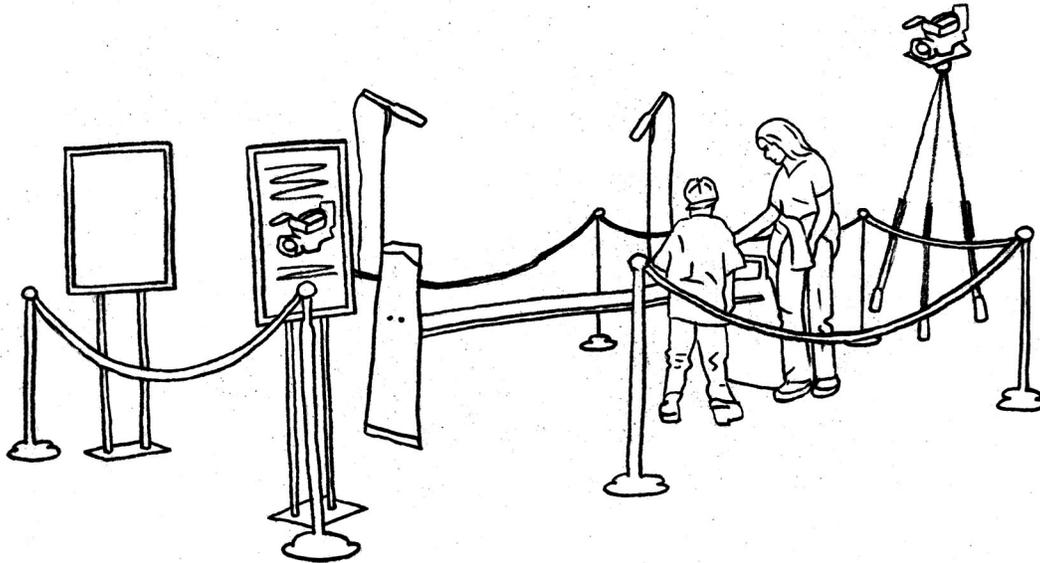


Figure 2. Exhibit setup.

The study addressed the following issues:

- How many visitors notice, read and understand posted signs?
- Are they bothered by the idea of being recorded for research purposes?
- What about it bothers them?

Using an uncued interview method, researchers approached visitors as they left the roped-off exhibit area. We interviewed 213 adult visitors on weekdays and weekends. (Only adults were interviewed because they are legally responsible for granting consent for their children.) We first told them that they had been videotaped in the area, and then asked the following questions:

- Did you know you were being videotaped in this area? (If “yes”) How did you know? (In addition to the signs, visitors might have noticed the camera or microphones.)
- Did you happen to notice the sign(s) posted at the exhibit?
- Did you happen to notice the sign posted at the museum entrance?

Next we told visitors, “We are videotaping people so we can see how they play with the exhibits, so we can improve them. This research is only for use here at the museum or to show at conferences. If we did show the video, we would blur your faces and change your voices.”

We then asked:

- How much does it bother you that we videotaped you at this exhibit? (5-point Likert scale from “A lot” to “Not at all”)
- What are your concerns?

For the visitors who said they had not known that they were being recorded, we asked:

- If you had known that you would be videotaped in this area, would you have avoided the exhibit or still played with it?
- Would you like us to erase the part of the videotape that has you on it?

The last two questions were designed to further measure how much the recordings bothered visitors.

## RESULTS

The uncued interviews showed that most visitors (75 percent) noticed and understood the sign at the exhibit when the exhibit was roped-off with stanchions.<sup>1</sup> The remaining 25 percent either did not see or did not understand the sign (Figure 3). Such an understanding of the sign is necessary if researchers are to infer consent correctly from visitors' actions.

We were particularly concerned about the feelings of the uninformed visitors, as they did not give truly informed consent. How upsetting was it to them that they were being recorded? What upset them about it? Only 8 out of 52 (15 percent) uninformed visitors reported that they were bothered by the recordings. An even smaller number of visitors (2 out of 52, or 4 percent) said they would avoid the exhibit if they could do it all over again. None of the uninformed visitors asked us to erase the tape. The 8 uninformed visitors who reported being bothered by the videotape generally cited two reasons for their feelings: five of them felt they could not “play around” or behave as freely if they were on videotape, because they might be embarrassed if someone watched them. The other three visitors complained that they did not know how the videotape would be used. This may have been due to the fact that they had not seen the sign, which explained that the videotape would be used only for research purposes. The 22 “bothered” visitors who had seen and understood the sign cited similar reasons for feeling bothered.

