



## RESEARCH ON COMMERCIAL SEARCH ENGINES FROM A USER PERSPECTIVE.

I am an information scientist with a focus on search engine user behavior. I study how users interact with search engines and how this affects society. I apply methods from information science and the social sciences, ranging from interviews and behavioral studies in the lab to representative online surveys.

## EXPERIENCE

---

May 2019–present

### RESEARCH ASSISTANT

Hamburg University of Applied Sciences, Research group Search Studies

- Studies on search engine user behavior: laboratory studies, representative online surveys, and experiments
- Content analyses of expert interviews
- Usability studies for a research software
- Supervision of the student assistants of our research group
- Contribute to writing applications for third-party funding

Apr 2018–Feb 2019 and  
Jan 2016–Aug 2017

### STUDENT ASSISTANT

Hamburg University of Applied Sciences, Research group Search Studies

- Data collection, data evaluation, event organization

Oct 2017–Mar 2018

### RESEARCH PROJECT IN THE MASTER'S PROGRAM

Carl von Ossietzky State and University Library Hamburg

- Transaction log analysis of a library discovery system

Sep 2014–Feb 2015

### INTERNSHIP IN THE BACHELOR'S PROGRAM

Gruner + Jahr GmbH, Documentation department

Sep 2010–Aug 2013

### APPRENTICESHIP AS A SPECIALIST IN MEDIA AND INFORMATION SERVICES

German National Library of Economics (ZBW)

## EDUCATION

---

Nov 2022–present

### DOCTORAL CANDIDATE

Humboldt University of Berlin

- "How search engine marketing influences user knowledge gain: Development and empirical testing of an information search behavior model"
- Supervisors: Prof. Vivien Petras, PhD and Prof. Dr. Dirk Lewandowski

Sep 2016–Feb 2019

### MASTER'S PROGRAM IN INFORMATION, MEDIA, LIBRARY

Hamburg University of Applied Sciences

- Search engines, user research, research data management
- Master thesis on the influence of user understanding of search-based advertising on user behavior
- Publication of master thesis see Schultheiß & Lewandowski, 2021c

- Search engines, user research
- Bachelor thesis on the impact of relevance and position on selection behavior
- Publication of bachelor thesis see Schultheiß et al., 2018

## PUBLICATIONS

---

2023

Häußler, H., Schultheiß, S., & Lewandowski, D. (2023). Is googling risky? A study on risk perception and experiences of adverse consequences in web search. *Journal of the Association for Information Science and Technology*, asi.24802. <https://doi.org/10.1002/asi.24802>

Schultheiß, S., Sünkler, S., Yagci, N., Sygulla, D., Von Mach, S., & Lewandowski, D. (2023). Simplify your Search Engine Research: Wie das Result Assessment Tool (RAT) Studien auf der Basis von Suchergebnissen unterstützt. In W. Semar (Ed.), *Nachhaltige Information—Information für Nachhaltigkeit. Tagungsband des 17. Internationalen Symposiums für Informationswissenschaft (ISI 2023)*, Chur, Schweiz (pp. 429–437). Verlag Werner Hülsbusch. <https://doi.org/10.5281/zenodo.10009338> (proceedings)

Schultheiß, S., Lewandowski, D., Von Mach, S., & Yagci, N. (2023). Query sampler: Generating query sets for analyzing search engines using keyword research tools. *PeerJ Computer Science*, 9, e1421. <https://doi.org/10.7717/peerj-cs.1421>

Schultheiß, S. (2023). How search engine marketing influences user knowledge gain: Development and empirical testing of an information search behavior model. *ACM SIGIR Conference on Human Information Interaction and Retrieval (CHIIR '23)*, March 19–23, 2023, Austin, TX, USA. <https://doi.org/10.1145/3576840.3578297>

Sünkler, S., Yagci, N., Sygulla, D., Von Mach, S., Schultheiß, S., & Lewandowski, D. (2023a). Result Assessment Tool: A Software Toolkit for Conducting Studies Based on Search Results. *Proceedings of the Association for Information Science and Technology*, 60, 1143–1145. <https://doi.org/10.1002/prat.972>

