

A bibliometric analysis of citation diversity in accessibility and HCI research

Lucy Lu Wang,¹ Kelly Mack,² Emma McDonnell,³ Dhruv Jain,² Leah Findlater,³ Jon E. Froehlich²

¹Allen Institute for AI

²Paul G. Allen School of Computer Science and Engineering, University of Washington

³Human Centered Design & Engineering, University of Washington

Citation diversity is a measure of **interdisciplinarity**, i.e., how much a paper is influenced by other disciplines and how much it influences other disciplines

Our scope: accessibility research published in CHI and ASSETS

What are the citation patterns of accessibility research published at CHI and ASSETS?

How does accessibility research relate to other computing fields and to fields outside of computing?

What are the trends over time and how are they changing?

How do these patterns and trends compare to other communities in HCI?

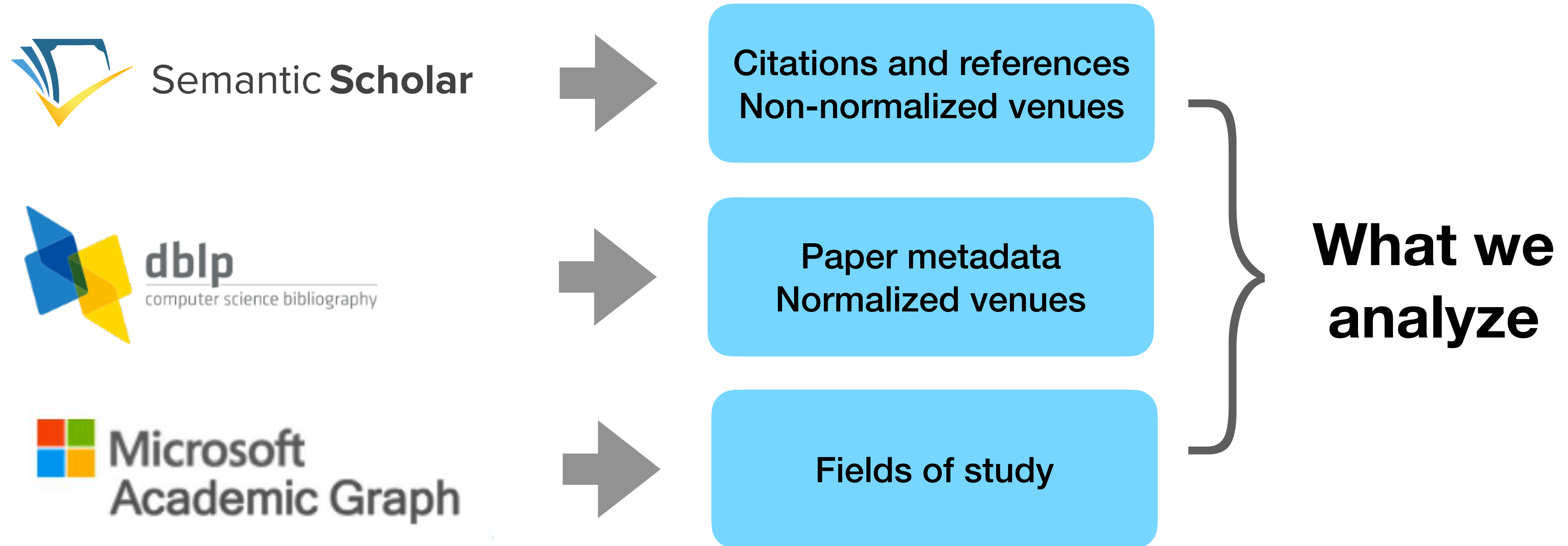
References: outbound citations

Citations: inbound citations

Venue: publication venue (conference or journal)

