



Are Privacy Dashboards Good for End Users?

Evaluating User Perceptions and Reactions to Google's My Activity

Florian M. Farke, [David G. Balash](#), Maximilian Golla, Markus Dürmuth, and Adam J. Aviv

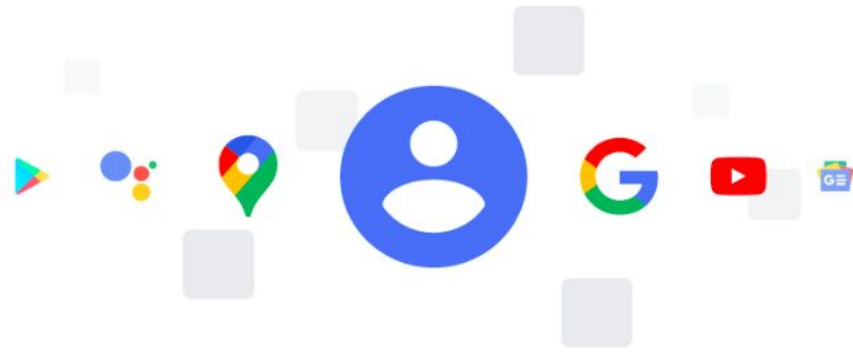
Motivation

Companies collect a lot of data about users

Data transparency → Privacy dashboards

Are dashboards helpful to users?

Google My Activity




My Google Activity

The activity you keep helps Google make services more useful for you, like helping you rediscover the things you've searched for, read, and watched.

You can see and delete your activity using the controls on this page.

<p>Web & App Activity</p> <p><input checked="" type="checkbox"/> On ></p>	<p>Location History</p> <p><input checked="" type="checkbox"/> On ></p>	<p>YouTube History</p> <p><input checked="" type="checkbox"/> On ></p>
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 Google protects your privacy and security. [Manage My Activity verification](#)

Our Study

Does My Activity Influence



Perceived benefit & concerns?



Awareness & understanding of data collection?



Intent to change settings or behaviors?

Study Design

Screening Survey

 669 Participants

 Google Account Usage

 Recruitment: Prolific

Main Study

 153 Participants

 Custom Browser Extension

 Pre-Post Study Design

Main Study

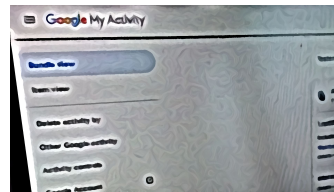
Pre Exposure

Install Extension

Perceptions of Google
Concern
Benefit

Intervention

Explore My Activity



Immediate Reactions



Activity Presentation



Post Exposure

Reflections and Trust

Intent to Take Action

Perceptions of Google
Concern
Benefit

Uninstall Extension

Results

Reactions to My Activity

“I’m surprised at how much data Google collects beside its own sites. I did not know it saved the links you clicked on after a Google search, for instance.” (P23)

Reactions to My Activity (cont.)

“It's not just what I'm doing with Google, but **everything on my phone** since it's an android.”
(P113)

“I did not realize they had access to **everything that I put into the chrome bar...**” (P45)

