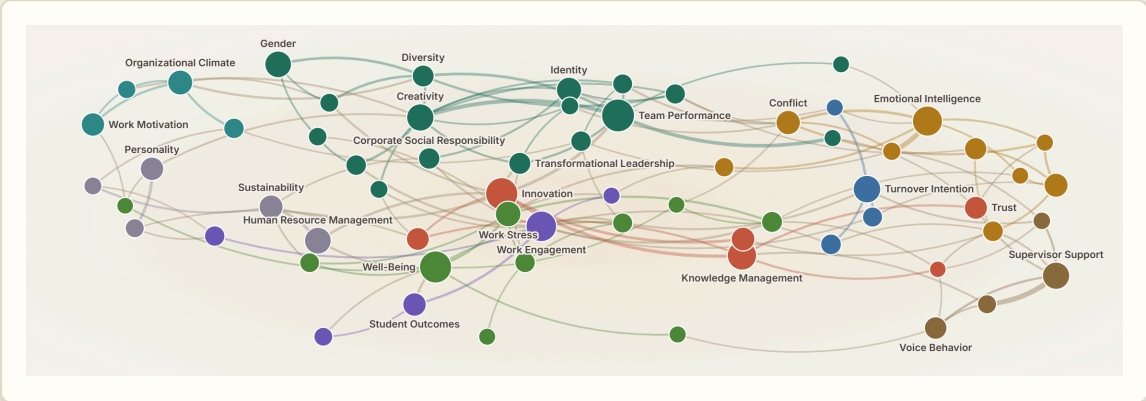

PAPERCARDS

Read the evidence, *not the hype*

PaperCards — how to read papers fast without reading them carelessly, and how to weigh several against each other.

Read the evidence, *not the hype*

A working guide to the step between finding papers and citing them: reading what each one actually claims, separating what was measured from what was said, and comparing studies before you lean on them. The study from Volumes 2 and 5 meets three real meta-analyses — and one of them changes its hypothesis.

Site. https://papercards.vercel.app/

Version. 2.1.4 (2026–10–18) · build `3702b3b+edits` · 2026–10–18T15:45:22Z

Figures. Real screenshots of the live site, captured 2026–10–18 by `scripts/capture.mjs`; sample data shown in figures is labelled simulated where it is simulated.

Sources. 6 DOI-verified references, numbered in order of use. Nothing in this book is invented: counts and labels are read from the site or its published data.

Status. A user guide, not documentation of record. Where the site and this book differ, the site is right — please report it (see Version history).

Type. Fraunces, Plus Jakarta Sans and IBM Plex Mono (SIL Open Font License). Laid out with Paged.js.

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01

BEFORE YOU ADD A PAPER

What a careful reading extracts

Most literature reviews cite papers for what their titles suggest. A careful reading asks five narrower questions — and the answers often differ from the headline.

FOR EACH PAPER, BEFORE YOU CITE IT

- [ ] **Constructs and roles:** what was the predictor, the outcome, and anything in between?
- [ ] **Effect:** which direction, and how large — in the source's own numbers, not a paraphrase?
- [ ] **Design:** what kind of study could support this claim — an experiment, a survey, a pooled review?
- [ ] **Sample:** how many, who, where? Would the finding travel to *your* population?
- [ ] **Limits:** what does the paper itself say it cannot show?

Meta-analyses deserve extra care because they look definitive. They pool many studies, which makes their averages precise — but the average can hide large differences between the studies pooled, and the quality of the pool limits the quality of the answer [1].

THE WORKED EXAMPLE — CONTINUED

The study (Volumes 5–7) predicts that long shifts relate to burnout, and that autonomy buffers the link. Before writing the hypothesis section, it reads the meta-analytic evidence on job demands, resources, burnout and engagement — three real papers:

PAPER	WHAT IT POOLED
Lee & Ashforth (1996) [2]	Correlates of the three dimensions of job burnout
Crawford, LePine & Rich (2010) [3]	Job demands and resources with engagement and burnout, by type of demand
Nahrgang, Morgeson & Hofmann (2011) [4]	203 independent samples (N = 186,440) linking demands and resources to burnout, engagement and safety

02

FROM DOI TO DIAGRAM

Add the paper, then check the card

Adding by DOI takes seconds. Checking the result is the part that matters.

1. Open **Add paper**, paste the DOI and press `↓ Fetch`. Metadata comes from Crossref; the abstract from Crossref or OpenAlex.
2. Press `Extract`. The AI reads the abstract into constructs, effects, method and caveats — or a deterministic fallback does, badged *Heuristic — verify*.
3. Read the preview against the abstract **before** saving. Nothing is saved until you press `Save to library`.

