What is most effective method to get Google search results into a RIS file format?

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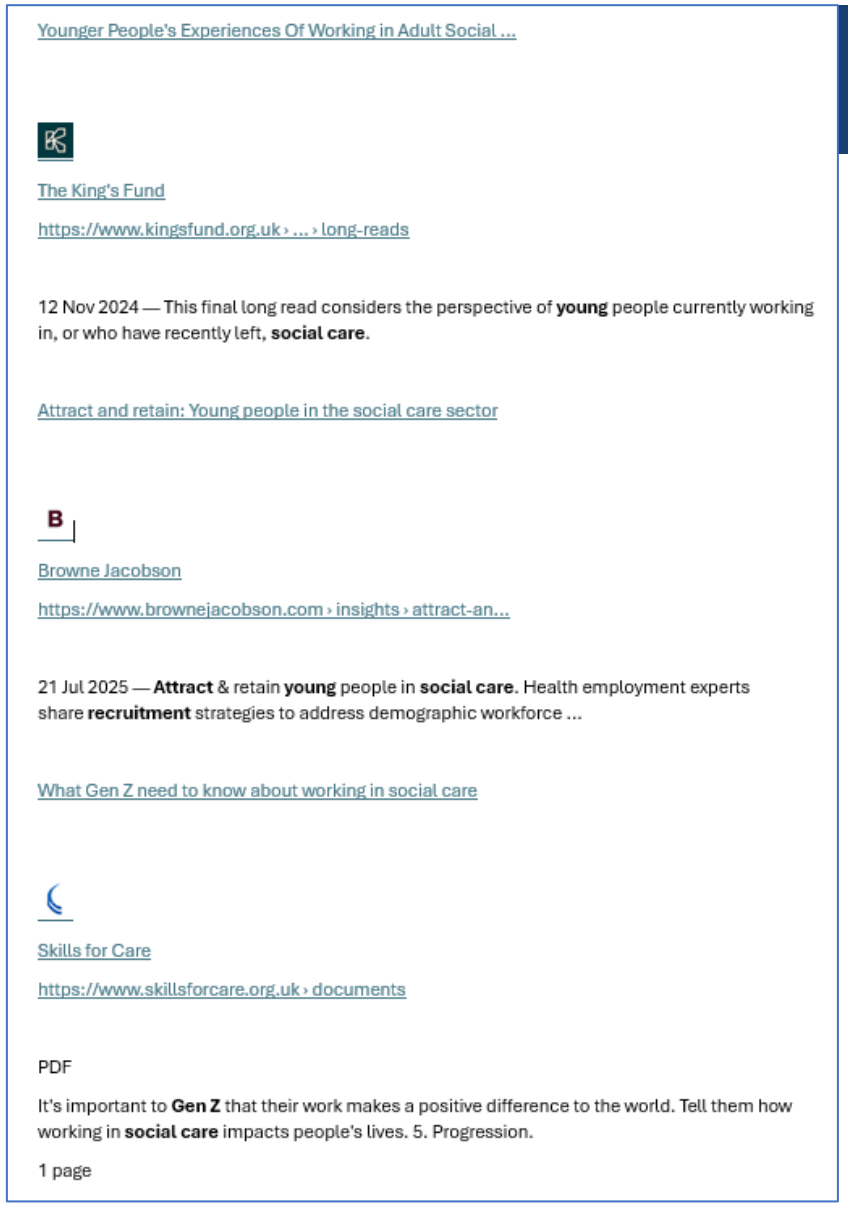
Why did we do this?

- Personal experience in creating RIS files manually or by using GenAI was problematic, time-consuming & labour-intensive.
- No consensus on best practice, some manually create in ref management or avoid Google searches for these reasons.
- 9% of our included studies in a recent review came from Google searches.
- Is there a simple, accurate & efficient method?
- If not, can we develop a robust study to find one?

Methods: Google search string



Younger People's Experiences Of Working in Adult Social ...

The King's Fund

https://www.kingsfund.org.uk › ... › long-reads

12 Nov 2024 — This final long read considers the perspective of **young** people currently working in, or who have recently left, **social care**.