Concern & Benefit

↓ 40 % – decreased concern

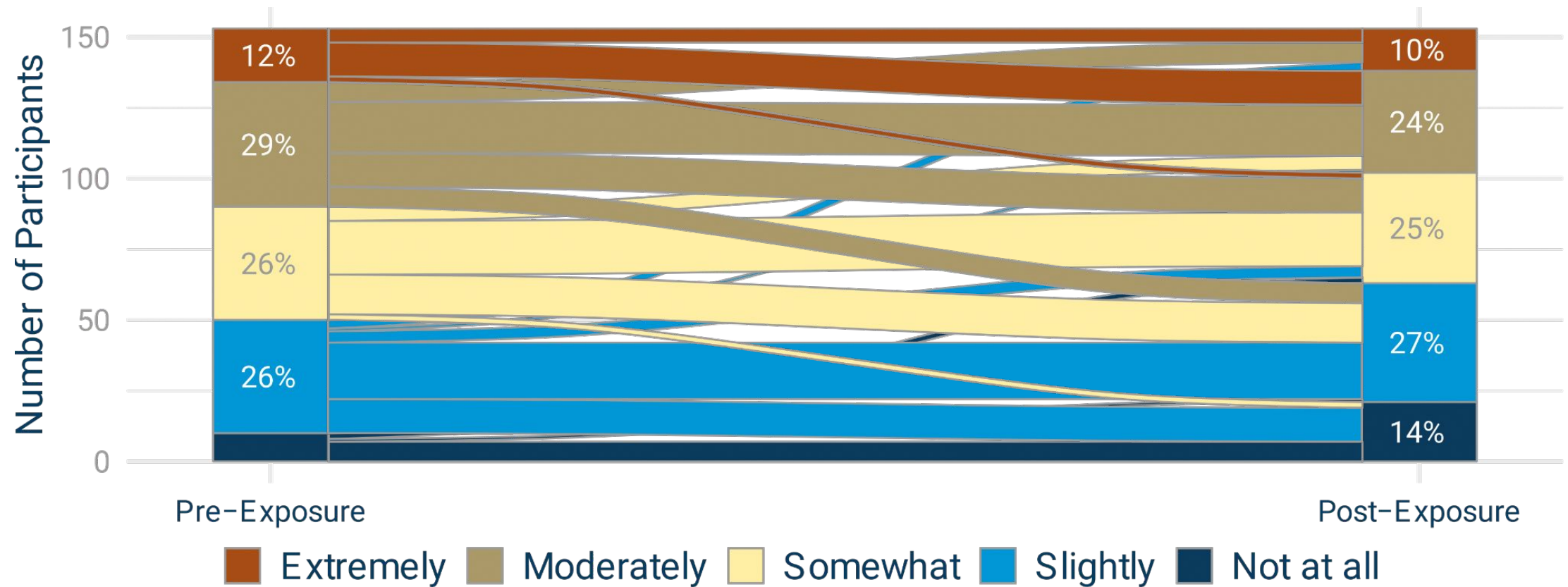
↑ 15 % – increased concern



↑ 29 % – increased benefit

↓ 10 % – decreased benefit

Change of Level of Concern



Pre-Exposure

“I am concerned about any potentially private information getting to the wrong people.”
(P146)

