A Day in The Life—Insight into the six phases of the HSS researcher workflow in Germany, Austria and Switzerland

25th January 2022
DE GRUYTER REPORT

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Scope

Most of what we know about how academics work day to day and the tools and technologies they use to manage projects — otherwise known as their workflow — has centred around those in the science, technology and medicine (STM) fields.

This work is invaluable and has provided us with a better understanding of how these scholars work. But as an academic publisher primarily of humanities and social sciences research, we wanted to know more about the workflow of a different, and no less important, set of scholars.

We wanted to know more about how humanities and social science (HSS) researchers find, fund and manage their projects. And in particular, to understand:

→ more about the tasks they conduct and the tools they use day to day
→ how the HSS workflow differs depending on career stage
→ which parts of their workflow are the most stressful
→ what potential actions we could take as a publisher

This is essential knowledge for us because the more we understand about how HSS researchers manage their projects — what works and what doesn’t — the more we can help and support them as they progress through their scholarly careers.
Methodology

The research comprises a quantitative survey of 641 HSS scholars, supported by qualitative, in-depth interviews with 14 HSS scholars. All respondents were from Germany, Austria or Switzerland (the DACH region).

The quantitative study was conducted via SurveyMonkey and took place between 21 April and 5 May 2021.

The qualitative interviews were each around one hour long and were conducted via Zoom by Lea Bauer between 15 and 28 March 2021.

Key takeaways

The six phases of the researcher workflow

Involving in-depth interviews and a large quantitative survey, this study explores the six phases in the workflow of a typical HSS researcher. These phases do not always follow each other sequentially but rather flow into or run parallel with each other. The phases are:

1. Funding and finding ideas
2. Project planning
3. Information gathering
4. Structuring and storing
5. Writing up
6. Publication and promotion
9 key learnings about the HSS researcher workflow in the DACH region

1. A very large proportion of any researcher's workload revolves around organising funding. Researchers find this task in particular stressful and time-consuming.

2. While humanities researchers mostly work alone, social scientists tend to work more often in teams.

3. Both groups use email and Zoom as the main communication method (we undertook the survey during the Covid-19 pandemic).

4. The library website is — next to Google — still the go-to place, but a physical visit to the library remains very popular, especially for humanities researchers.

5. Humanities researchers prefer print over PDF, but for social scientists it is the other way around.

6. For both researcher groups, Microsoft Word is not only the main writing tool but also the main tool to manage references.

7. Both groups prefer external hard drives, local computers and USB sticks to store their work over cloud solutions.

8. Email is the main channel to promote and share publications and data.

9. HSS scholars are not resistant to open data and open research — they just don’t know what the concept of data means when applied to their disciplines.
PHASE 1
Funding and finding ideas

The life of an HSS researcher involves far more than just conducting scholarly research. While this may not be breaking news for an overstretched academic, it does lead us to ask what other activities they spend their time on.

The study finds that a very large proportion of any researcher’s workload revolves around finding funding opportunities, applying for funding, and managing funding applications and budgets—all tasks that researchers find time consuming and very stressful.

In fact, respondents said they found the finance element of a research project the most difficult and frustrating part of their job.

While the findings indicate that financing can come from multiple sources depending on the size and scope of the project, most funding comes through an academics’ organisation or institution.

→ 44% of HSS projects in DACH are funded by the institution
→ 34% are funded from personal funding sources
→ 18% are funded from external competitive grants that the academic has applied for
→ 5% are funded from government sources

Slow going

The study finds that to apply for funding, researchers must master the art of the proposal or pitch document—perhaps unfamiliar skills for an academic—and be proficient at presenting complex budgets, financial forecasts and project milestone documents.

While this proposal process differs depending on the scale of the project, it’s clear many researchers view the application process as a taxing, burdensome and lengthy process that can take years.
“For most applications you write a bit, then you wait on average six months to hear back from the funding institution. It usually takes another three to six months before the project really starts,” said one researcher.

“All-in-all it takes a year from the time I write the application to when the project can start, if it is positively approved,” they said.

Dwindling opportunities

The study indicates that part of the frustration derives from the fact that so many applications must be made for an ever-shrinking pool of funding opportunities.

Much time and energy is spent applying for these opportunities—but many come to nothing.