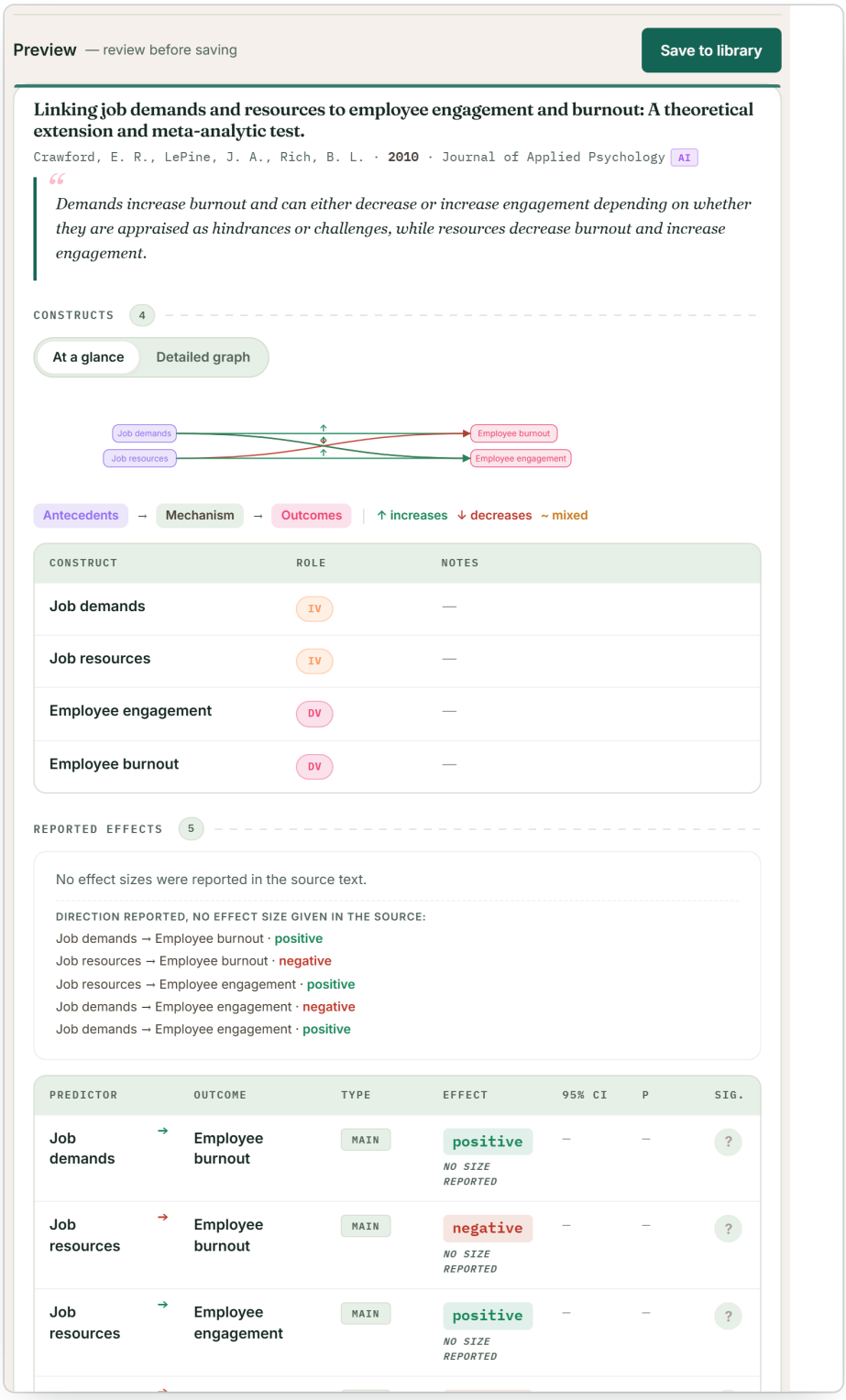

FIG 2.1 Crawford et al. (2010) after `Fetch` and `Extract`: four constructs and five effects, every effect recorded with its direction and marked **no size reported**, because the abstract gives none. Captured live, 16 October 2026.

Look at what the card did *not* do. The abstract says demands and burnout "were positively associated" and gives no coefficient — so the card records *positive* and leaves the size empty. It does not guess a correlation from the literature, and it does not round "positively associated" into a number.

DIRECTION IS NOT SIZE

Numbers on a card must appear in the source text. Abstracts of meta-analyses often state directions only; the pooled effect sizes are in the tables. Open the paper before you quote a size.