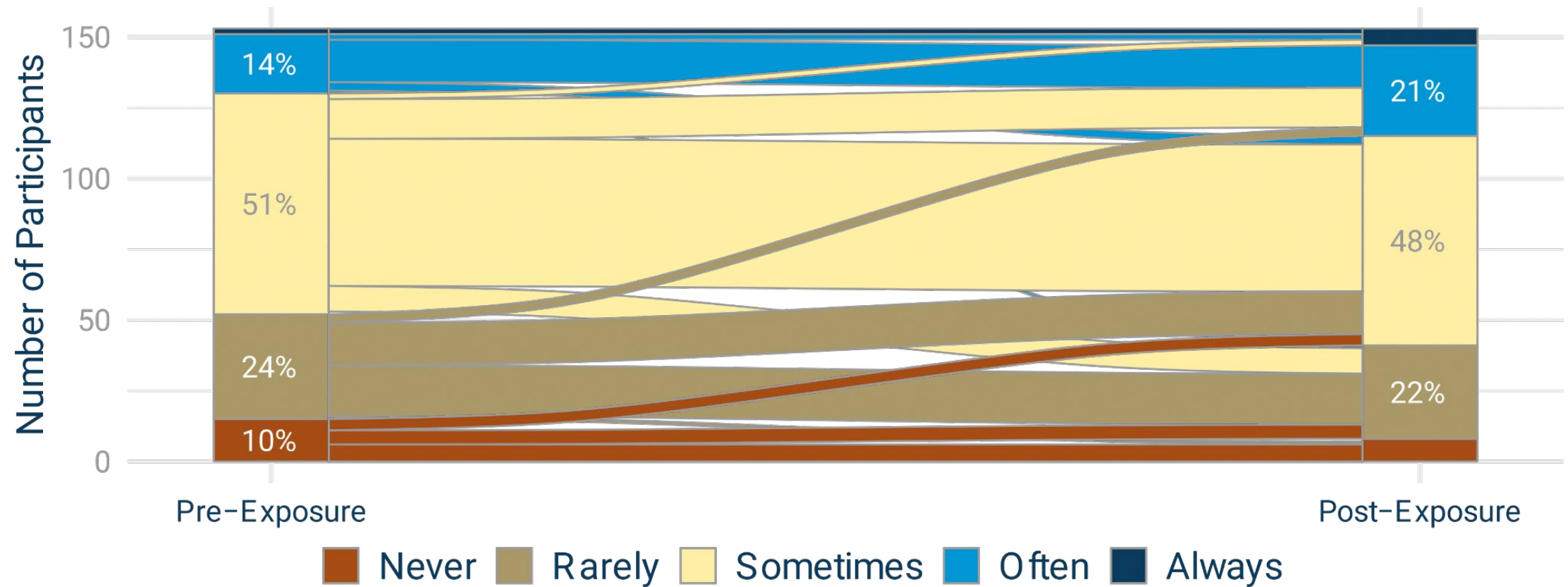
 Somewhat Concerned

Post-Exposure

“After seeing what exactly is collected, it's pretty boring and not at all information that worries me.” (P146)

 Not at all Concerned

Change of Perceived Benefit



Pre-Exposure

“I really haven't noticed too many tangible benefits to Google's data collection.” (P70)

