

Aesthetic Dissonance: Viewing Fine Art in a Science Museum

Jana Greenslit & Tiffany Malone, Museum of Science and Industry, Chicago

BACKGROUND

At the height of the Black Arts Movement, the Museum of Science and Industry, Chicago partnered with emerging local artists to host an exhibition and celebration of African American creativity. Hosted annually since 1970, the Museum's historic Black Creativity Juried Art Exhibition (Juried Art) is the nation's longest running exhibition of African American art. The works showcased are selected by a panel ("Jury") of Black and African American art experts, and include pieces by Black and African American adult and youth artists in a variety of media .

Juried Art also distinguishes itself as an **art exhibition with no ties to science content, even though it is hosted within a science museum**. It provides an opportunity to study the ways in which viewing art for art's sake may prime the mind for the intake of science content (for example, by opening the guest up to new emotions or making them more perceptive in their visual observations).



Black Creativity Juried Art Exhibition, Museum of Science and Industry, Chicago, 2019

Photo Credit: J.B. Spector



RESEARCH QUESTION:

What impact does viewing a non-science art exhibition have on the subsequent viewing of a science exhibition?

We compare the experiences of two groups of guests:

- 1) Guests who attend Juried Art and then a science exhibit
- 2) Guests who only attend a science exhibit

The science exhibit selected for this study, Extreme Ice, was chosen for its proximity to Juried Art.

It focuses on climate science, particularly the impact global warming has had on glaciers worldwide. It has time lapse photography of glaciers, a movie about expeditions that capture these photographers, interactive touch screens with scientific information, and an ice wall visitors can touch.



Extreme Ice, Museum of Science and Industry, Chicago

Photo Credit: Kasumi Chow

METHODS

Two groups of adult guests were recruited to participate:

- . **Juried Art + Extreme Ice:** these guests were asked to walk through Juried Art, then Extreme Ice (**n=20 groups, 39 individuals**)
- . **Extreme Ice Only:** these guests were asked to walk through Extreme Ice only (without having gone to Juried Art first (**n=20 groups, 41 individuals**))