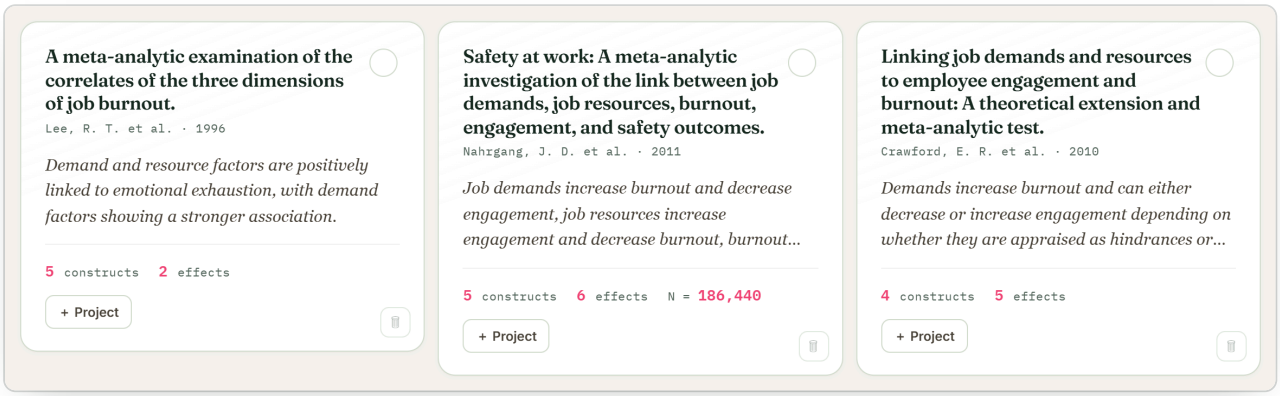

FIG 2.2 The library after adding all three papers by DOI. Each card shows its one-line takeaway, constructs, effects and — where the abstract states it — the sample (N = 186,440 for Nahrgang et al.).

03

CARDS

Read each paper for what it claims

Open each card and ask what it adds to *your* argument — not what it is famous for.

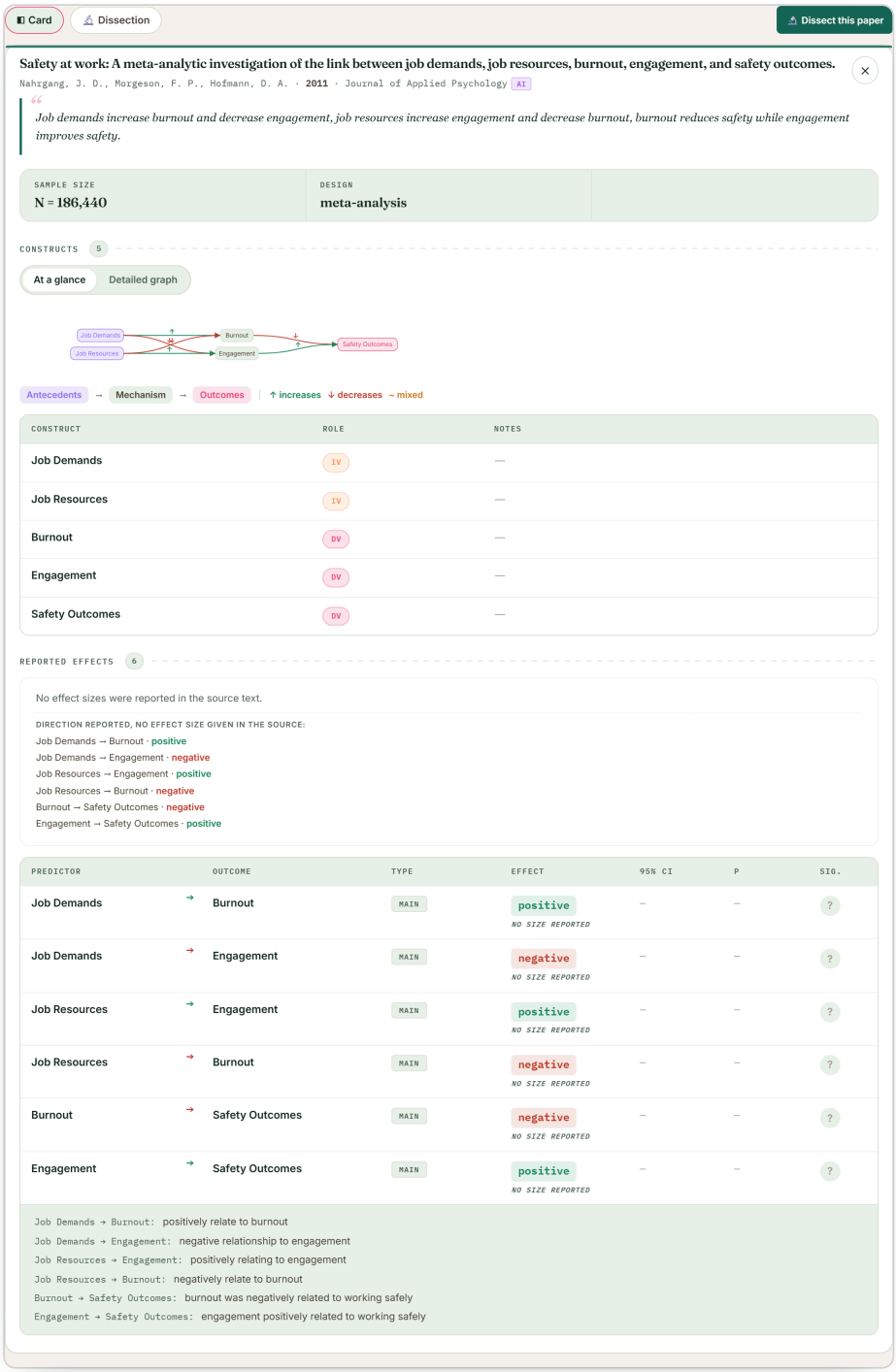

FIG 3.1 Nahrgang et al. (2011): sample size and design at the top; constructs and their roles; six reported effects, each with its direction; the caveats the extraction found.