“A large part of [the funding application process] doesn’t get anything because it’s a very competitive landscape,” said one researcher, with another stating that funding applications can be “a massive waste of resources”.

Researchers also complain that funding bodies impose ever-stringent requirements on academics seeking finance. Many academics see these requirements as unrealistic, overly rigid and inflexible.

“We had to write out a budget for six years, which is madness,” one researcher says. “That limits our flexibility a lot.”

→ 55% of HSS researchers say applying for funding is “very difficult”

→ 31% of HSS researchers say managing budgets is “very difficult”

→ 70% of early-career academics say applying for funding is the most difficult thing about their jobs
What do you find difficult about the research workflow?
(among those saying task is relevant to their workflow)

- Applying for funding: 41% Very difficult or stressful, 55% Sometimes difficult or stressful, 3% Not at all difficult or stressful
- Managing the funding i.e. making sure it covers project: 14% Very difficult or stressful, 33% Sometimes difficult or stressful, 53% Not at all difficult or stressful
- Finding time to read research/keep up to date on topic: 21% Very difficult or stressful, 24% Sometimes difficult or stressful, 54% Not at all difficult or stressful
- Managing the project to ensure it runs on time: 20% Very difficult or stressful, 18% Sometimes difficult or stressful, 62% Not at all difficult or stressful
- Managing all of my research, e.g. references, documents: 32% Very difficult or stressful, 15% Sometimes difficult or stressful, 53% Not at all difficult or stressful
- Conducting qualitative or quantitative research: 27% Very difficult or stressful, 13% Sometimes difficult or stressful, 60% Not at all difficult or stressful
- Searching for collaborators: 34% Very difficult or stressful, 12% Sometimes difficult or stressful, 54% Not at all difficult or stressful
- Getting access to the research I need e.g. full text: 35% Very difficult or stressful, 8% Sometimes difficult or stressful, 58% Not at all difficult or stressful
- Searching for relevant research elsewhere e.g. in archives: 42% Very difficult or stressful, 7% Sometimes difficult or stressful, 51% Not at all difficult or stressful
- Finding time to read research/keep up to date on topic: 56% Very difficult or stressful, 4% Sometimes difficult or stressful, 40% Not at all difficult or stressful
- Collaborating with colleagues: 53% Very difficult or stressful, 42% Sometimes difficult or stressful, 5% Not at all difficult or stressful
- Designing the research/developing the core idea: 56% Very difficult or stressful, 40% Sometimes difficult or stressful, 4% Not at all difficult or stressful
- Searching for relevant research online: 61% Very difficult or stressful, 36% Sometimes difficult or stressful, 2% Not at all difficult or stressful
What do you find difficult about the research workflow?
(among those saying task is relevant to their workflow)

- The lack of transparency in peer review: 23\% (Very difficult or stressful), 28\% (Sometimes difficult or stressful), 49\% (Not at all difficult or stressful)
- Finding the time to write: 21\% (Very difficult or stressful), 26\% (Sometimes difficult or stressful), 53\% (Not at all difficult or stressful)
- Understanding legal/copyright issues e.g. of images: 32\% (Very difficult or stressful), 25\% (Sometimes difficult or stressful), 43\% (Not at all difficult or stressful)
- Promoting my research/achieving impact: 23\% (Very difficult or stressful), 24\% (Sometimes difficult or stressful), 53\% (Not at all difficult or stressful)
- Writing collaboratively with other colleagues: 24\% (Very difficult or stressful), 14\% (Sometimes difficult or stressful), 62\% (Not at all difficult or stressful)
- Preparing the manuscript for publication: 13\% (Very difficult or stressful), 32\% (Sometimes difficult or stressful), 54\% (Not at all difficult or stressful)
- Considering feedback from peer reviewers: 29\% (Very difficult or stressful), 13\% (Sometimes difficult or stressful), 58\% (Not at all difficult or stressful)
- Rewriting the manuscript after feedback: 12\% (Very difficult or stressful), 27\% (Sometimes difficult or stressful), 61\% (Not at all difficult or stressful)
- Handling, publishing or archiving of any research ‘data’: 10\% (Very difficult or stressful), 43\% (Sometimes difficult or stressful), 47\% (Not at all difficult or stressful)
- Finding a publisher: 9\% (Very difficult or stressful), 52\% (Sometimes difficult or stressful), 39\% (Not at all difficult or stressful)
- Being able to write e.g. overcoming writer’s block: 5\% (Very difficult or stressful), 49\% (Sometimes difficult or stressful), 46\% (Not at all difficult or stressful)
“All-in-all it takes a year from the time I write the application to when the project can start, if it is positively approved.”