EYE TRACKING

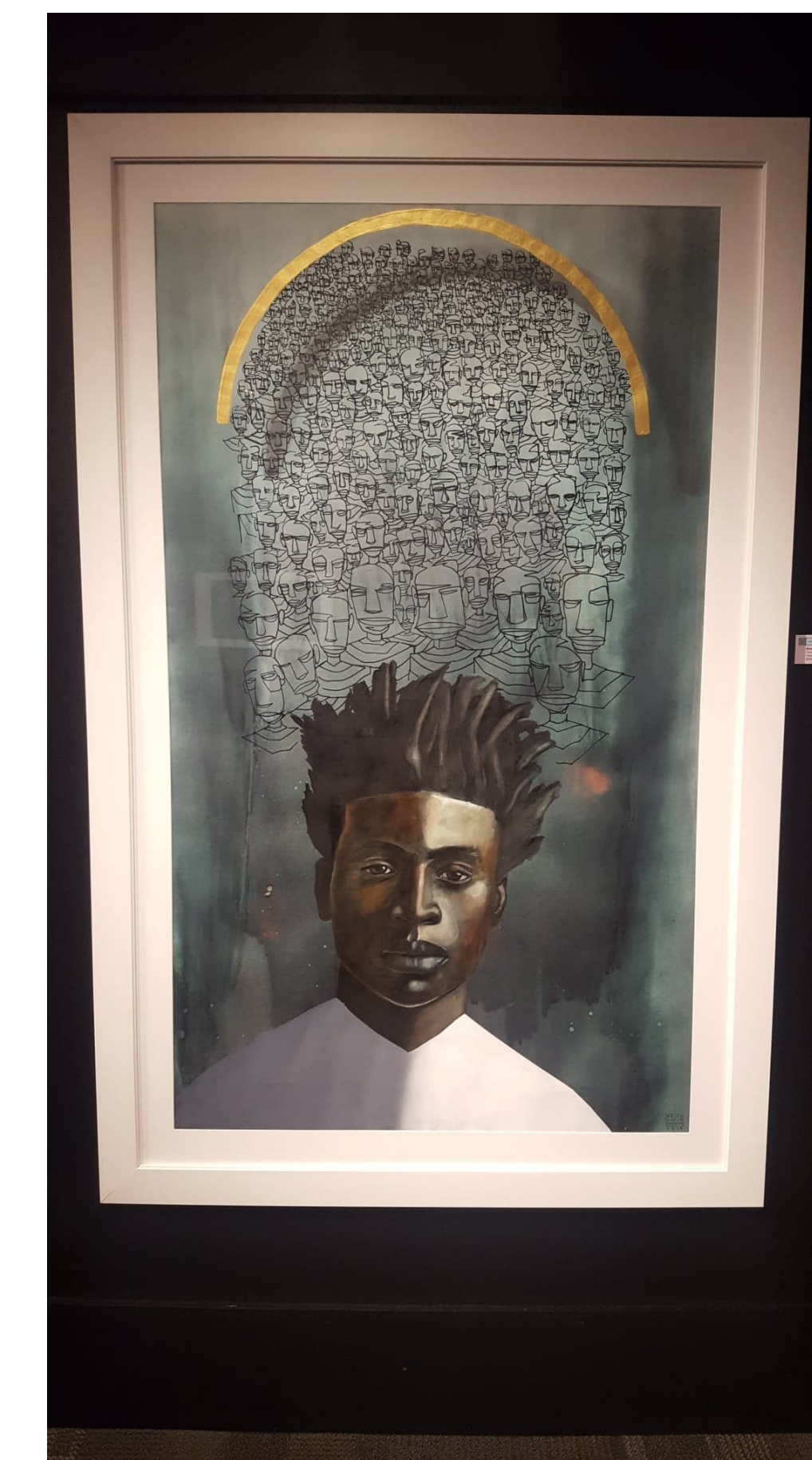