Nahrgang et al. supply the broadest support for the study's model: in 203 samples, demands "positively relate to burnout", resources such as "autonomy, and a supportive environment" relate positively to engagement, and the two processes run as JD-R describes. They also report that the demand explaining most variance "differed by industry" — a reminder that the average hides setting.

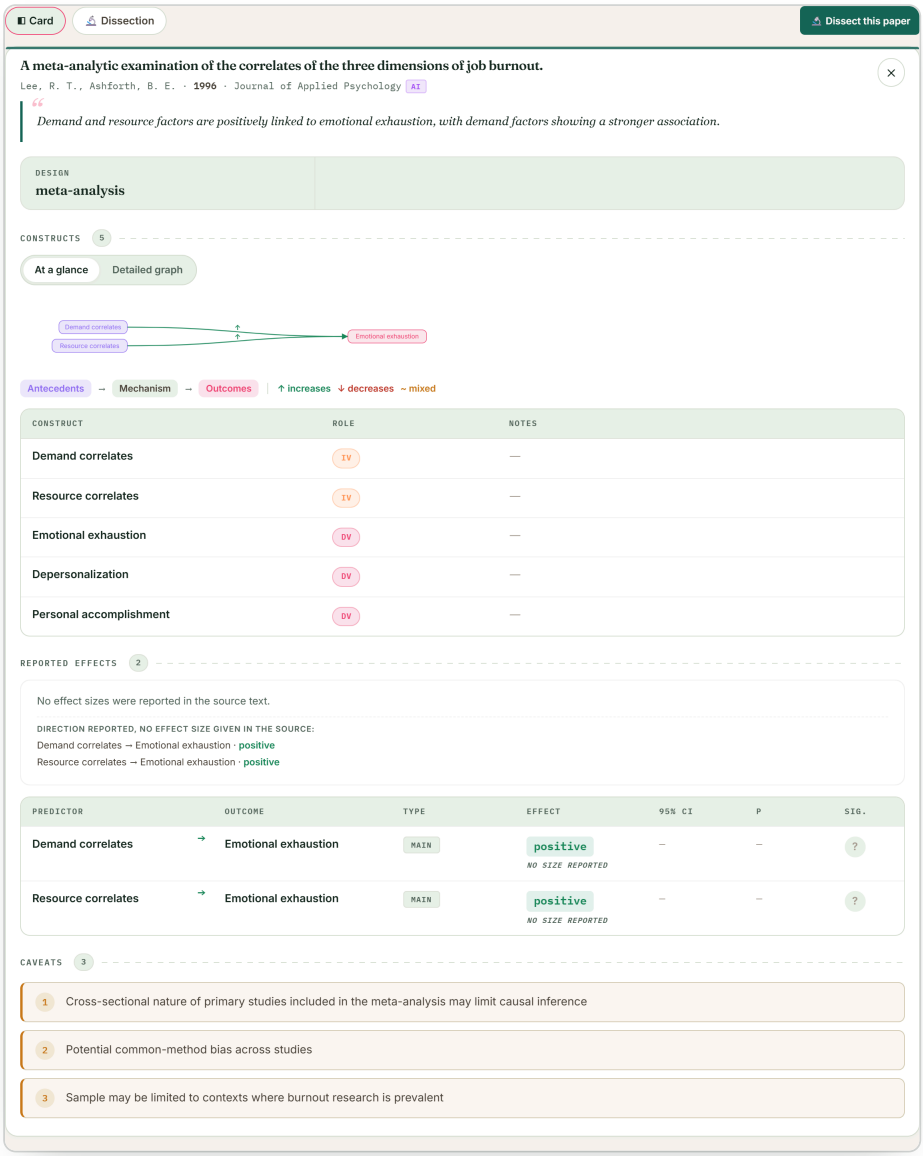

FIG 3.2 Lee & Ashforth (1996): demand and resource correlates were more strongly related to emotional exhaustion than to the other two burnout dimensions.

Lee and Ashforth add something for the measures: correlates of burnout are strongest for **emotional exhaustion**. The study's burnout measure (Volume 6) splits exhaustion from disengagement, so it can report the two separately — and should expect the demand association to be larger for exhaustion.

04

MANY PAPERS AT ONCE

Compare before you lean

One paper is an anecdote, even a meta-analysis. Put the evidence side by side and look for where it disagrees.