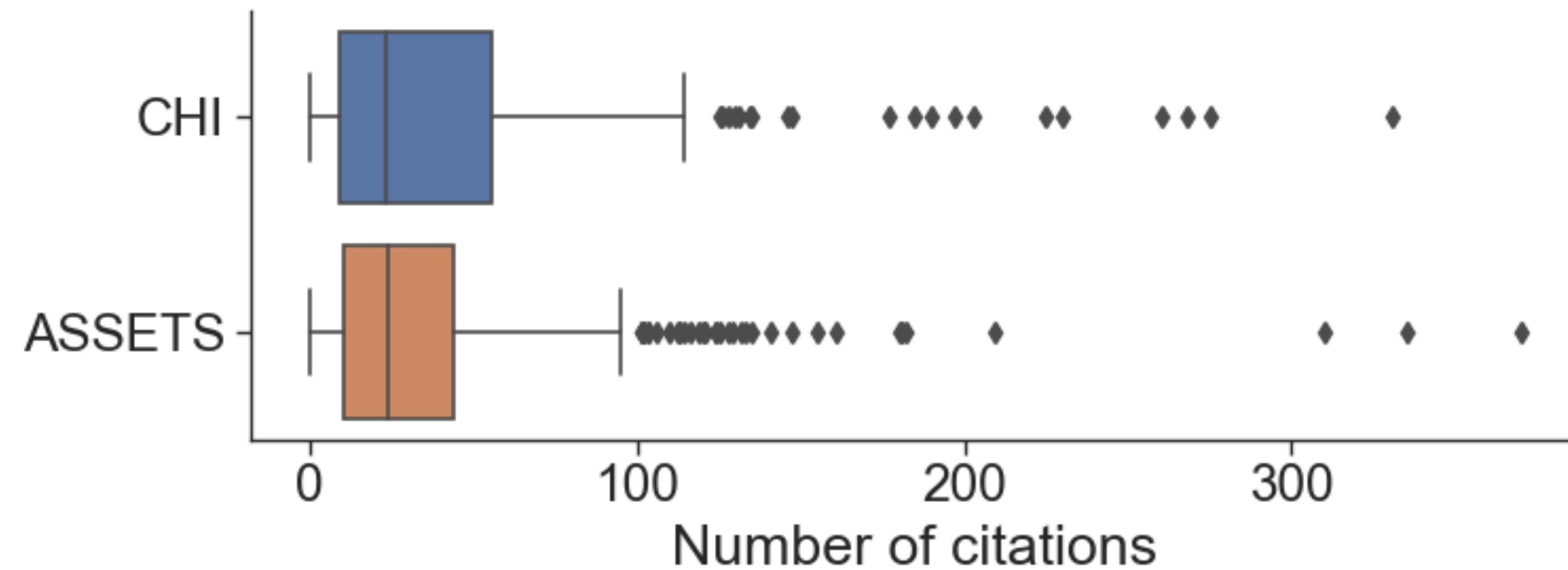
Field: field of study as classified by Microsoft Academic

We begin with a core dataset of 836 accessibility papers from CHI and ASSETS identified and curated by Mack et al. 2021 [1]