Head of Department, Health Psychology
Idea impetus

The findings indicate that individual researchers rarely decide on the topics of their research projects in isolation, with the impetus normally coming from elsewhere.

Often, project themes and teams are influenced by what is the flavour of the month for funding bodies. Project ideas are moulded through a combination of a pragmatic need for financing and the research interests of particular academics.

The study points towards the importance of peer-to-peer meetings and informal networking in helping scholars formulate their ideas, hone down on specific topics and ensure research ideas are both original and relevant to funding requirements.

→ 26% of HSS researchers work on one project at a time
→ 57% work on between one and five projects at a time
→ Just 5% of respondents say they typically work on more than five projects at any one time
PHASE 2
Project planning

Once an academic has laboured through the proposal process and found the money to pay for their project, the ‘real’ research work starts.

The study finds that broadly, the planning phase of an HSS research project takes around six months. Depending on the size and scale of the project, it involves finding collaborators, choosing team members and, where needed, hiring staff.

But while some projects involve large teams, project managers and coordinators, others are far smaller. Perhaps because of the nature of the scholarly work involved, humanities scholars tend to work solo, whereas social scientists work collaboratively and in teams.

→ 55% of humanities scholars work alone, compared to 36% of social scientists
→ 31% of humanities scholars and 45% of social scientists work in teams with at least two others

How many people do you typically work with on a project?

<table>
<thead>
<tr>
<th></th>
<th>Humanities</th>
<th>Social sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>I work alone</td>
<td>55%</td>
<td>36%</td>
</tr>
<tr>
<td>With one other person</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>With 2-3 other people</td>
<td>14%</td>
<td>27%</td>
</tr>
<tr>
<td>With 4 or more other people</td>
<td>17%</td>
<td>18%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
<td>7%</td>
</tr>
</tbody>
</table>
Networking begins

The study also found that during this crucial planning phase, researchers start to spread the word about their research to fellow academics and relevant scholarly organisations.

The study indicates that this is done through formal channels such as the conference circuit, newsletters and articles and informally through networking and peer-to-peer communication.

It would seem that at the planning phase, researchers often have their eye on the end result and make early moves to generate interest, excitement and awareness in relevant scholarly networks.

The role of communication

During the planning phase, researchers also set up ways of working and consider the various platforms that could be used so that team members can communicate effectively.

The study found that across the region, researchers remain loyal to established communication technologies.

While many academics have grown to like new platforms such as Zoom, saying things like, “Zoom is the best, because you have the fewest breakdowns and a large number of people can work together;” others have grown weary.

Some researchers complain that video meetings are far less effective than simple, traditional methods of communication such as email or phone. They criticise video for being “tedious” and making meetings longer than they need to be.

Many still crave being able to see colleagues face to face, especially in the early brainstorming phases, with nothing beating “real life”.

Newer digital collaboration platforms such as FaceTime, Microsoft Teams and Google Meet are used rarely. While early-stage academics are more likely to depend on newer platforms, the differences to later-stage colleagues are small. It would seem that when it comes to communication with team members, HSS researchers prefer to keep things simple.
96% of humanities scholars rely on email to communicate

66% use Zoom

65% use the telephone

22% use WhatsApp

The numbers are very similar for social sciences scholars.

<table>
<thead>
<tr>
<th>Communication Method</th>
<th>Humanities</th>
<th>Social sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td>96%</td>
<td>96%</td>
</tr>
<tr>
<td>Zoom</td>
<td>66%</td>
<td>61%</td>
</tr>
<tr>
<td>Telephone</td>
<td>65%</td>
<td>57%</td>
</tr>
<tr>
<td>WhatsApp</td>
<td>22%</td>
<td>27%</td>
</tr>
<tr>
<td>A programme from the university</td>
<td>20%</td>
<td>13%</td>
</tr>
<tr>
<td>Webex</td>
<td>16%</td>
<td>12%</td>
</tr>
<tr>
<td>Microsoft Teams</td>
<td>14%</td>
<td>16%</td>
</tr>
<tr>
<td>FaceTime</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Google Meet</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>11%</td>
<td>15%</td>
</tr>
</tbody>
</table>
PHASE 3
Information gathering

Once the planning phase is done and dusted, it’s time to pull together the information, data and resources needed to complete the project.