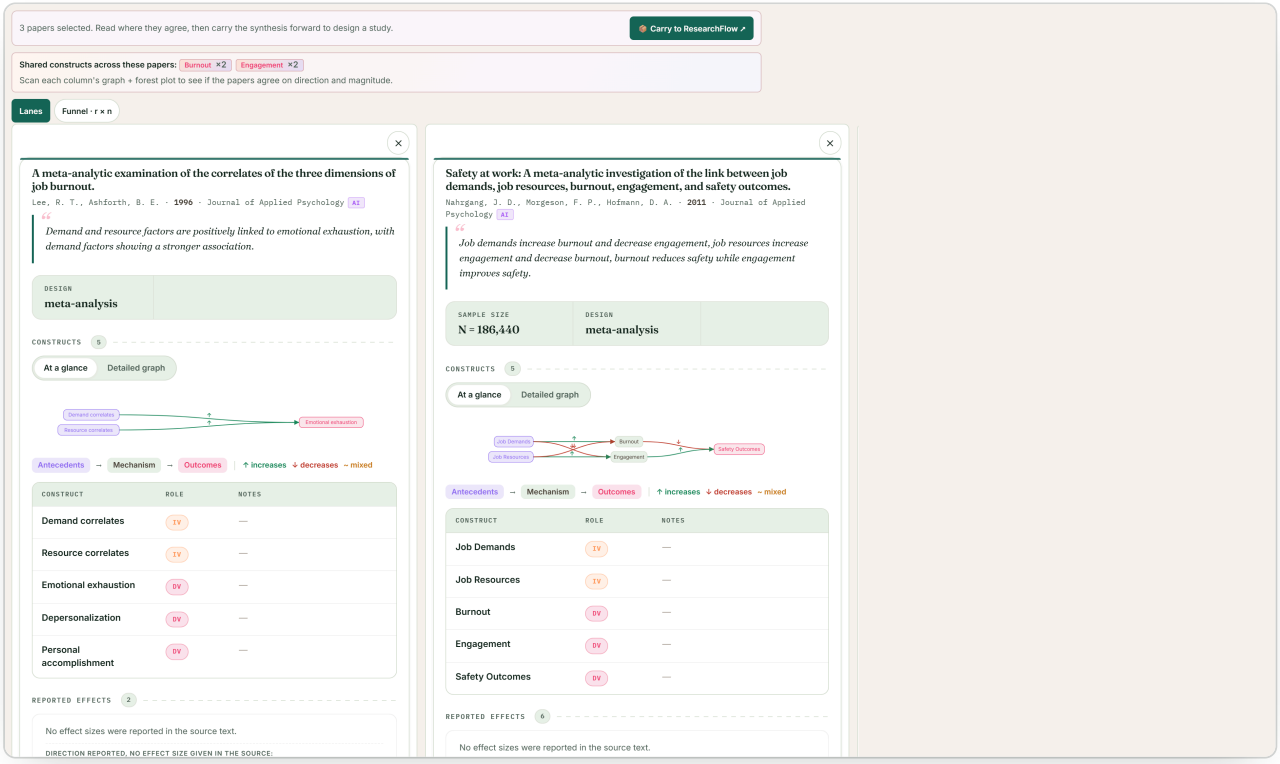

FIG 4.1 Compare with the three meta-analyses selected. The banner lists constructs shared across them; each column keeps a paper's own constructs, effects and caveats. `Carry to ResearchFlow` sends the set on as a discovery pack.

CLAIM	LEE & ASHFORTH 1996	CRAWFORD ET AL. 2010	NAHRGANG ET AL. 2011
Demands → burnout	positive (strongest for exhaustion)	positive	positive
Resources → burnout	—	negative	negative
Resources → engagement	—	positive	positive

Demands → engagement	—	**depends on the demand**	negative

Three papers agree about burnout. They do not agree about **engagement**: Nahrgang et al. find demands negatively related to it, while Crawford et al. find the relationship "highly dependent on the nature of the demand" — demands appraised as **hindrances** go with lower engagement, demands appraised as **challenges** with higher [3].

WORKED EXAMPLE

That disagreement changes the study. Is a long shift a challenge or a hindrance? For most nurses it is plausibly a hindrance — an obstacle, not a chance to grow. The study therefore states its assumption and adds a prediction it can test: **shift length should relate negatively to engagement, as a hindrance demand would**. If it relates positively, the challenge–hindrance account, not plain JD-R, is the better lens.

HONEST DATA

Every cell in this table restates what the abstracts say, in the cards' words. The direction of an effect in a meta-analysis abstract is a summary; the paper's tables give sizes, intervals and heterogeneity.

05

DISSECTION AND LIMITS

Read the whole paper

A card reads an abstract. Your citation rests on the paper. The dissection is the bridge.

1. Open a card and switch to `Dissection` for a 13-facet reading — question, theory, design, sample, measures, findings, limits and more — each item grounded in the source text.
2. Add the PDF (`PDF → dissect`) when the abstract is not enough; the dissection then reads the full text.
3. Note the pooled effect sizes, their intervals and heterogeneity from the paper's tables — those are what you report.
4. Write down each paper's limits in its own words; they become your boundary conditions.

LIMITS

Extraction is AI-assisted. It is constrained to the source text and badged *AI · verify*, but it can still miss or mislabel a construct. A card is a reading aid; the paper is the evidence.

06

THE OBJECTIONS YOU WILL MEET

Defend it

Evidence sections are challenged on what was left out and on how the evidence was weighed.