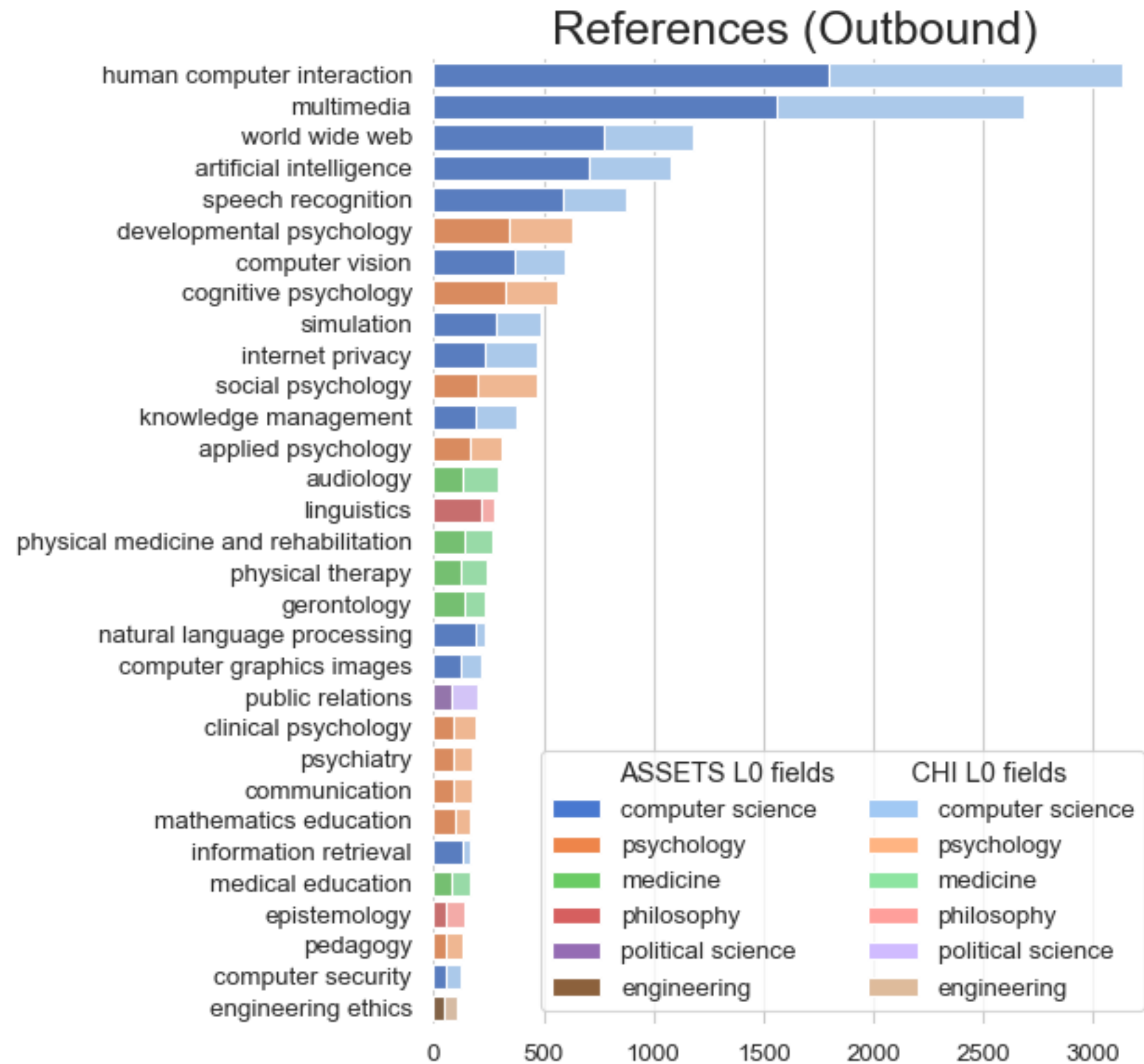
21464 references and 30355 citations
11 other HCI venues for comparative analysis

What are the citation patterns of accessibility research published at CHI and ASSETS?