Attract and retain: Young people in the social care sector

Browne Jacobson

https://www.brownejacobson.com › insights › attract-an...

21 Jul 2025 — **Attract** & retain **young** people in **social care**. Health employment experts share **recruitment** strategies to address demographic workforce ...

What Gen Z need to know about working in social care

Skills for Care

https://www.skillsforcare.org.uk › documents

PDF

It's important to **Gen Z** that their work makes a positive difference to the world. Tell them how working in **social care** impacts people's lives. 5. Progression.

1 page

young|Millennials|younger|"Gen Z" attract|recruit|recruitment "social care"|"care work"|"care homes"|"nursing homes"|Domiciliary

The Challenge

Make Google records easy to screen and deduplicate

#COREIRF26

NIHR | Innovation Observatory

Methodology Incubator
Careers | Connections | Knowledge

Newcastle University

Methods: Approaches

TY - WEB

AU -

PY -

DA -

TI -

T2 -

SP -

EP -

UR -

VL -

ER -

Manual

- Create 50 blank RIS templates in notepad
- Paste key info into RIS template

Mendeley

- Click URL
- Click Mendeley import widget
- Add any missing data to record
- Export collection as RIS

ChatGPT

- Develop prompt to create RIS file
- Check accuracy
- Copy URLs in batches
- Paste into notepad

Word Macro

- Analyse records to design Macro
- Record Macro keystrokes in Word
- Run Macro, process final edits in Word

Data-Miner

- Find recipe, set parameters and run search
- Process csv file for import into Endnote

Methods: Timings

Time to capture: Run the search in Google and copy/paste 50 records into a Word doc (except web scraper).

Time to create/set-up: Install and set up any software, set up RIS templates or create Macro rules. These are one-off timings (e.g. creating and recording a Macro from scratch).

Time to run: Process Google records into a RIS file. Time included any pre-processing before loading into EndNote or post-processing in Endnote to complete the record.

Total time taken: Average time to complete all steps – capturing, creating and running.

Methods: Gold standard records

Major fields
Title
URL

Minor fields
Author
Tertiary author
Year
Date last updated
Abstract/Summary
DOI/ISBN
Source/Journal/Publisher

Parameters

Accuracy: Records need both the Title and URL fields to match the Gold Standard for both searchers

Completeness: Records need both the Title and URL fields completed for both searchers

Partially missing: Records with either the Title and/or URL marked as partially missing by at least one searcher

Missing: Records with either the Title and/or URL uncompleted by at least one searcher

Results: Google searches differed among staff

- The same standardised Google search differed among searchers. This gave **39** common results out of the 50 captured, from 2 staff members.
- These **39** records became the Gold Standard for comparison. In some approaches, both searchers did not retrieve all **39** Gold Standard records, so analysis was limited to those where two results were present.
- Mendeley had all **39** records present, ChatGPT = **35**, Data-miner = **27**, and Macros = **25**.
- The Data-miner search was *not* conducted in incognito mode as it wasn't available (we later discovered the setting to change this).

Results: Time comparisons for 50 records

- Running the Google search & pasting 50 records to Word took **1-2 minutes** for all approaches, except Data-miner which doesn't use this step.
- Setting up software or steps to set-up took **4-7 minutes** for all approaches, except Macros.
- Macro set–up took much longer (as expected), and were highly variable for each staff member, with one taking **45 minutes** and one taking **4 hrs 15 minutes.**
- Time to run the process which creates the RIS file was more variable across the approaches, taking on average **15 minutes** (ChatGPT) to **1 hour 39 minutes** (Manual)

Results: 50 records vs 300 records (estimate)

	Manual	Mendeley	Macros	ChatGPT	Data-miner
50 records	1 hr 58 mins	1 hr 27 mins	2 hrs 59	21 mins	33 mins
300 records (estimate)	10 hr 23 mins	8 hrs 11 mins	5 hrs 8 mins	1 hr 42 mins	2 hrs 43 mins

- ChatGPT and Data-miner were fastest overall.
- Macros and manually creating a RIS file were the slowest.
- If one-off timings for setting up/creating are removed, the estimated timings for 300 records would be reduced.