In the humanities, this typically revolves around a primary source of some kind—but this doesn’t need to be a book, text or document.

The range of primary sources that humanities scholars use as their jumping off point can be vast. Anything can be a source of inspiration, including films, audio files, conversations, diary entries or artefacts.

The study indicates that secondary literature can take on many forms too, from images to letters.

Humanities scholars are more likely to translate and transcribe content from primary texts than social scientists and more likely to consult objects in archives and collections—online or physical.

→ 100% of humanities scholars say they use primary texts compared to 90% of social scientists

→ 96% of humanities researchers review secondary literature compared to 88% of their social science colleagues

→ Social scientists conduct a variety of tasks as part of their research, including qualitative research interviews, observational exercises, quantitative research/surveys and analysing research outputs from other studies
“The good old library is still the privileged place of research.”

Professor, Philosophy
What are the key tasks you undertake as a researcher?

<table>
<thead>
<tr>
<th>Task</th>
<th>Humanities</th>
<th>Social sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review primary texts</td>
<td>100%</td>
<td>90%</td>
</tr>
<tr>
<td>Translate content from primary texts</td>
<td>51%</td>
<td>24%</td>
</tr>
<tr>
<td>Transcribe content from primary texts</td>
<td>53%</td>
<td>26%</td>
</tr>
<tr>
<td>Review secondary literature</td>
<td>96%</td>
<td>88%</td>
</tr>
<tr>
<td>Review physical archives/ reps/special collections</td>
<td>60%</td>
<td>34%</td>
</tr>
<tr>
<td>Review online archives/ reps/special collections</td>
<td>73%</td>
<td>55%</td>
</tr>
<tr>
<td>Review artworks or images</td>
<td>27%</td>
<td>6%</td>
</tr>
<tr>
<td>Review video or audio recordings</td>
<td>13%</td>
<td>20%</td>
</tr>
<tr>
<td>Conduct experiments</td>
<td>1%</td>
<td>11%</td>
</tr>
<tr>
<td>Conduct my own qualitative research interviews</td>
<td>7%</td>
<td>34%</td>
</tr>
<tr>
<td>Conduct observational exercises</td>
<td>9%</td>
<td>27%</td>
</tr>
<tr>
<td>Conduct my own quantitative research/surveys</td>
<td>6%</td>
<td>32%</td>
</tr>
<tr>
<td>Analyse experiments from other studies</td>
<td>4%</td>
<td>17%</td>
</tr>
<tr>
<td>Analyse qualitative research interviews from other studies</td>
<td>8%</td>
<td>21%</td>
</tr>
</tbody>
</table>
What are the key tasks you undertake as a researcher?

<table>
<thead>
<tr>
<th>Task</th>
<th>Humanities</th>
<th>Social sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyse observational exercises/data from other studies</td>
<td>20%</td>
<td>38%</td>
</tr>
<tr>
<td>Analyse quantitative research data from other studies</td>
<td>9%</td>
<td>33%</td>
</tr>
<tr>
<td>Conduct text analyses e.g. analyse word-frequencies</td>
<td>36%</td>
<td>39%</td>
</tr>
<tr>
<td>Conduct other data analysis e.g. financial data</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Analogue vs digital search

During the discovery phase, scholars use a range of tactics to search for information relevant to their projects. Today, these searches are conducted in two ways: online or analogue in physical libraries, archives and collections.

The study shows that while scholars tend to use a mixture of both search methods, they express a clear preference for analogue search. Humanities researchers in particular love visiting libraries, collections and archives and greatly value the opportunity to see, touch and handle physical books, artefacts and objects.

In the interviews, researchers spoke enthusiastically about how they like to browse library shelves and be inspired. “The good old library is still the privileged place of research,” said one.

The study finds that for researchers, nothing beats being in a physical space where they can spend time going off on research tangents and exploring new avenues. This finding also came through strongly in the qualitative study, where 11 of the 14 interviewees preferred the analogue search route.
Online overwhelm

While many researchers have embraced online search, the research indicates that finding the right keyword to search on remains a major stumbling block.