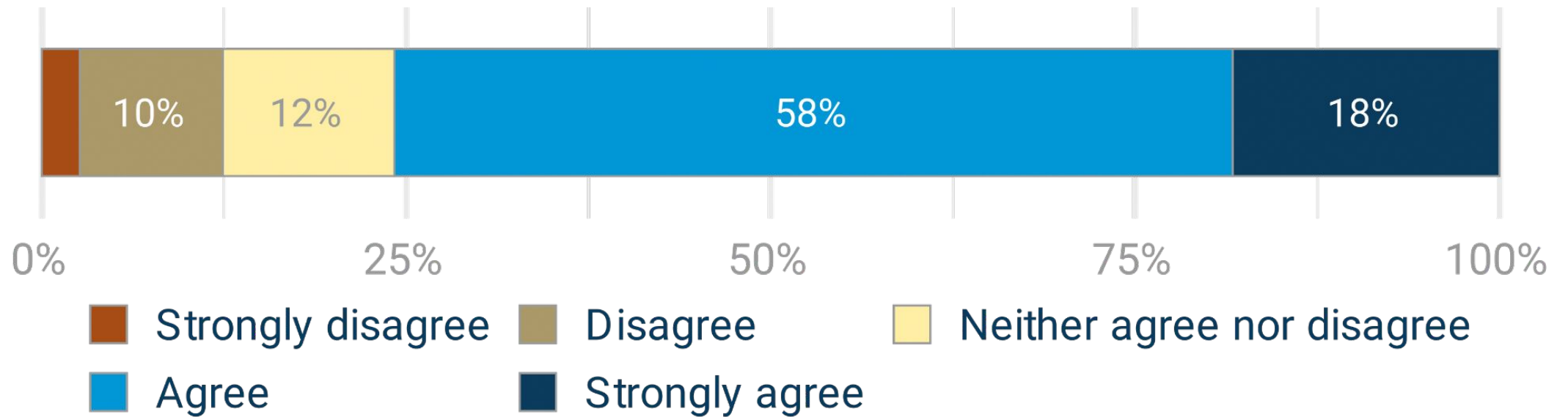
 Rarely

Post-Exposure

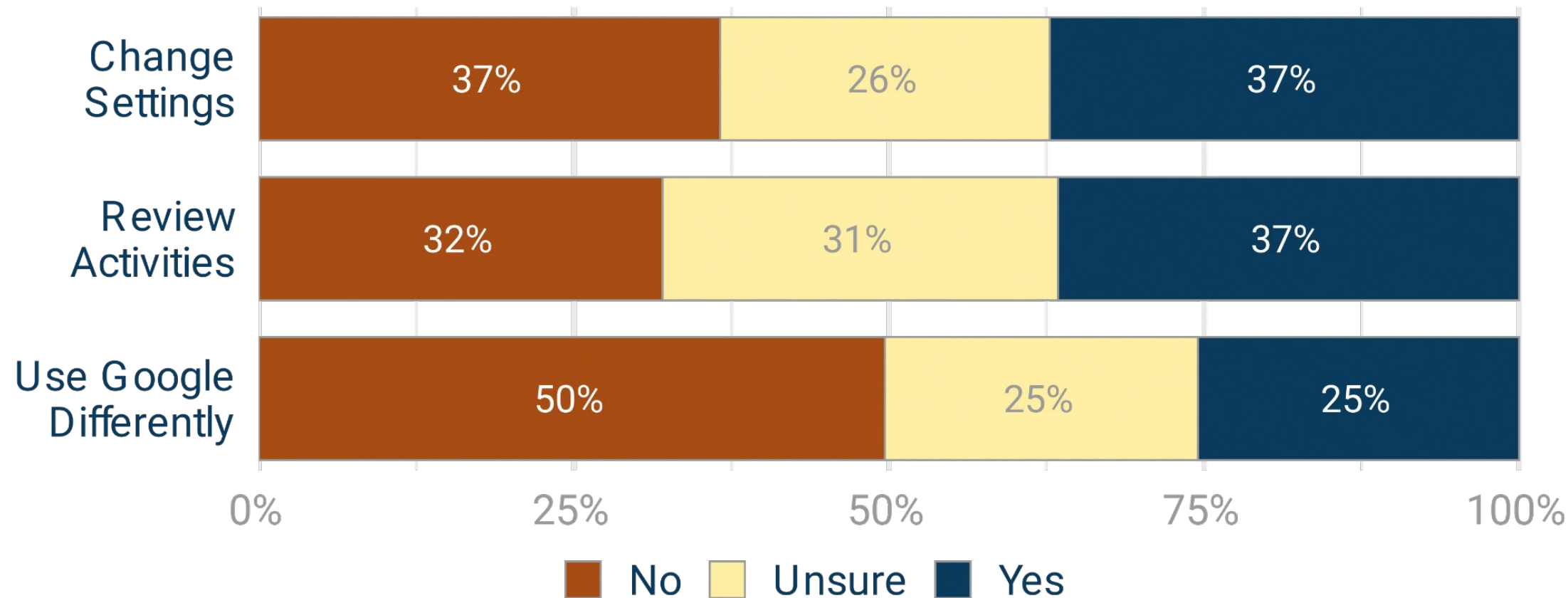
“Google's data collection does make my YouTube experience better, and they offer me relevant articles on Google News.” (P70)

 Sometimes

Better Understanding






Change Settings or Behavior



Takeaways

Controlling Data Collection

-  Increased awareness → Higher benefit, lower concern [1]
-  **75%** better understand data collection
-  Information flow controls → Important for privacy perception

[1] Sebastian Schnorf, Martin Ortlieb, and Nikhil Sharma. Trust, Transparency & Control in Inferred User Interest Models.

Lack of Info Inhibits Decision Making

- Impact of keeping activities not clear
- Lack of additional information inhibits decision making [2]
- Users tend to relate inferences with their past activities [3]

[2] Ashwini Rao, Florian Schaub, and Norman Sadeh. What do they know about me? Contents and Concerns of Online Behavioral Profiles.

[3] Emilee Rader, Samantha Hautea, and Anjali Munasinghe. "I Have a Narrow Thought Process": Constraints on Explanations Connecting Inferences and Self-Perceptions.

Many Dashboards – Many Choices

- Privacy dashboards require continuous management
- Only one of possibly many dashboards
- Bundling dashboards under one umbrella service

Lack of Negative Consequences



Low willingness to change



Trust in Google



No information about privacy risks

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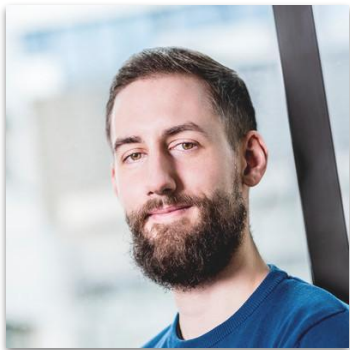
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<https://gwusec.seas.gwu.edu/are-privacy-dashboards-good/>

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