Can Wearable Cameras Stimulate Non-visual Memory?

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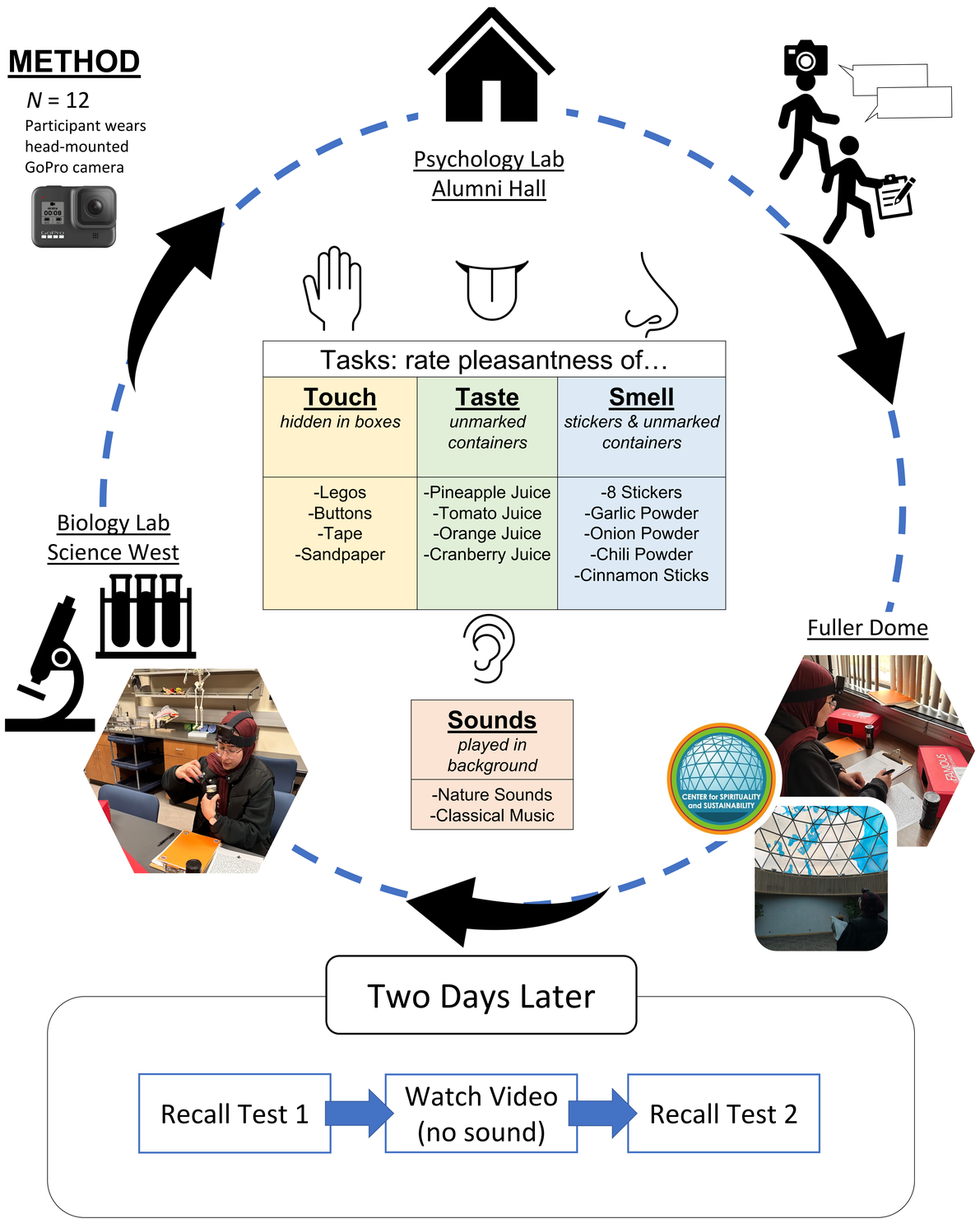
INTRODUCTION

- Wearable cameras create visual records of experience.
- Reviewing videos evokes a sense of reliving.
- Can they stimulate memory for ***non-visual*** aspects of experience?