Academics report that many online resources aren’t referenced correctly, so searches can bring back thousands of results—which can lead to overwhelm and unnecessary work. Online search brings vast choice, but if it’s not properly done, it also brings too many distractions.

“In a library, I find things that I wouldn’t find online,” said one interviewee. “I miss things in online searches because I don’t know the author or I search for the wrong keyword.”

→ 89% of humanities scholars surveyed use their library website or search engine, compared to 74% of social scientists

→ 33% of humanities scholars use a publisher’s site, compared to 42% of social scientists

→ 53% of humanities scholars use Google Scholar or books, compared to 56% of social scientists
Where do you search for information?

<table>
<thead>
<tr>
<th>Information Source</th>
<th>Humanities</th>
<th>Social sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>JSTOR</td>
<td>54%</td>
<td>37%</td>
</tr>
<tr>
<td>Google Scholar/books</td>
<td>53%</td>
<td>56%</td>
</tr>
<tr>
<td>KVK</td>
<td>24%</td>
<td>49%</td>
</tr>
<tr>
<td>Physical visit to an archive</td>
<td>21%</td>
<td>46%</td>
</tr>
<tr>
<td>Academia.edu</td>
<td>32%</td>
<td>42%</td>
</tr>
<tr>
<td>Scholarly publisher’s website</td>
<td>33%</td>
<td>42%</td>
</tr>
<tr>
<td>German Digital Library</td>
<td>32%</td>
<td>22%</td>
</tr>
<tr>
<td>Archive.org</td>
<td>29%</td>
<td>13%</td>
</tr>
<tr>
<td>Follow other researchers in my field online, on social media</td>
<td>28%</td>
<td>31%</td>
</tr>
<tr>
<td>WorldCat</td>
<td>24%</td>
<td>15%</td>
</tr>
<tr>
<td>ResearchGate</td>
<td>19%</td>
<td>40%</td>
</tr>
<tr>
<td>Talk to a librarian</td>
<td>17%</td>
<td>14%</td>
</tr>
<tr>
<td>Physical visit to museum or gallery</td>
<td>16%</td>
<td>3%</td>
</tr>
<tr>
<td>Project MUSE</td>
<td>15%</td>
<td>8%</td>
</tr>
</tbody>
</table>
Books vs eBooks

As well as being keen supporters of physical places and spaces to conduct research, academics also prefer physical documents over digital ones.

“You don’t need any other requirements for a book and you don’t need electricity. You don’t need an operating system — the operating system is paper and ink,” said one interviewee.

While most researchers read documents both in print and online and see the benefit of each format, the majority prefer working with physical objects and books.

Researchers like digital formats for their ease of use and because it removes the need to carry around weighty books, while physical books still have the edge when researchers need to read intensively — and for taking notes.

Some researchers think printed documents are simply less taxing to work with and easier on the eyes. “With printed paper you see things faster,” one academic told us. “Jumping back and forth is easier in a paper document than with an electronic medium.”

→ 82% of humanities scholars said they print out their documents most of the time, compared to 65% of social scientists
How do you prefer to read information most of the time?

<table>
<thead>
<tr>
<th></th>
<th>Humanities</th>
<th>Social sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printed version</td>
<td>82%</td>
<td>65%</td>
</tr>
<tr>
<td>PDF</td>
<td>62%</td>
<td>70%</td>
</tr>
<tr>
<td>Using HTML view</td>
<td>7%</td>
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<tr>
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<tr>
<td>Mendeley</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>iAnnotate</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>ReadCube</td>
<td>1%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Accessing material

Gaining access to scholarly content is still primarily achieved through accessing university library websites, followed closely by inter-library loan. However, a large proportion of researchers circumnavigate search systems entirely and go direct to the author. When it comes to accessing research:

→ 88% of humanities scholars use their university library, compared to 91% of social scientists
→ 79% of humanities scholars use inter-library loans, compared to 63% of social scientists
→ 43% of humanities scholars go direct to the author, compared to 40% of social scientists
The study found that social media has not caught on yet as a route to access scholarly content, although use is higher among those scholars early on in their careers.