Sünkler, S., Yagci, N., Sygulla, D., Von Mach, S., Schultheiß, S., & Lewandowski, D. (2023b). Result Assessment Tool: Software-Toolkit für die Durchführung von Studien auf der Grundlage von Suchergebnissen. In W. Semar (Ed.), *Nachhaltige Information—Information für Nachhaltigkeit. Tagungsband des 17. Internationalen Symposiums für Informationswissenschaft (ISI 2023)*, Chur, Schweiz (pp. 438–444). Verlag Werner Hülsbusch. <https://doi.org/10.5281/zenodo.10009338> (proceedings)

2022

Häußler, H., Schultheiß, S., Sünkler, S., & Lewandowski, D. (2022). From knowing to showing: Using marking tasks to demonstrate information literacy in practice. *2022 ASIS&T 24-Hour Conference*. <https://doi.org/10.5281/zenodo.6406802>

Lewandowski, D., & Schultheiß, S. (2022). Public awareness and attitudes towards search engine optimization. *Behaviour & Information Technology*. <https://doi.org/10.1080/0144929X.2022.2056507>

Lewandowski, D., Schultheiß, S., & Sünkler, S. (2022). Einflüsse auf die Ergebnisse kommerzieller Suchmaschinen: Modellbildung und empirische Ergebnisse. In A. Imeri, K. Scheibe, & F. Zimmer (Eds.), *Informationswissenschaft im Wandel. Wissenschaftliche Tagung 2022 (IWWT22)*. Düsseldorfer Konferenz der Informationswissenschaft, 6.–7. Oktober 2022, Haus der Universität Düsseldorf (p. 123–144). Verlag Werner Hülsbusch. <https://doi.org/10.5281/zenodo.7092079> (proceedings)

Schultheiß, S., Häußler, H., & Lewandowski, D. (2022). Does Search Engine Optimization come along with high-quality content? *ACM SIGIR Conference on Human Information Interaction and Retrieval*, 123–134. <https://doi.org/10.1145/3498366.3505811>

Schultheiß, S., & Lewandowski, D. (2022). Data set of a representative online survey on search engines with a focus on search engine optimization (SEO): A cross-sectional study [version 2; peer review: 2 approved]. F1000Research, 11(376). <https://doi.org/10.12688/f1000research.109662.1>

Sünkler, S., Yagci, N., Sygulla, D., von Mach, S., Schultheiß, S., & Lewandowski, D. (2022). Result Assessment Tool: Software zur Durchführung von Studien auf der Basis von Suchergebnissen. In A. Imeri, K. Scheibe, & F. Zimmer (Eds.), *Informationswissenschaft im Wandel. Wissenschaftliche Tagung 2022 (IWWT22)*. Düsseldorfer Konferenz der Informationswissenschaft, 6.–7. Oktober 2022, Haus der Universität Düsseldorf (p. 287–291). Verlag Werner Hülsbusch. <https://doi.org/10.5281/zenodo.7092079> ((roceedings))

## 2021

Lewandowski, D., Sünkler, S., Schultheiß, S., Häußler, H., Spree, U., & Behnert, C. (2021). The Search Studies Group at Hamburg University of Applied Sciences. Datenbank-Spektrum, 21(2). <https://doi.org/10.1007/s13222-021-00375-x>

Schultheiß, S. (2021). Der Einfluss des Verständnisses von Suchmaschinenwerbung auf das Rechercheverhalten am PC und am mobilen Endgerät: Eine Nutzerstudie [Extended Abstract]. Information between Data and Knowledge. Information Science and its Neighbors from Data Science to Digital Humanities. Proceedings of the 16th International Symposium of Information Science (ISI 2021), Regensburg, Germany, 8th–10th March 2021, 461–467. <https://doi.org/10.5283/EPUB.44964>

Schultheiß, S., & Lewandowski, D. (2021a). Google Search Results—They're All the Same, Right? Information Matters, 1(21). <https://informationmatters.org/2021/11/google-search-results-theyre-all-the-same-right/>