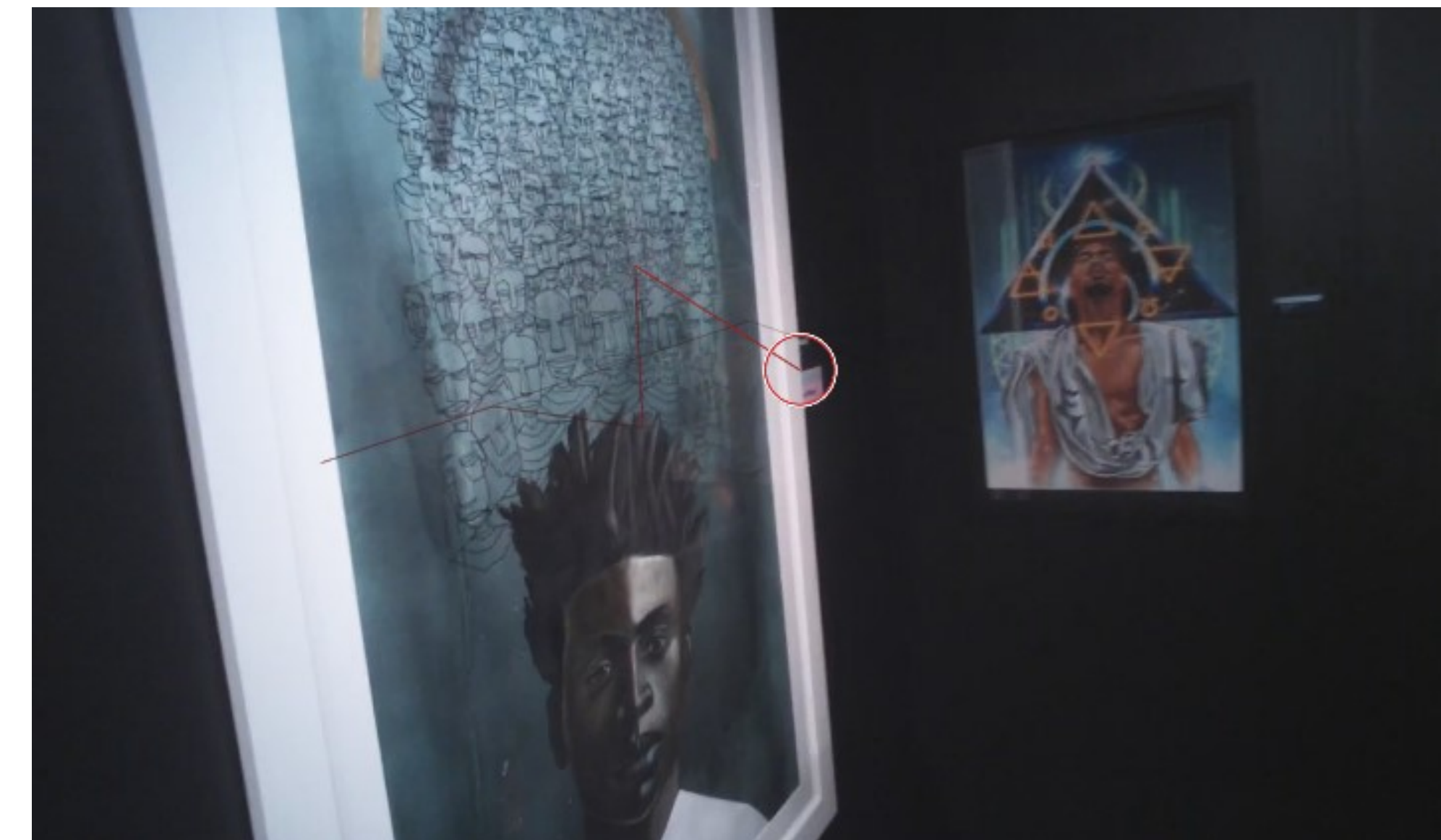