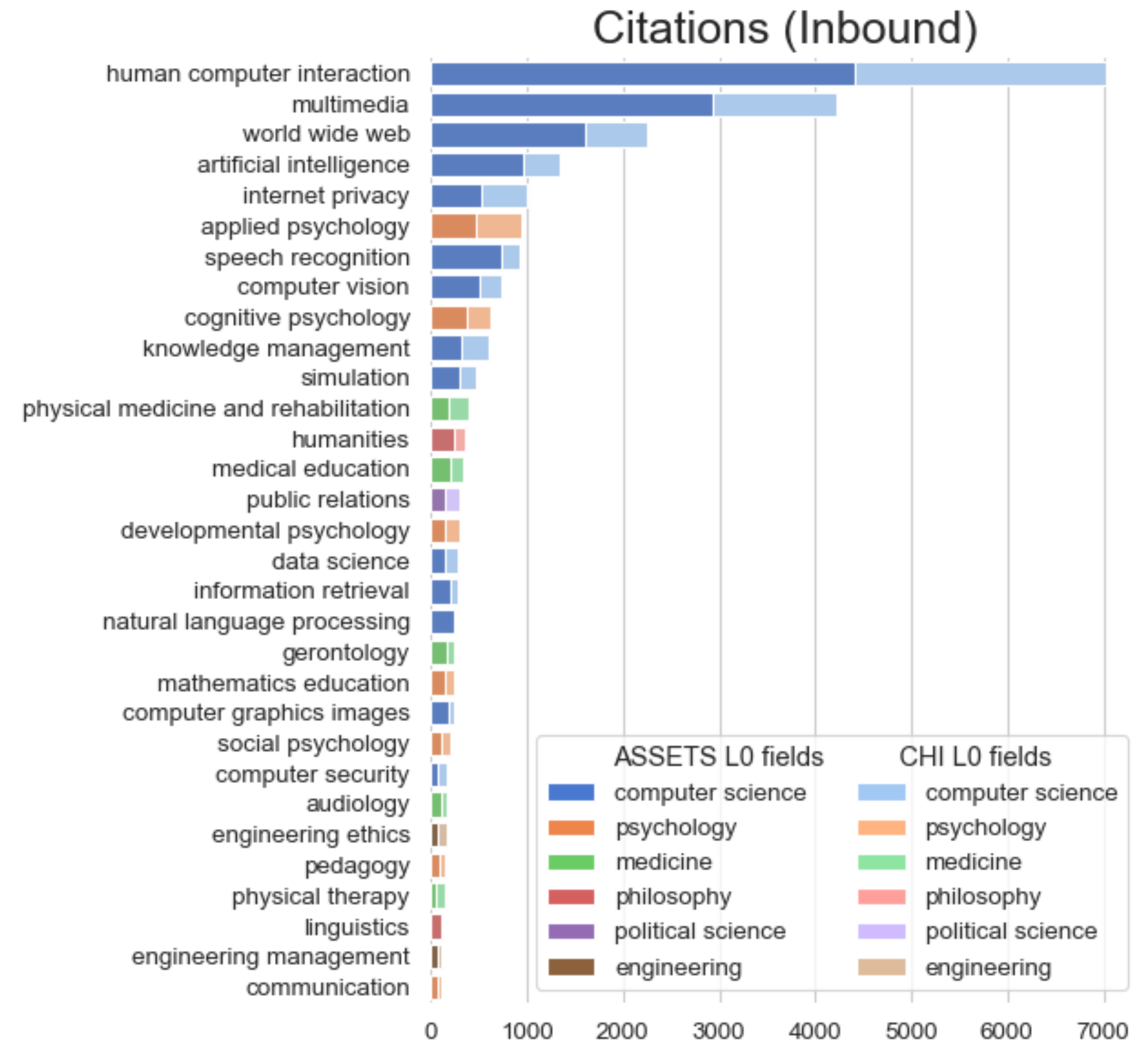
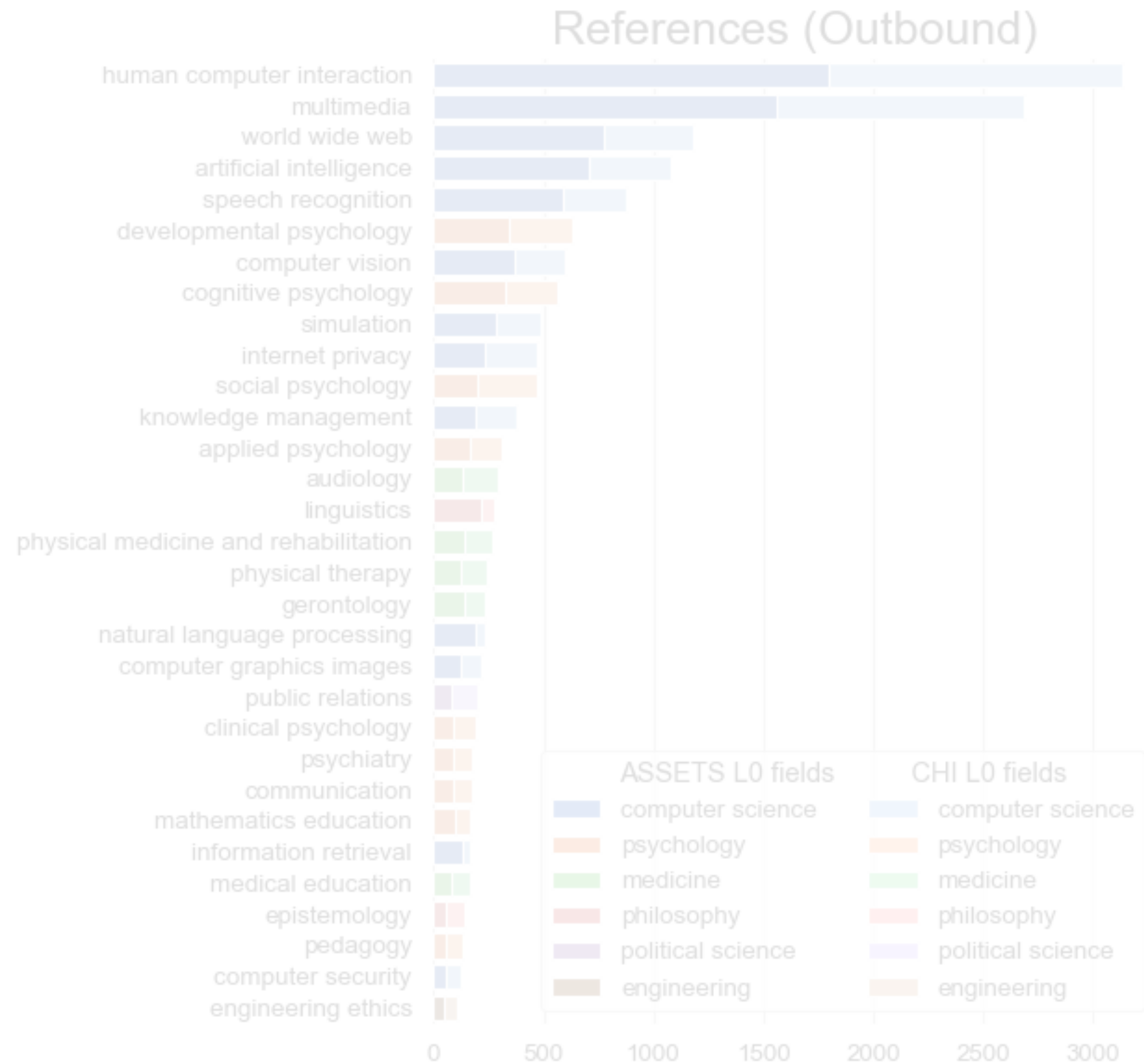