REVIEWER	YOUR ANSWER
"You cite meta-analyses for directions only. How big are these effects?"	Report the pooled estimates and intervals from each paper's tables, not from abstracts or cards, and note heterogeneity [1].
REVIEWER	YOUR ANSWER
"Demands do not always reduce engagement."	Agree, and show it shaped the design: the challenge–hindrance distinction [3] is stated, and the study tests whether shift length behaves as a hindrance.
REVIEWER	YOUR ANSWER
"These meta-analyses pool mostly other occupations."	Say so. Nahrgang et al. themselves report that the most important demand differs by industry [4]; the study's nursing sample is the test of transfer.
REVIEWER	YOUR ANSWER
"Which burnout dimension?"	Follow Lee and Ashforth [2]: report exhaustion and disengagement separately, and expect demands to relate most strongly to exhaustion.

07

FROM CARDS TO PROSE

Write the evidence

The hypothesis section cites evidence to justify each prediction. Weigh it: agreement first, disagreement explicitly, and your choice in light of both.

MODEL PARAGRAPH

Meta-analytic evidence consistently links job demands to burnout and job resources to engagement [3,4], with demands most strongly related to emotional exhaustion [2]. We therefore expect longer shifts to be associated with higher burnout, particularly exhaustion.

The evidence for engagement is less uniform. Demands relate negatively to engagement in pooled data across industries [4], but the direction depends on whether employees appraise a demand as a challenge or a hindrance [3]. We treat extended shift length as a hindrance demand and accordingly expect it to be associated with lower engagement.

Model paragraph for the illustrative study. Every claim paraphrases the three abstracts; before publishing, replace directions with the pooled estimates from the papers' tables.

BEFORE YOU SUBMIT THE SECTION

- [ ] Each hypothesis cites the evidence behind it, from the paper and not the card.
- [ ] Where studies disagree, the disagreement is stated and resolved by an argument.
- [ ] Effect sizes quoted come from tables, with intervals.
- [ ] Sample and setting differences are acknowledged.

08

REFERENCE

PaperCards at a glance

The tabs and the hero — for when you know what you want and need to find where it lives.

TAB	USE IT TO…
Library	Your papers as cards; select up to five to compare; search, sort, export (CSV, BibTeX, RIS, JSON).
Add paper	Single DOI or abstract, bulk DOIs, a journal's recent papers, or a PDF to dissect.
Discover	The latest real work by field, journal or author, with DOIs.
Corpus	The Research Book's papers inside PaperCards, filterable by construct.
Explore	Citation networks: what a paper cites, what cites it, what is related.
Compare	Two to five papers side by side, with shared constructs, effect lanes or a funnel, and a sortable league of numeric effects.
Timeline · Matrix	Papers by year; every paper as a row with construct and dissection columns.

The hero above the tabs reads one real paper as a diagram. Type a topic, or pick a chip, and it opens the best-matching paper from the Research Book papers that have a dissection on file. For *burnout* that is Weißmüller, Ritz, Steijn and Alfes on private life events, engagement and burnout in public employees [5] — and its *Why* station names an extended job demands–resources model, the same theory the worked study uses.