Left: Tobii Pro Glasses 2 wearable eye tracker

Researchers used Tobii Pro 2 eye tracking glasses to record audio and video footage of guests as they moved through these exhibit(s), worn by one individual in each participating group. These glasses record video data of where a person is directing their gaze within a space, as well as audio through a microphone attached to the glasses. This allows us to analyze:

- . **What participants look at**
- . **How long they look at certain items**
- . **What they talk about while moving through these spaces**

The red dot in this snapshot pulled from an eye tracking video represents where a participant is focusing their gaze.



Heat Map of Participant Gaze in Juried Art

Painting Title/Artist: Promises, Promises by Brian Golden



SURVEYS

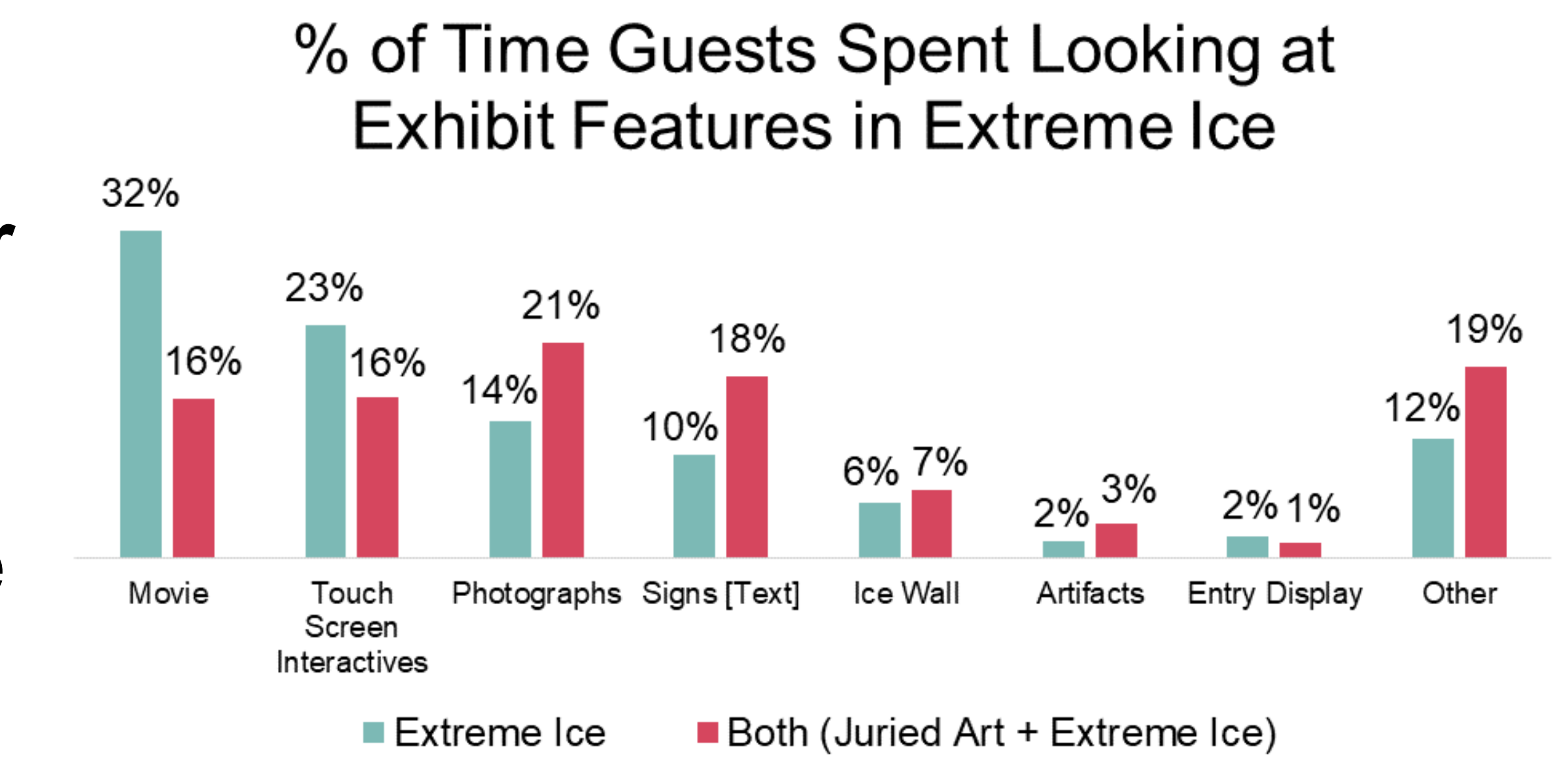


After guests visited the exhibit(s), we gave surveys to the participants wearing eye tracking glasses, as well as all other members of their group over the age of 17. These surveys focused on their experience in Extreme Ice and asked questions about:

- . What they connected with most within the exhibit, and why
- . Whether or not they thought about their race and/or ethnicity within the Extreme Ice exhibit
- . Their overall feelings of belonging at the Museum
- . Their overall interest in learning about science and art
- . Demographic questions such as party size, age, gender, race/ethnicity, etc.