Schultheiß, S., & Lewandowski, D. (2021b). (Un)bekannte Akteure auf der Suchergebnisseite? Ein Vergleich zwischen selbst eingeschätzter und tatsächlich vorhandener Suchmaschinenkompetenz deutscher InternetnutzerInnen. Information between Data and Knowledge. Information Science and its Neighbors from Data Science to Digital Humanities. Proceedings of the 16th International Symposium of Information Science (ISI 2021), Regensburg, Germany, 8th–10th March 2021, 218–246. <https://doi.org/10.5283/epub.44946>

Schultheiß, S., & Lewandowski, D. (2021c). How users' knowledge of advertisements influences their viewing and selection behavior in search engines. Journal of the Association for Information Science and Technology, 72(3), 285–301. <https://doi.org/10.1002/asi.24410>

Schultheiß, S., & Lewandowski, D. (2021d). Misplaced trust? The relationship between trust, ability to identify commercially influenced results and search engine preference. Journal of Information Science. <https://doi.org/10.1177/01655515211014157>

## 2020

Lewandowski, D., Sünkler, S., & Schultheiß, S. (2020). Studies on Search: Designing Meaningful IIR Studies on Commercial Search Engines. Datenbank-Spektrum, 20(1). <https://doi.org/10.1007/s13222-020-00331-1>

Schultheiß, S., & Lewandowski, D. (2020). "Outside the industry, nobody knows what we do" SEO as seen by search engine optimizers and content providers. Journal of Documentation. <https://doi.org/10.1108/JD-07-2020-0127>

Schultheiß, S., Linhart, A., Behnert, C., Rulik, I., & Lewandowski, D. (2020). Known-item searches and search tactics in library search systems: Results from four transaction log analysis studies. The Journal of Academic Librarianship, 46(5), 102202. <https://doi.org/10.1016/j.acalib.2020.102202>

## 2019

Schultheiß, S. (2019). Der Einfluss des Verständnisses von Suchmaschinenwerbung auf das Rechercheverhalten am PC und am mobilen Endgerät: Eine Nutzerstudie [Masterarbeit, Hochschule für Angewandte Wissenschaften Hamburg]. <https://doi.org/10.13140/RG.2.2.21818.03526>

## 2018

Schultheiß, S. (2018). Taktiken der Suche: Eine Logfileanalyse des Discovery-Systems beluga [Forschungsarbeit, Hochschule für Angewandte Wissenschaften Hamburg]. <https://doi.org/10.13140/RG.2.2.22020.42888/1>

Schultheiß, S., Sünkler, S., & Lewandowski, D. (2018). We still trust in Google, but less than 10 years ago: An eye-tracking study. Information Research, 23(3). <http://www.informationr.net/ir/23-3/paper799.html>

Sünkler, S., Kerkmann, F., & Schultheiß, S. (2018). Ok Google ... The End of Search as we know it – Sprachgesteuerte Websuche im Test. B.I.T. Online, 21(1). <https://www.b-i-t-online.de/heft/2018-01/fachbeitrag-suenkler.pdf>

## SCHOLARSHIPS AND AWARDS

---

2021	Gerhard Lustig Award for the best Master Thesis in Information Science 2017–2020 (Hochschulverband für Informationswissenschaft)
2018	SUMA Scholarship: financial support of the master thesis (SUMA-EV)
2017	Scholarship to attend the IFLA World Library and Information Congress 2017 (BI-International)

## TEACHING AT HAW HAMBURG

---

2024	Investigating an information science topic using Result Assessment Tool, summer semester, B.A.
2023	Research and Information Quality, winter semester, B.A.
2022	Research and Information Quality, winter semester, B.A. Information Research 2, summer semester, B.A.
2021	Information Research 2, summer semester, B.A. Theory and practice project: support and evaluation seminar, summer semester, M.A.
2020	Exploring information search behavior with multi-method studies, winter semester, M.A.