METHOD

N = 12

Participant wears head-mounted GoPro camera



Tasks: rate pleasantness of…		
Touch *hidden in boxes*	**Taste** *unmarked containers*	**Smell** *stickers & unmarked containers*
-Legos -Buttons -Tape -Sandpaper	-Pineapple Juice -Tomato Juice -Orange Juice -Cranberry Juice	-8 Stickers -Garlic Powder -Onion Powder -Chili Powder -Cinnamon Sticks

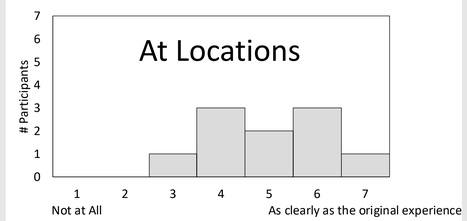
Sounds *played in background*
-Nature Sounds -Classical Music

Two Days Later

Recall Test 1 → Watch Video (no sound) → Recall Test 2

RESULTS

When you were watching your video, how much did it feel like you were reliving the original experience?



"The video would show something I didn't think of but once it happened, it clicked"

Aspect of Experience	Number of Participants (of 12) Reminded of at Least One Element After Watching Video
Sounds	2
Touch	1
Taste	1
Smell	10
Thoughts & Feelings	8
Conversation	6

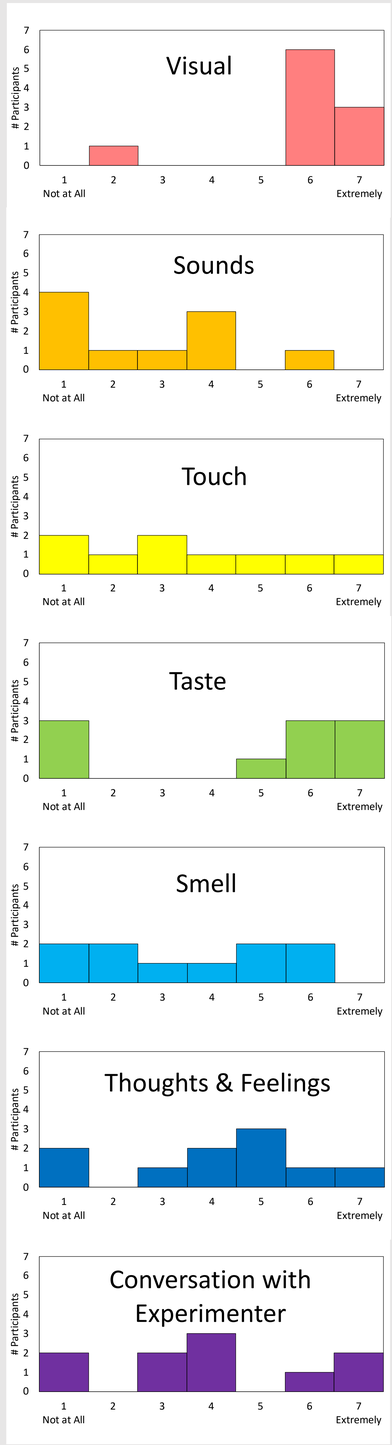
ceiling effect

DISCUSSION

YES

Participant Ratings

How much did watching the video stimulate your memory for each of the following aspects of your original experience?



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Wearable cameras capture a first-person visual record of experience. Such videos can evoke a powerful sense of reliving. Twelve participants wore a head-mounted GoPro camera across campus to two distinct campus locations where they completed multi-sensory tasks, including: touching hidden objects and textures in sensory boxes, tasting juices from disguised containers, smelling unlabeled spices and scratch-n-sniff stickers, and hearing ambient nature sounds or classical music. Two days later, they recalled their experiences both before and after watching their video (without sound). The video reminded a majority of participants about smell, thoughts and feelings, and/or conversations with the experimenters. Results demonstrate that footage from wearable cameras can stimulate non-visual memories.