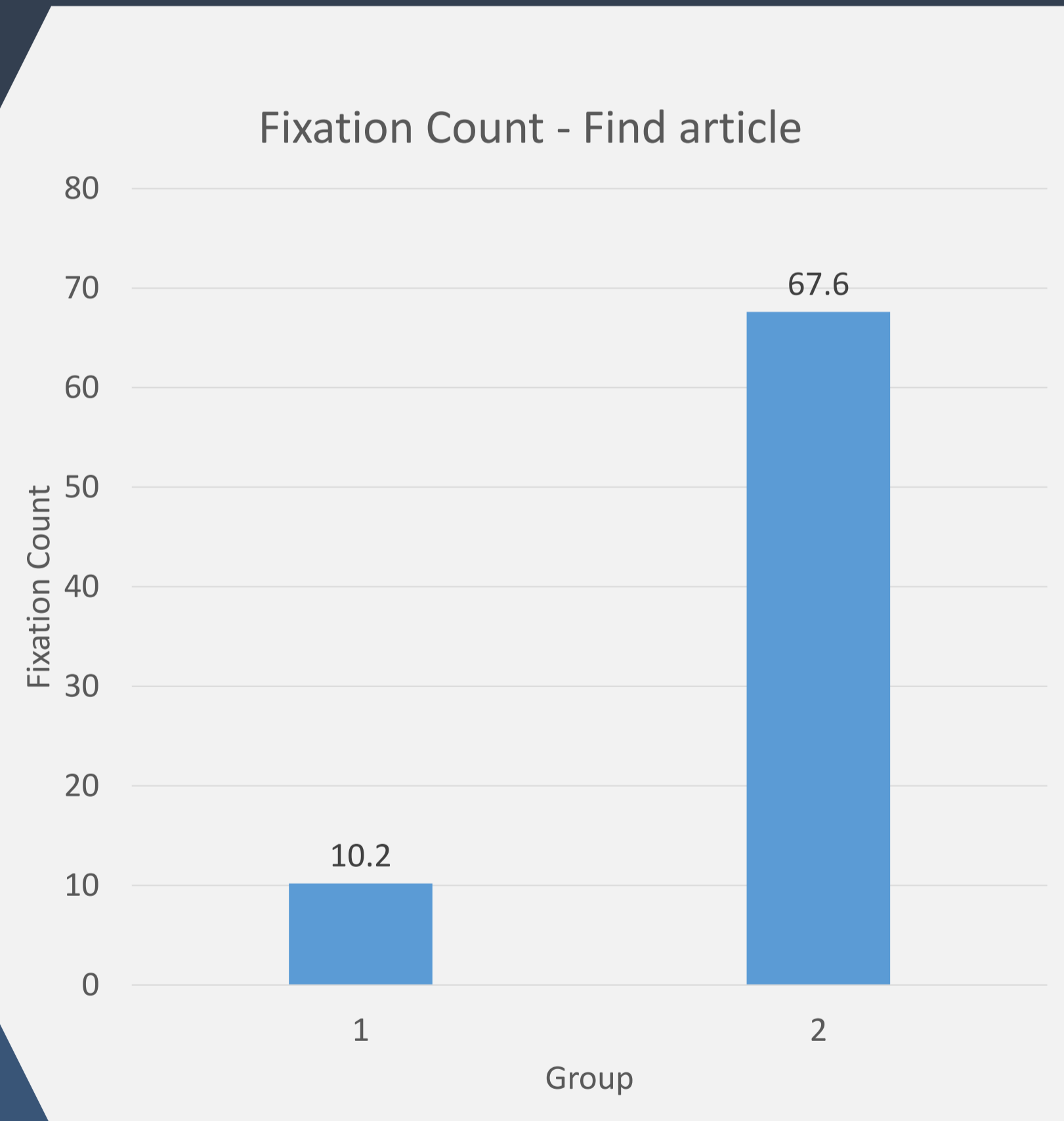
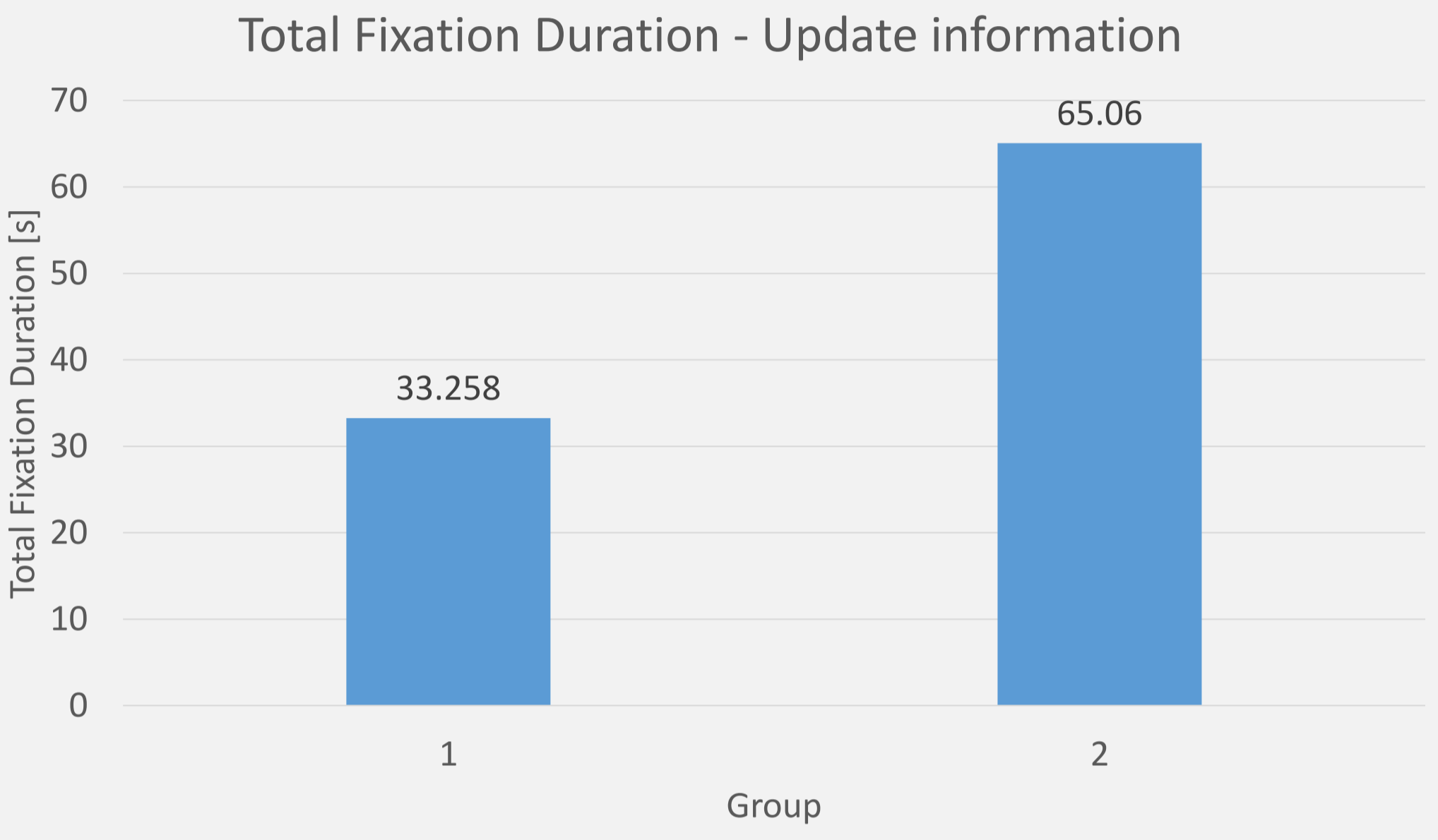


A FIRST STEP TOWARD DETECTION OF USABILITY SMELLS USING EYE-TRACKING

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User Study

- Newspapers domain
- 10 participants (8 men and 2 women)
- 2 groups of participants:
 - With Usability problems
 - Without usability problems
- 300Hz eye-tracker
- 8 usability problems
- 3 tasks:
 - Sign in to the system
 - Find specific article
 - Update information in your profile
- Metrics:
 - Fixation Duration
 - Fixation Count
 - Time to finish the task

Motivation

- Usability problem is an aspect of the system which makes it unpleasant, inefficient or impossible for the user to achieve their goals.
- Detection of usability problems is performed manually by experts.
- Automation of this process - such methods will be able to detect different usability problems automatically.
- Nowadays, such methods use solely records of user activity in the form of clicks, scrolling or keyboard input.
- Detection process of these methods can be improved by introducing gaze metrics.

Goals

- Hypothesis - gaze metrics are able to identify specific usability problems.
- Goal - identify specific gaze metrics which can reveal specific usability problems.
- These metrics then can help us to find cases when some usability problems occurred while using web page.

Future Work

- Usability problems are connected to a specific sequence of patterns
- Scanpath analysis of usability problems