→ **50% of social scientists use ResearchGate, compared to 19% of humanities scholars**

→ **5% of social scientists use social media to gain access, compared to 10% of humanities scholars**

<table>
<thead>
<tr>
<th>How do you access literature and data?</th>
<th>Humanities</th>
<th>Social sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional access/ via university library</td>
<td>88%</td>
<td>91%</td>
</tr>
<tr>
<td>Inter-library loan</td>
<td>79%</td>
<td>63%</td>
</tr>
<tr>
<td>Email the author</td>
<td>43%</td>
<td>40%</td>
</tr>
<tr>
<td>Open Access Button</td>
<td>20%</td>
<td>22%</td>
</tr>
<tr>
<td>ResearchGate</td>
<td>19%</td>
<td>50%</td>
</tr>
<tr>
<td>Via social media</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Pay per view on publisher platform</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Research4Life</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>DeepDyve</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
<td>6%</td>
</tr>
</tbody>
</table>
PHASE 4
Structuring and storing

In this phase of the workflow, researchers structure their materials and start to arrange their work thematically, marking important areas and identifying the main and secondary aspects of their work.

Reference management

The research indicates that academics remain loyal to traditional ways of structuring, planning and editing their work.
For example, one researcher said: “When a colleague has completed something, they send me the corresponding Word document.”

The academics surveyed overwhelmingly use Microsoft Word to manage their references. Describing how they typically collaborate with others:

→ 67% of humanities scholars surveyed use Word to manage their references, compared to 59% of social scientists

→ 20% of humanities scholars prefer to write references long-hand, as do 17% of social scientists

What do you use to manage references?

<table>
<thead>
<tr>
<th></th>
<th>Humanities</th>
<th>Social sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word</td>
<td>67%</td>
<td>59%</td>
</tr>
<tr>
<td>Handwritten</td>
<td>20%</td>
<td>17%</td>
</tr>
<tr>
<td>Citavi</td>
<td>19%</td>
<td>21%</td>
</tr>
<tr>
<td>EndNote</td>
<td>16%</td>
<td>17%</td>
</tr>
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</table>
The study finds that early-career scholars are much more likely than their mid- and late-career colleagues to take advantage of reference management software, particularly Zotero and Citavi. Early-stage scholars are also keen advocates of Word.

23% of early-career scholars use Zotero, compared to just 3% of late-career colleagues

40% of early-career academics depend on Word, compared to 74% of those later on in their careers
“I really do make handwritten annotations everywhere... I get on better with it.”

Post doc, Religious Studies and History of Religion
Storing the work

Around one-third of researchers surveyed rely on cloud-based services such as Dropbox or Uni-Cloud to store their work, with uptake more enthusiastic among younger academics.

→ 52% of mid-career scholars store their work using Dropbox, compared to 43% of early-career scholars and 24% of late-career scholars

→ 45% of mid-career scholars store their work using the Uni-Cloud, compared to 32% of early-career scholars and 31% of late-career scholars

However, the majority choose more traditional methods of storage. Very little use is made of services such as Google Drive or OneDrive. For humanities scholars:

→ 74% store their work on their own computer

→ 66% use an external hard drive

→ 61% use a USB stick

However, while this may appear an unwise approach, 66% of humanities scholars work either on their own or with just one other person — with the majority working alone. This suggests that tools and services that enable team collaboration and storage may simply not be needed.

Keeping up to date

Scholars say it is important to keep in touch with networks and scholarly communities and keep up to date with the latest news in their field. Scholars do this in a variety of ways, from reading newsletters and setting alerts to subscribing to industry journals and magazines.

The research finds that around four in 10 HSS researchers rely on publisher sites to get alerts, although a similar number also rely on alerts from Google Scholar to discover new content. Few rely on social media or tools such as Mendeley.
PHASE 5
Writing up

After all the planning, organising, searching and gathering of data comes the inescapable penultimate phase in a researcher’s workflow — the writing. And for many, this brings a unique set of stresses of its own.

Indeed, the study reveals that aside from applying for funding, researchers find the write-up phase the hardest element of their project. However, it’s not a lack of writing skill that poses the main problem for researchers — it’s the lack of an effective writing practice.

Researchers complain about having too little quality time to write and too many interruptions. In short, the writing gets delayed because researchers have not established the writing processes that work for them.

