

***Harbingers* — an international research project (2015–2024)**

Introduction

Harbingers is an international collaboration of researchers from ten countries - Australia, China, France, Israel, Malaysia, Poland, Portugal, Spain, UK and US¹. It follows on a regular and continuing basis the working lives and scholarly-communication attitudes and behaviours of early career researchers (ECRs) — tomorrow's leading professors, influencers and decision makers. The premise is that ECRs hold the key to understanding where the scholarly communications system is heading, indeed, will be instrumental in transforming it. They are the new generation, held to be trailblazers and disruptors of the established order of things. *Millennials*, who characteristically possess generational values of openness to change and community-mindedness.

Our aim is to identify the developments in scholarly communications and research practices as these unfold, forecast further changes that might occur, and assess the extent, direction and impact of these changes, using quantitative and qualitative means and longitudinal methods. We believe that *Harbingers* is the only research group that has been investigating ECRs for so long (8 years), in such depth and on an international level. Thus we have been able to achieve an understanding and appreciation of overriding as well as the country-specific patterns in scholarly views, practices and career experiences of ECRs over time.

Scope

The collaboration began with *Harbingers-1* (2015–2018)², funded by the UK Publishers Research Consortium, which explored the working lives and scholarly communication behaviour of 116 junior science and social science researchers from eight countries (China, France, Malaysia, Poland, Russia, Spain, UK and US). The focus was on generational (millennial) change, to discover whether digital natives have brought with them new attitudes to scholarly communications and thereby changed traditional practice.

*Harbingers-2*³ —a 2-year extension (2020–2022) of *Harbingers-1*, covered the pandemic years and assessed the impact of the pandemic. Conducted at a time of unprecedented change in scholars' circumstances, and funded by the Alfred P. Sloan Foundation, covered 170 science and social science ECRs from the same countries.

Now, *Harbingers-3* (2023–2024), expands the investigation to consider the potential of generative artificial-intelligence tools to change research practice. A timely undertaking,

¹ Russia was a member until 2022

² <http://ciber-research.com/harbingers.html>

³ <http://ciber-research.com/harbingers-2/>

for the long-heard call for changes in the scholarly system, compounded by the impacts of the pandemic, may have become realisable through newly-introduced capabilities. It is a pilot study, funded by the collaboration, which sets out to conduct around a 100 in-depth interviews in China, France, Malaysia, Poland, Portugal⁴, Spain, UK and the US during the Autumn/Winter 2023–4. It is intended to inform and prime a longer research project whereby we hope to investigate more fully Generative AI tools. A topic where the potential for affect upon the efficacy and integrity of the body of human knowledge, might have truly far-fetching implications to the way research is conducted.

People, institutions and countries

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⁴ Joined in 2023

Publications

Journal Articles

2023

1. Herman, E., Nicholas, D., Clark, D., Boukacem-Zeghmouri, C., Rodríguez-Bravo, B., Abrizah, A., Sims, D., Watkinson, A., Xu, J., Serbina, G., Świgoń, M. (2023). Outside the library: Early career researchers and use of alternative information sources in pandemic times. *Learned Publishing*, 36(2), 141-155. DOI: [10.1002/leap.1522](https://doi.org/10.1002/leap.1522)
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7. Nicholas, D., Herman, E., Boukacem-Zeghmouri, C., Rodríguez-Bravo, B., Watkinson, A., Abrizah, A., Świgoń, M., Xu, J., Sims, D., Clark, D., Jamali, H. R., Tenopir, C., Allard, S. (2023). Transforming scholarly communications: The part played by the pandemic and the contribution of early career researchers. *Learned Publishing*. Early view. DOI: [10.1002/leap.1576](https://doi.org/10.1002/leap.1576)
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6. Nicholas, D., Watkinson, A., Abrizah, A., Rodríguez-Bravo, B., Boukacem-Zeghmouri, C., Xu, J., Świgoń, M., Herman, E. (2020). Does the scholarly communication system satisfy the beliefs and aspirations of new researchers? Summarizing the Harbingers research. *Learned Publishing*, 33(2), 132-141. DOI: [10.1002/leap.1284](https://doi.org/10.1002/leap.1284)
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career researchers in Spain). *Profesional de la información*, 28(2), e280203. DOI: 10.3145/epi.2019.mar.03

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