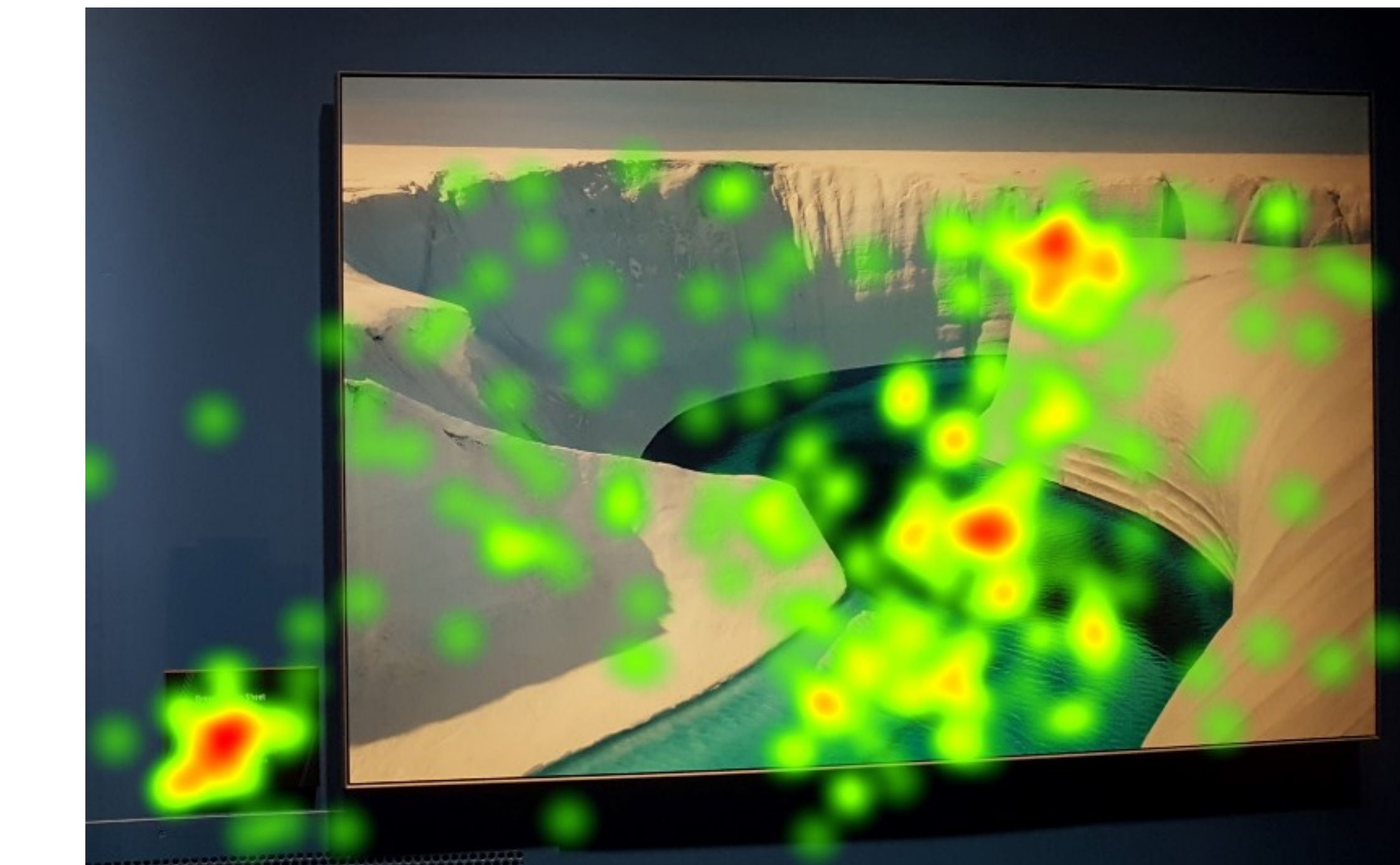
PRELIMINARY FINDINGS

Based on eye tracking data, **participants that attended Juried Art before visiting Extreme Ice spent a higher proportion of their visit looking at photographs and signs with text**, and a lower proportion of their visit watching the movie and looking at the touch screen interactives.