Burned out

As other De Gruyter insights research has found, many academics today are feeling overburdened and overworked and are experiencing extra pressure because many now have to teach online from home — fitting in research and writing alongside busy domestic lives.

This previous research indicates that pressure is felt particularly acutely at mid-career (and especially among mid-career females) — something mirrored in the findings of this study, too.

“The family demands on researchers with children must be taken into account,” said one researcher. “This concerns women in particular,” they said.
“The time pressure is high; the expectations from my employer and in general are very high... Teaching takes a lot of time away from research and writing.”

Mid career researcher, History
→ 42% of scholars at mid-career say that finding time to write is very difficult

→ 30% say that finding time to read research or keep up to date is very difficult — presumably because they are juggling research with teaching and administration

→ Finding time to read or write becomes less of a challenge at late career, with just 22% of HSS scholars saying it poses a problem

Methods of writing

Many find the writing element of the research to be disconnected from the research work and that it often occurs in reaction to something else — like an invitation to present at a conference or debate.

HSS researchers prefer traditional methods to write up their manuscripts, once again preferring to use Word or to write long-hand. Little or no use is made of digital tools such as Overleaf, Pages, Scrivener or Google Docs to write up research.

While early-stage academics are less likely to use Word and more likely to use digital services, once again, the differences are relatively small:

→ 93% of humanities scholars use Word to write their manuscripts, compared to 94% of social science scholars

→ 25% of humanities scholars write long-hand compared to 12% of social scientists

Click here to view our Report 2020: “Locked Down, Burned Out — Publishing in a Pandemic: the Impact of Covid on Academic Authors”
PHASE 6
Publication and promotion

The final stage in the HSS research workflow involves academics choosing where to publish.

Once a research project is completed, the ‘dissemination’ phase then follows—a step that takes around a year after the completion of a study.

Where to publish

Over half of the HSS researchers surveyed consult publisher and journal websites to decide which journals they should publish in.

While those academics early on in their career are more likely to use a greater variety of sources when deciding where to publish, use of services such as SciFinder, Sherpa Romeo, Sci-Hub and even Google Scholar remain very low by comparison:

→ 51% of humanities scholars consult the publishers’ website, compared to 54% of social scientists
→ 10% of humanities scholars use Google Scholar, as do 15% of social scientists
→ 17% of early-career scholars use Google Scholar, as do 11% of mid- and late-career scholars
“We’re not averse to online publications... on the other hand, we all always like to have a bound, printed book.”

Professor, Literary Studies/Teaching
What to publish

The findings indicate that scholars seek to disseminate their work in multiple formats—although many say a physical book is what they want. “We’re not averse to online publications... on the other hand, we all always like to have a bound, printed book,” one said.

In addition to books and eBooks, many conferences, congresses and meetings are also very important for publicising results.

The study reveals that both humanities and social science scholars are still keen to have their work published in traditional formats. Humanities scholars are more likely to publish via conference proceedings and monographs.

→ 88% of humanities scholars publish journal articles, as do 84% of social scientists

→ 79% of humanities scholars publish collected volumes, compared to 68% of social science scholars

→ 60% of humanities scholars publish monographs compared to 53% of social science scholars
Which of the following have you published or taken part in to discuss your work, in the last 3 years?

<table>
<thead>
<tr>
<th>Type of Publication/Activity</th>
<th>Humanities</th>
<th>Social sciences</th>
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<tbody>
<tr>
<td>Journal articles</td>
<td>88%</td>
<td>84%</td>
</tr>
<tr>
<td>Collected volume</td>
<td>79%</td>
<td>68%</td>
</tr>
<tr>
<td>Presentations</td>
<td>75%</td>
<td>76%</td>
</tr>
<tr>
<td>Conference proceedings</td>
<td>70%</td>
<td>44%</td>
</tr>
<tr>
<td>Monographs</td>
<td>60%</td>
<td>53%</td>
</tr>
<tr>
<td>Newspaper/magazine article</td>
<td>25%</td>
<td>27%</td>
</tr>
<tr>
<td>Interviews (on the radio)</td>
<td>22%</td>
<td>23%</td>
</tr>
<tr>
<td>Research results on a/my website</td>
<td>16%</td>
<td>11%</td>
</tr>
<tr>
<td>Blog posts</td>
<td>14%</td>
<td>11%</td>
</tr>
<tr>
<td>Podcasts</td>
<td>9%</td>
<td>5%</td>
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<tr>
<td>Videos</td>
<td>6%</td>
<td>4%</td>
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<tr>
<td>Other</td>
<td>8%</td>
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How to promote

Traditional methods such as email remain the favoured way to share scholarly insight and research with fellow researchers, followed by promoting via a personal website.