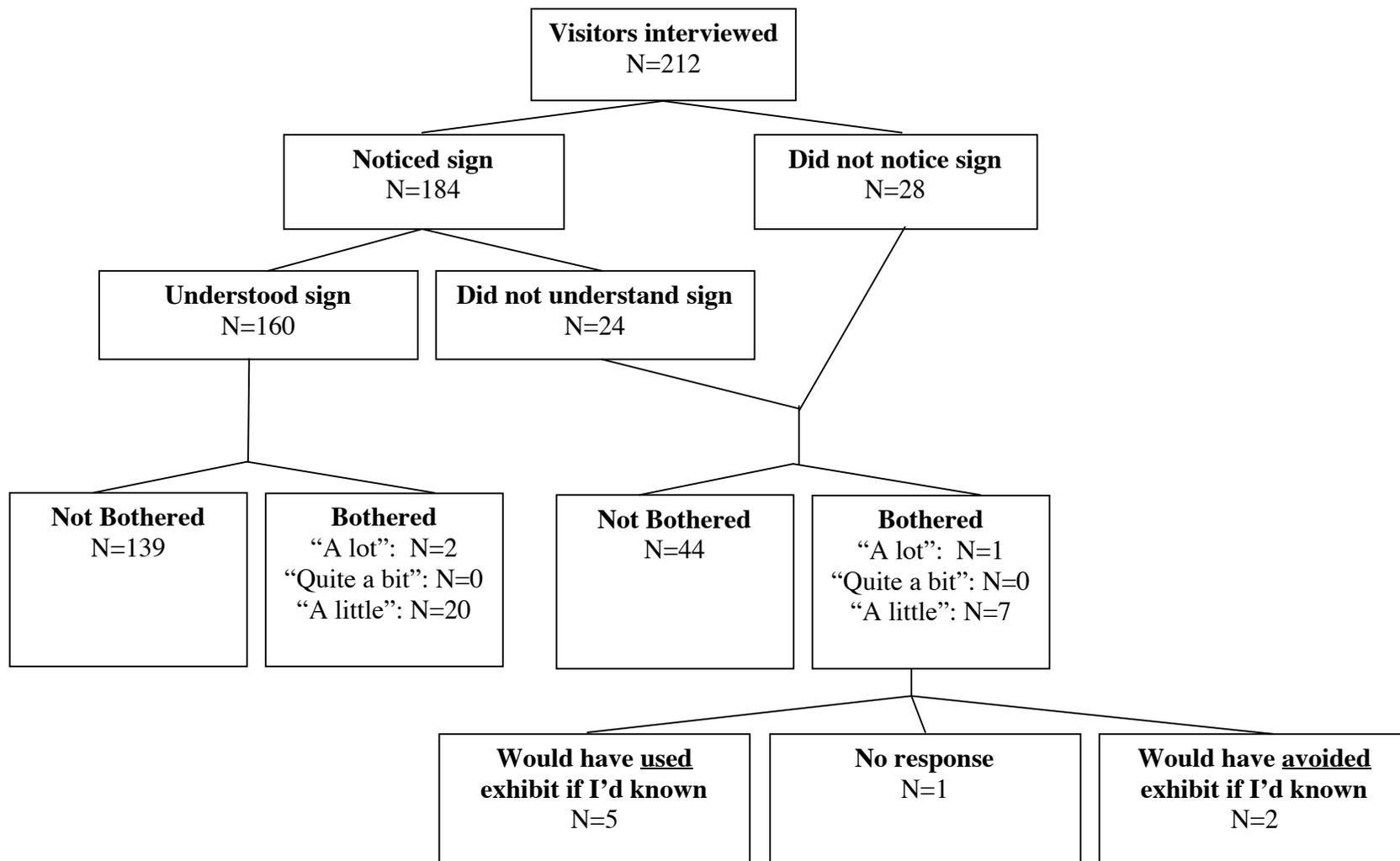


Figure 3. Summary of visitor responses

## DISCUSSION

The study suggests that posted signs, even when used in conjunction with an access-limiting barrier around an exhibit, are not fully effective at informing all visitors that they will be videotaped at the exhibit. However, most visitors (75 percent) did seem to understand that they were being recorded at the exhibit, and most visitors were unconcerned about being recorded. Only 8 visitors out of 213 did not know they were being videotaped and later reported feeling bothered by it; only 1 visitor in this group reported being bothered “a lot.” Even this visitor said she would still enter the exhibit area if she could do it over again, as long as her children wanted to try the exhibit. These results suggest that although posting signs does not guarantee complete informed consent, the likelihood of upsetting visitors is low.

These data were collected under one set of circumstances, namely cordoning off an exhibit in the middle of an open space full of exhibits. An obvious follow-up question is what would happen in a different environment, perhaps one with walled-off rooms, where visitors would see only the posted sign as they entered the room? Would the same fraction (75 percent) of visitors read the sign and understand that they were being recorded?

We plan to conduct further studies of the posted-sign method, using walls and other means to focus visitors’ attention on the signs. We hope that other institutions will follow suit in their own settings, furthering our understanding of the strengths and weaknesses of this method. In the meantime, the results of the current study inform our practice as we audio- and videotape visitors at the Exploratorium.

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## ACKNOWLEDGEMENTS

I wish to thank Nina Hido for collecting and analyzing the data for this study, and for help in designing the posted informational signs. Thanks to Veronica Garcia-Luis and Richard Brooks

for translating the English text into Spanish. My thanks also go to Diane Burk and Larry Antilla for their graphic design work in this study and article. I thank Sue Allen for reviewing a previous draft of this article. I am grateful to Zahava D. Doering and the anonymous reviewers who helped me focus my thinking in the article.

#### NOTE

<sup>1</sup>Although some visitors noticed the camera or microphones, all visitors who understood they were being videotaped had also seen the posted sign.