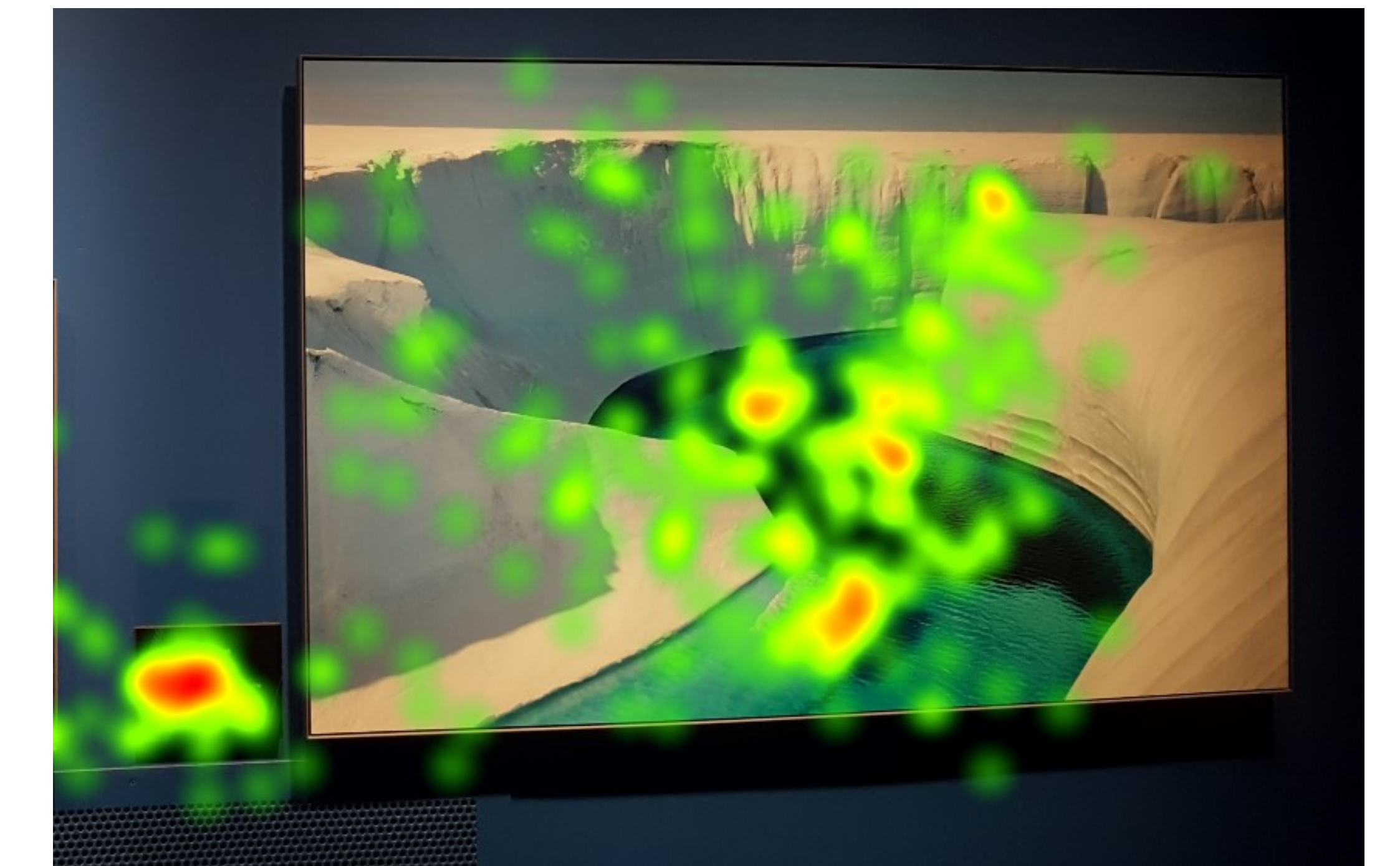


Eye Tracking Heat Maps of Photography in the Extreme Ice Exhibit:

