

You Are Being Watched

Bystanders' Perspective on the Use of Camera Devices in Public Spaces

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Introduction

Imagine you are in a park and playing soccer with your children when someone starts streaming video to a remote person using Skype. You notice that the camera points towards you and your children. How would you react? How would you describe your feelings? How comfortable would you be?

Methodology

The goal of our study was to learn about bystanders' reactions to video capture in public spaces. Specifically, we wanted to learn if people had privacy concerns and whether or not these differed depending on the mode of capture - recording vs streaming and the type of device - smartphone vs wearable camera.

During each session, a researcher (Researcher A, male) stood at the corner of a wide hallway using one of two video capturing devices: a smartphone or a Google Glass.

Smartphone



Google Glass



In both setups, a second researcher (Researcher B, male) was standing approximately 25 feet away observing the bystander's reactions and approached them for interview.

Our field sessions yielded nine interviews with 5 male and 4 female participants who were undergraduate or graduate students in the age group of 19-25; however, their areas of study varied and included interaction design, film and media, engineering, history, business, and the sciences.

Findings

Comfort and Acceptability

Participants said they were more comfortable in the Smartphone setup, while in the Google Glass setup they expressed being more cautious, especially about their personal data and information. This was because they felt it was difficult to identify a Google Glass user and even more difficult to determine his activity.

Concerns

Throughout the course of the interviews, we captured the common factors which affected the bystanders' reactions.

Activity



Participants were more concerned with recording as compared to streaming. They were concerned with activities which were either personal, covert or embarrassing in nature for a public space.

Place



Participants were more concerned with recording as compared to streaming. They were more concerned with Google Glass due to its design and ability to capture videos in a covert way.

Gender



Three out of four female participants expressed concerns about the gender of the person using the device. They said they would be more comfortable with a person of the same gender using the device.

Prior Permission

All of the participants said that they would prefer to provide permission prior to being recorded. This would make them aware of the camera activity and they would be more cautious about themselves.

Discussion

Our analysis found that participants described Google Glass capturing as being different from other types of recording due to its subtle design of the camera and the current scarcity of such devices in our location.

Participants further expressed interest for prior permission before recording them. In practice, gaining such permission would be extremely difficult, especially for all of the people present as potential bystanders. Thus, while people feel they want to give permission, other design considerations may be more appropriate to provide awareness to bystanders so that they can appropriate themselves for the given situation. This might involve simple solutions like visual feedback on the device or designing interactions for controlling the camera such that they appear unique and are visibly identifiable by others.