## CO-SUPERVISION OF STUDENT WORK

---

2024	Co-supervisor of a Master thesis on influencer marketing
2023	Co-supervisor of a Bachelor thesis on native advertising on news websites Co-supervisor of a Bachelor thesis on human resources marketing in libraries Co-supervisor of a Bachelor thesis on the image of librarians Co-supervisor of a Master thesis on UX-maturity models
2022	Co-supervisor of a research project on e-commerce marketing for a small business
2021	Co-supervisor of a research project on creating personas for user research Co-supervisor of a research project on customer relationship management

## PEER REVIEW

---

2024	Information Processing & Management
2023	ACM SIGIR Conference on Human Information Interaction and Retrieval (CHIIR) [7 reviews] International Journal of Human-Computer Interaction International Symposium on Information Science (ISI 2023) Journal of Electronic Commerce Research (JECR) [2 reviews] Journal of the Association for Information Science and Technology (JASIST) [2 reviews] New Media & Society The Electronic Library
2022	Journal of the Association for Information Science and Technology (JASIST) [2 reviews] 2022 ASIS&T Annual Meeting
2021	Journal of the Association for Information Science and Technology (JASIST) [2 reviews] The Electronic Library [3 reviews]
2020	Aslib Journal of Information Management The Electronic Library
2019	Aslib Journal of Information Management

## ACADEMIC SERVICE

---

2023	Member of the Program Committee of ACM SIGIR Conference on Human Information Interaction and Retrieval (CHIIR 2024)
2023	Member of the Program Committee of the 17th International Symposium on Information Science (ISI 2023)
2022	Member of the Best Paper Award jury of the conference Informationswissenschaft im Wandel. Wissenschaftliche Tagung 2022

## CERTIFICATES

---

2022	Project Manager CCI
2021	Certified Professional for Usability and User Experience – Foundation Level (CPUX-F)

## LANGUAGES AND OTHER SKILLS

---

Languages	German (first language) and English (fluent)
Digital skills	Eye tracking: Tobii Studio, iMotions Surveys: EFS Survey Content analysis: MAXQDA Statistical analysis: IBM SPSS Statistics Other: Microsoft Office, WordPress

## ATTENDANCE AT CONFERENCES

---

Mar 2024	ACM SIGIR Conference on Human Information Interaction and Retrieval (CHIIR '24), Sheffield, UK
Nov 2023	17th International Symposium for Information Science (ISI 2023), Chur, Switzerland, poster presentation ( <i>Schultheiß, Sünkler, et al., 2023</i> )
Mar 2023	ACM SIGIR Conference on Human Information Interaction and Retrieval (CHIIR '23), Austin, TX, USA, presentation ( <i>Schultheiß, 2023</i> )
Oct 2022	ASIS&T Annual Meeting, Pittsburgh, PA, USA
Apr 2022	ASIS&T 24-Hour Global Conference, April 26–27, 2022, virtual, presentation ( <i>Häußler et al., 2022</i> )
Mar 2022	ACM SIGIR Conference on Human Information Interaction and Retrieval (CHIIR '22), virtual, presentation ( <i>Schultheiß et al., 2022</i> )
Oct 2021	ASIS&T Annual Meeting, virtual
Oct 2021	OSSYM 2021 – 3rd International Open Search Symposium, virtual, presentation
Mar 2021	16th International Symposium for Information Science (ISI 2021), virtual, presentations ( <i>Schultheiß, 2021</i> ) and ( <i>Schultheiß, Lewandowski, 2021b</i> )
Aug 2020	ACM SIGIR Conference on Human Information Interaction and Retrieval (CHIIR '20), virtual
Dec 2019	10. Studenten-Workshop für informationswissenschaftliche Forschung, Potsdam, Germany, presentation
Aug 2017	IFLA World Library and Information Congress, August 19–25, 2017, Wrocław, Poland, student volunteer
May 2017	106. Bibliothekartag in Frankfurt am Main, Frankfurt am Main, Germany, presentation ( <i>Sünkler et al., 2018</i> )
Nov 2016	7. Studenten-Workshop für informationswissenschaftliche Forschung, Kiel, Germany, presentation
Sep 2016	INFORMATIK 2016: Informatik von Menschen für Menschen, Klagenfurt, Austria, presentation