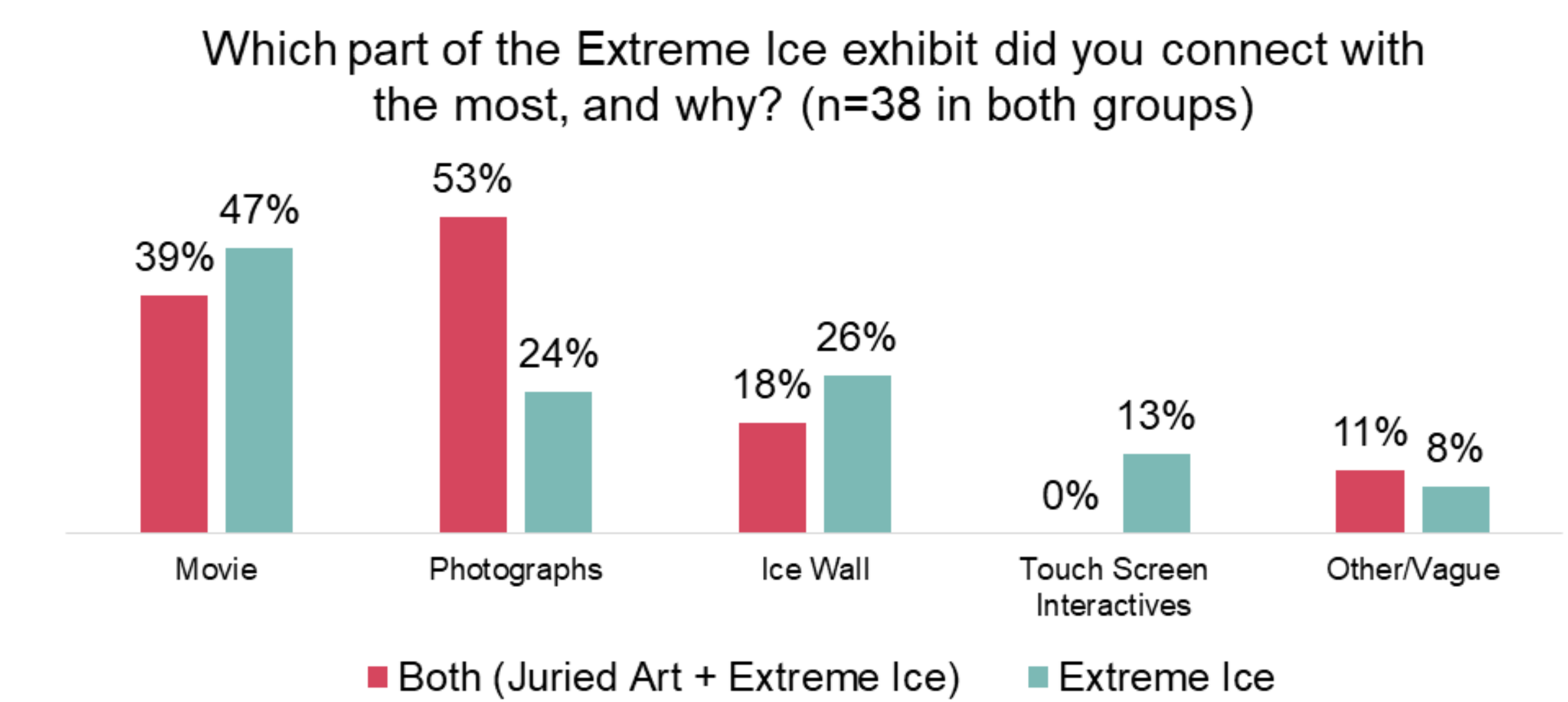
Participants Who **Visited Juried Art First**



Participants Who **Visited Extreme Ice Only**



In the survey, **participants that attended Juried Art before visiting Extreme Ice were twice as likely to say they connected the most with the photographs in the exhibit.**



NEXT STEPS

Researchers will analyze the audio from the eye tracking videos to see if the dialogue provides an explanation of why these differences exist.