→ Humanities scholars promote their work primarily via email

→ Social scientists use a range of methods for promotion, including email, their own website, an institutional repository and ResearchGate

While early-stage academics are more likely to turn to social media platforms to promote their work, late-stage academics are more likely to have their own website.

This finding suggests that established academics value the importance of having an online presence and are willing to invest time and potentially their own money in developing their own platforms.

Attitudes to data and data sharing

Finally, the study also examined how well HSS researchers understand the concepts of ‘data’, ‘open research’ and ‘data sharing’ as they relate to their disciplines.

Perhaps understandably, the findings show that because HSS scholars are more likely to work with texts (rather than datasets) than their STM colleagues, they often struggle— with humanities scholars struggling the most.

“I do not understand here what is meant by the term ‘data’ in the case of the humanities,” said one. The research finds one in three humanities scholars and one in four social scientists have never considered sharing data before— presumably because the concept of ‘data’ has little relevance to their fields.
While data is better understood among social science scholars, it is likely this is because such academics use a wider selection of research methods and approaches than humanities scholars — some of which do involve collecting or analysing datasets.

However, the research still finds that only one in four social scientists had shared spreadsheets or data alongside their published research findings. When asked what the barriers are to sharing data from their research, social scientists are mainly concerned with potential misuse and anonymity of data.

**Communicating data**

When social scientists do choose to share their outputs, the research finds that simple methods such as email and Dropbox are most commonly used. Other collaboration tools and services such as Zenodo, GitHub and Figshare are used rarely, according to the findings.

Among those who have shared data and outputs, the biggest challenges are getting to grips with new and different technologies, limitations when saving data or the formatting and standardisation of data.

Lastly, 59% of humanities scholars and 63% of social scientists claim to be aware of data management, but the jury is still out as to whether it will be an important topic for the future — with 18% of humanities scholars and 13% of social scientists saying they “don’t know”.

**Are you aware of the topic of Research Data Management, for researchers and research institutions in the Humanities and Social Sciences?**

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<thead>
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<th></th>
<th>Humanities</th>
<th>Social sciences</th>
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<tr>
<td><strong>59%</strong></td>
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<td><strong>63%</strong></td>
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The findings indicate that any movement towards open research and open data must first define what ‘data’ means when applied to HSS disciplines.

While the findings indicate that six in ten HSS scholars have published Open Access, they are less likely to embrace ‘open research’. This is because the concept of data has little relevance to scholars who primarily work with texts.

Quite simply, most HSS scholars have different outputs than STM academics, which means that publishers will need to develop data-sharing policies that make sense to HSS researchers. They must not assume that a one-size-fits-all approach will work for all scholarly disciplines.
Reflections

In the fast pace of modern scholarly life, it’s easy to assume that everyone wants and needs new technologies and digital innovations to improve their productivity and streamline their processes. But this research finds that not everyone does.

We conducted this research to understand how HSS researchers across Germany, Austria and Switzerland really work—not how we might want them to work or assume they do. We found that they overwhelmingly remain loyal to traditional ways of working. They prepare, plan, structure and write their papers and books in a way that makes little use of the plethora of digital solutions on the market.

We also found that humanities researchers tend to work alone. They work in libraries, print out their online documents before reading them and organise their work without the help of reference management programmes. One in four humanities scholars still take notes using long-hand.

While there will be many reasons why individual HSS researchers remain wedded to traditional methods, we must conclude that they do so because they work well for them. Where STM researchers may need advanced software tools to execute and evaluate their data and collaborate, humanities researchers may not.

This does not make HSS scholars resistant to change; it simply means their needs are different.

Our research finds that HSS scholars thrive in physical places, surrounded by books, archives, collections and artefacts. They search online, of course, but they want to get lost in primary sources, read original texts, discover fresh areas and unveil new and exciting research questions. While digital innovation can advance research in many fields, perhaps a library, a pen and a notebook are the only things some scholars truly want and need.