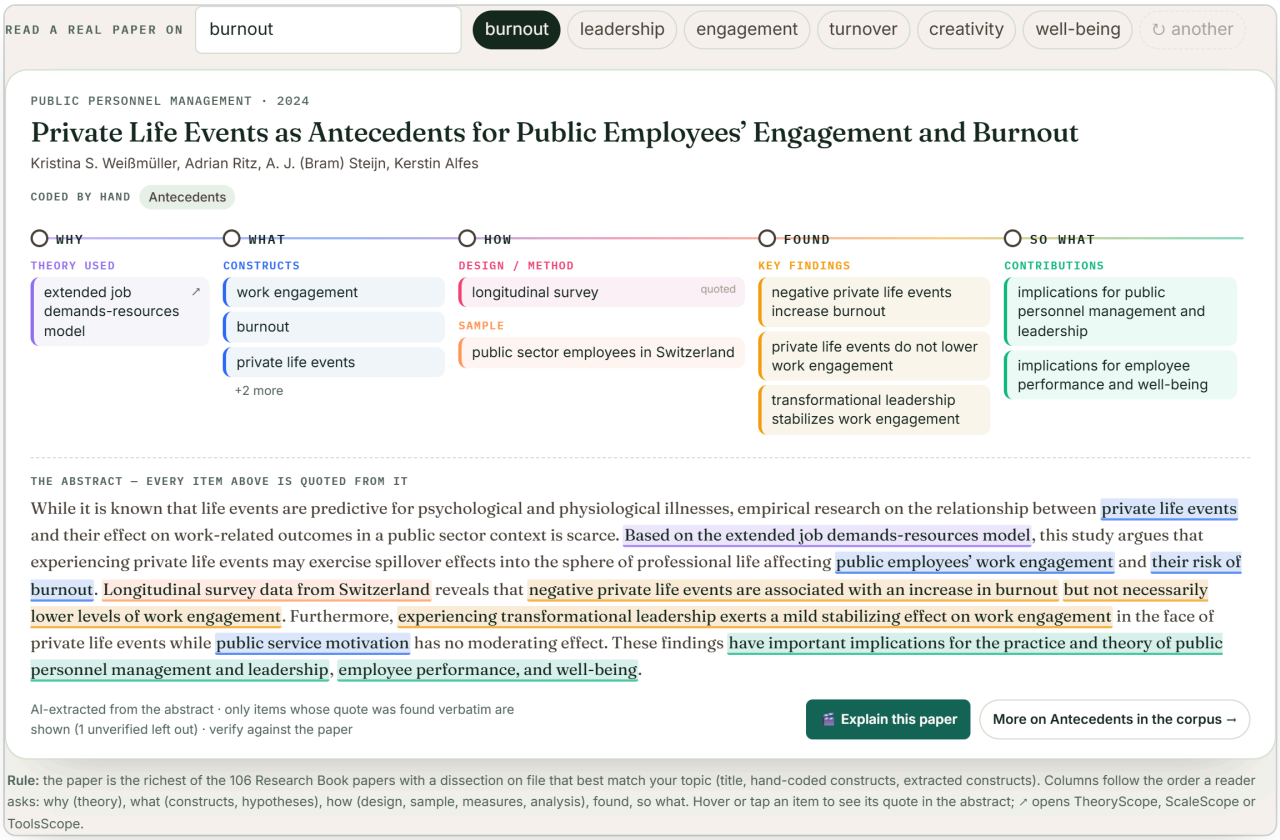

FIG 8.1 The hero for burnout. Why: an extended job demands-resources model. How: a longitudinal survey of public-sector employees in Switzerland. Found: negative private life events increase burnout but do not lower engagement, and transformational leadership stabilises engagement. One extracted item could not be found verbatim and is left out.

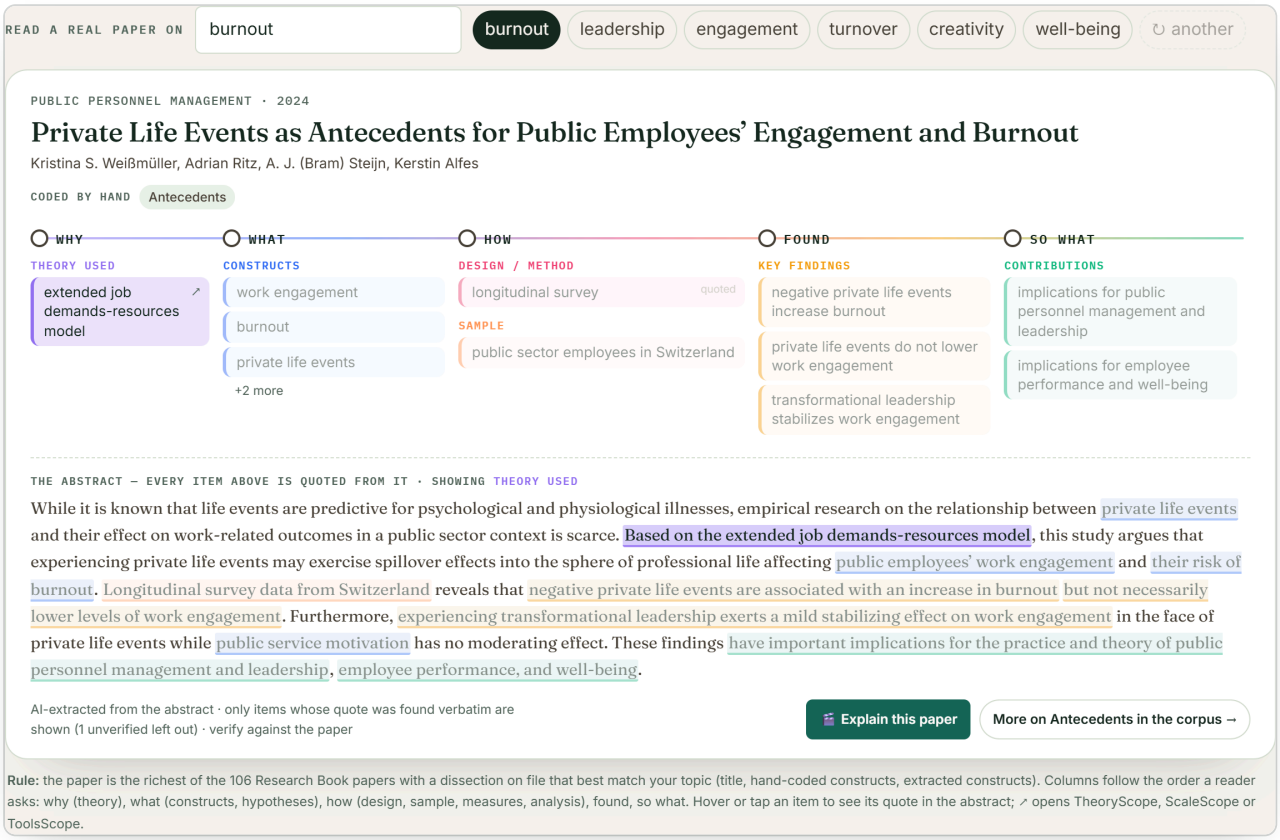

FIG 8.2 Hovering or clicking an item (here the theory) lights the words it was quoted from in the abstract and dims the rest. Check the quote, not the label: the label is the AI's summary, the quote is the paper.