Results: Completeness and accuracy

	Fully complete records	Completeness	Records missing Title or URL	Records partially missing data	Inaccurate records	Acc. range	Averaged accuracy
Manual	39 / 39	100%	0	0	0	100%	100%
Mendeley	38 / 39	97%	1	2	4	89% - 100%	92%
ChatGPT	35 / 35	100%	0	1	25	31% - 88%	61%
Data-Miner	27 / 27	100%	0	7	0	100%	100%
Macros	24 / 25	96%	1	7	24	4% - 96%	52%

Results: Ease of use & knowledge required

	Ease of use & implementation	Knowledge required
Manual	EASY. Monotonous, requires concentration. Easy to copy and paste from one document to another.	LOW. RIS field codes. Notepad software. Keyboard shortcuts. Google Incognito.
Mendeley	EASY. Monotonous, requires concentration. Easy to copy additional data from webpage to Mendeley.	LOW. Keyboard shortcuts. Google Incognito. Accessing and using Mendeley. Installing web extension.
ChatGPT	MIXED. Easy for those familiar with prompting and straightforward once prompts are established after iterations.	MEDIUM. RIS field codes. Google Incognito. Accessing and using ChatGPT. Knowledge of pitfalls to check for e.g. hallucinations. Effective prompt writing.
Data-Miner	MIXED. Easy with instructions and a recommended 'recipe'. Difficult to find a suitable recipe or to create own recipe.	MEDIUM. Accessing and using Data-miner. Installing web extension. Converting CSV into tab delimited file. Excel editing. EndNote tab delimited headings.
Macros	DEMANDING. Difficult to create if you lack experience/appropriate knowledge. Easy to run once developed.	HIGH. RIS field codes. Word formatting symbols. Advanced keyboard shortcuts. Macro recording. Converting to a Unicode text file.
Common to most	Difficult to see where one record ends and next one starts in the Word doc of Google results	RIS record types (TY). Google Incognito.

Results: Overall

	Time taken for 50 records	Est. time for 300 records	Completeness	Acc. range	Averaged accuracy	Ease of use	Knowledge required
Manual	1 hr 58 mins	10 hr 23 mins	100%	100%	100%	EASY	LOW
Mendeley	1 hr 27 mins	8 hrs 11 mins	97%	89% - 100%	92%	EASY	LOW
ChatGPT	21 mins	1 hr 42 mins	100%	31% - 88%	61%	MIXED	MEDIUM
Data-Miner	33 mins	2 hrs 43 mins	100%	100%	100%	MIXED	MEDIUM
Macros	2 hrs 59	5 hrs 8 mins	96%	4% - 96%	52%	DEMANDING	HIGH

Key	Top 2 performing	Mid-performing	Bottom 2 performing

Summary

- **For Title and URL**
  - ChatGPT, Data-Miner and manual creation produced the most complete records
  - Manual creation and Data-Miner gave the most accurate records
  - ChatGPT was the fastest approach overall at **21 minutes** and Macros were the slowest at **2hr 59 minutes**.

- **For additional fields (including abstract/summary)**
  - Initial analysis shows that ChatGPT produces more complete records **(79%)**, followed by Mendeley **(68%)**, Macros **(56%)** and Data-Miner **(40%)**. However, ChatGPT generated **100%** of abstracts and their accuracy is unclear.

- The best approach depends on the review/er. Is the title and URL enough? Would an abstract/summary be preferred?

- ChatGPT and Data-Miner seem the most viable for further research, while Mendeley & Macros do not.

Future plans

- Test the process on a larger data sample, potentially 300 records.
- 1 person to run, copy and paste initial Google search results to test all approaches.
- Develop an improved Macro & Data-Miner recipe beforehand and record time for colleague to copy and use.
- Further analysis on the completeness and accuracy of additional fields.
- Compare different GenAI software – any suggestions welcome!

How do you manage Google results?

Thank you!

Any questions?