Are Privacy Dashboards Good for End Users?

Evaluating User Perceptions and Reactions to Google’s My Activity

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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.

<table>
<thead>
<tr>
<th>Web &amp; App Activity</th>
<th>Location History</th>
<th>YouTube History</th>
</tr>
</thead>
<tbody>
<tr>
<td>On</td>
<td>On</td>
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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)

Post-Exposure
“After seeing what exactly is collected, it's pretty boring and not at all information that worries me.” (P146)
Change of Perceived Benefit

Number of Participants

Pre-Exposure

Post-Exposure

14%
51%
24%
10%
21%
48%
22%

Never
Rarely
Sometimes
Often
Always
Pre-Exposure
“I really haven't noticed too many tangible benefits to Google's data collection.” (P70)

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

- 10% Strongly disagree
- 12% Disagree
- 58% Agree
- 18% Strongly agree
- 0% Neither agree nor disagree
Change Settings or Behavior

- Change Settings: 37% No, 26% Unsure, 37% Yes
- Review Activities: 32% No, 31% Unsure, 37% Yes
- Use Google Differently: 50% No, 25% Unsure, 25% Yes
Takeaways
Controlling Data Collection

Increased awareness → Higher benefit, lower concern [1]

75% better understand data collection

Information flow controls → Important for privacy perception

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]


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

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