CHI and ASSETS accessibility papers receive similar numbers of citations

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Also in the paper:

- ▶ **A thorough description of how we constructed our dataset**
- ▶ **An analysis of venues referenced by and citing accessibility papers**
- ▶ **Temporal trends of different fields of study citing accessibility papers**
- ▶ **The diversity of the references and citations of various HCI publication venues, as measured by Leinster-Cobbold Diversity Index**

Main takeaways

- ▶ **Accessibility papers are predominantly influenced by other work in accessibility and HCI, though they also draw influence from psychology, medicine, and other fields**
- ▶ **The citation diversity of accessibility papers is increasing over time**
- ▶ **CHI and ASSETS are complementary venues for publishing accessibility research**

Thank you!

References

1. Mack, K., McDonnell, E., Jain, D., Wang, L.L., Froehlich, J., & Findlater, L. (2021). What Do We Mean by "Accessibility Research"? A Literature Survey of Accessibility Papers in CHI and ASSETS from 1994 to 2019. CHI. arxiv: 2101.04271.
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4. Shen, Z., Ma, H., & Wang, K. (2018). A Web-scale system for scientific knowledge exploration. ACL.
5. Zhang, L., Rousseau, R., & Glänzel, W. (2016). Diversity of references as an indicator of the interdisciplinarity of journals: Taking similarity between subject fields into account. Journal of the Association for Information Science and Technology, 67.

Learn more about how we performed this analysis:
<https://github.com/makeabilitylab/accessibility-bibliometric-analysis>

