

Using Think-Alouds for Search Term Collection for Search Engine Studies

Meghan L. Dowell^a and Jessalyn I. Vallade^a

^a University of Kentucky, 160 Patterson Drive, Lexington, KY, USA

1. Introduction

This poster presentation examines the methodological advantages of using think-aloud protocols within a multi-phase research design to study digital information-seeking behavior. While traditional search logs provide quantitative data on what users find, they often fail to capture the cognitive processes behind query formulation and result selection. This research demonstrates how think-aloud methodologies, when triangulated with screen capture and automated tools, transform opaque search sessions into a visible trace of decision-making, revealing the specific obstacles, expectations, and justifications that drive user behavior.

In information science, the primary challenge of studying search behavior is its internal nature. The think-aloud method is uniquely beneficial because it allows researchers to observe how users judge results, reformulate queries, and recover from dead ends in real-time (Branch, 2000). By surfacing the confusion and obstacles that simple observation might miss, this method provides a contextualized understanding of information behavior that is essential for identifying usability problems and digital literacy gaps.

This methodology utilizes concurrent verbalization during search tasks based on fictional health narratives. The primary methodological benefit here is the ability to capture not just the search terms themselves, but the underlying justifications for word choices and the selection of specific search engines. To address the reality that the think-aloud method is not neutral and can potentially alter task performance (Branch, 2013), this study employs methodological triangulation by pairing audio verbalization with screen capture. This ensures that the data includes both the user's stated intent and their actual physical interactions on the Search Engine Results Page (SERP), such as which areas are read or clicked (Makri et al., 2010).

This poster will detail the insights gained during our think-aloud interviews, particularly regarding how participants lived experience influenced their interactions with developing search terms and interaction with search results. We invite conversation regarding the design of successful think-aloud interviews, looking for peer feedback on strategies to balance task complexity with participant cognitive load and ways to integrate qualitative verbalizations with quantitative search data in diverse research settings

2. References

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