> **HONEST DATA**
>
> The hero is a reading aid, not a search result. It shows one paper per topic, chosen from the 106 Research Book papers with a dissection on file (17 October 2026); "↻ another" cycles through other matches when there are any. To find papers, use **Corpus** or **Discover**.

> **HONEST DATA**
>
> The three demonstration cards that load on a first visit are labelled *demo*: their effect sizes are illustrative examples, not the papers' reported values. Add the real paper by DOI for verified data.

Why it looks like this

The hero draws one paper as a line of five stations — why, what, how, found, so what — in the order a reader asks them, not the order the paper is written in. A station the abstract says nothing about stays on the line, marked *not stated in the abstract*: a missing theory or sample is information, not a gap in the drawing.

Every item is tied to the words it came from. Hovering an item marks its quote in the abstract and dims the rest; an item whose quote cannot be found verbatim is left out, and the footer counts how many were dropped. The diagram can only say what the abstract says.

The paper is chosen by rule, not by chance: the richest of the Research Book papers with a dissection on file that matches your topic by title and constructs. The same topic opens the same paper, so the figures in this guide can be checked against the site.

Glossary

Card

One paper read as a diagram: its constructs and their roles, the reported effects, the design and sample, and its caveats.

Direction-only effect

An effect the source states as positive or negative without a number. PaperCards records the direction and never fills in a size.

Meta-analysis

A study that pools results from many primary studies to estimate an average effect and its variation [1, 6].

Challenge vs hindrance demand

Demands that employees tend to appraise as opportunities for growth (challenges) versus as obstacles (hindrances) [3].

Dissection

A 13-facet structured reading of a paper (question, theory, design, sample, findings, limits…), every item grounded in the source text.

Corpus

The Research Book inside PaperCards, read live from its published files and never copied into your library unless you add a paper.

References

Every reference was resolved by its DOI against Crossref (or DataCite) and matched on first author and year before it could be cited — 6 sources in this volume. Verification date per entry is kept in `references/verified.json`.

1 Borenstein, M., Hedges, L. V., Higgins, J. P. T., & Rothstein, H. R. (2009). Introduction to Meta-Analysis. Wiley. https://doi.org/10.1002/9780470743386

2 Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout.. Journal of Applied Psychology, *81*(2), 123–133. https://doi.org/10.1037/0021-9010.81.2.123

3 Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test.. Journal of Applied Psychology, *95*(5), 834–848. https://doi.org/10.1037/a0019364

4 Nahrgang, J. D., Morgeson, F. P., & Hofmann, D. A. (2011). Safety at work: A meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes.. Journal of Applied Psychology, *96*(1), 71–94. https://doi.org/10.1037/a0021484

5 Weißmüller, K. S., Ritz, A., Steijn, A. J. (., & Alfes, K. (2024). Private Life Events as Antecedents for Public Employees' Engagement and Burnout. Public Personnel Management, *53*(1), 85–112. https://doi.org/10.1177/00910260231187535

6 Hunter, J., & Schmidt, F. (2004). Methods of Meta-Analysis. SAGE Publications, Inc.. https://doi.org/10.4135/9781412985031

Version history & errata

This guidebook is version-controlled. Corrections are made in its source, the version number is raised, and the change is recorded here and in `CHANGELOG.md`. Report an error with the page number and the version printed in the footer.

VERSION	DATE	CHANGES
2.1.4	2026-10-18	Series back to 13 volumes (Throughline CS dropped: a separate product, not one of the Lazy Research Lad sites): covers and title pages now read 'of 13'. Text and figures unchanged.
2.1.3	2026-10-18	Series grows to 14 volumes (ScholarScope, Cadence, FallacyScope and Throughline CS added): "of 14" on the cover and title page; content unchanged.
2.1.2	2026-10-18	Series grows to ten volumes: Volume 10 (BookScope) added, so covers and title pages now read 'of 10'. Text and figures unchanged.
2.1.1	2026-10-18	Suite renamed: Throughline is now Lazy Research Lad (series, titles and text). Screenshots unchanged.
2.1.0	2026-10-17	The hero chapter now teaches the paper-anatomy view that replaced the construct mycelium: new figures for burnout (the JD-R paper the hero opens) and the hover-to-quote check, rewritten design notes.
2.0.1	2026-10-17	Light cover edition: paper-cloth cover with the volume's accent spine and the live figure as a plate, captured in light theme 17 October 2026.
2.0.0	2026-10-16	Rewritten as a research guide continuing the worked study: what a careful reading extracts, adding real papers by DOI, direction versus size, comparing three JD-R meta-analyses, refining a hypothesis from the evidence, reviewer objections and a model evidence paragraph. Tool reference moved to the last chapter. 4 new verified references.
1.0.0	2026-10-16	First edition. Figures captured 16 October 2026 from the live site.

Errata

VERSION	WHERE	CORRECTION
2.1.0	PaperCards at a glance: the mycelium figure described a hero the site no longer has	The hero chapter now teaches the paper-anatomy view that replaced the construct mycelium: new figures for burnout (the JD-R paper the hero opens) and the hover-to-quote check, rewritten design notes.