

Avoiding the filing cabinet: Writing up your research study

Sarah Henrickson Parker, PhD VTCRI, VTCSoM, Carilion Clinic



Why do you read an article?



Why do you write an article?



What are the best articles you have read? Why?



When should you start thinking about your write up?



Importance of 'the literature'

- Need to put your work in context
- Make sure no one else has done what you are proposing
- Do not ever assume you are the first to think of this idea
- Method ideas
- Helps you figure out where to target for publication



Types of research germane to HC

- Quantitative
 - Descriptive
 - Correlational
 - Quasi-experimental
 - Experimental
- Qualitative
 - Understanding a social or human problem
 - Discovery

- Mixed method
 - Combo Quant and Qual
 - Focus on triangulation
- Application
 - Generate EBM
 - Test new practice
 - Med ed
 - Patient safety
 - Etc...





This is not scientific writing





Why are papers rejected

- Appropriateness of journal chosen
- Research is seriously flawed
- Macro aspects of writing (organization, logic flow)
- Micro aspects of writing (word choice, grammar, spelling, punctuation)
- Crap diagrams
- Following "instructions for authors"
- "sufficiently important and free from flaws to justify publication" - APA



Identify a target journal early

- Don't write then look for a journal
- Where do you cite?
- What do you read?
- Impact factor?
- Special calls



Impact Factors

0) 🏗 🗔) 🗄 📾 📈 🗛 🕻	s 🗲 Kor • Nor • Σ • ♣u • ♀ • 🕼 🖺 🗄 100% • ??												Q							
	A Home	Layout Tables	Charts	Smar	tArt	Formulas	Data	Rev	iew											_ ^ ⊀	* -	
-	Sort & Filter Analys			External Data So					Tools			Group & Outline										₽ ▼
1	} U - √	7 - 🧊 - 扚 -	₽ -		Tà -	1🔁 1		Text to C	Columns	8 -	⇒	÷≣∎ -	*	Show	v Detail						nes	
1	Sort Fil	ter PivotTable What-If	Refresh	Text D	Database	HTML File	Maker	Consolic	late	Validate	Remove	Group	Ungroup	Hide	Detail							
	A3	+ 🛛 🖉 (= f	× 1439								Suphoutob										▼ nes	
	A	В	С	D	E	F	G	Н		J	K	L	М	N	0	Р	Q	R	S	Т		E
2	Rank	Abbreviated Journal Title(linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immedia cy Index	Articles	Cited Half-life	Eigenfact or Score	Article Influence Score											1
3	1439	CA-CANCER J CLIN	0007- 9235	13722	153.459	88.55	27.04	25	3.3	0.0517	29.478											11
4	6399	NEW ENGL J MED	0028- 4793	245605	51.658	50.807	12.667	360	8	0.65776	21.494											11
5	7457	REV MOD PHYS	6861	35720	44.982	51.882	6.478	46	10	0.13048	32.634											11
6	1675	CHEM REV	2665	112596	41.298	45.795	14.335	176	8.2	0.22661	14.294											11
7	6266	NAT REV GENET	0056	23358	41.063	36.4	6.314	70	4.9	0.12498	18.755											11
8	5693	LANCET	6736	166922	39.06	36.427	9.556	313	9.1	0.36193	14.524											
9	6278	NATURE	0836	554745	38.597	38.159	9.243	869	9.6	1.57508	20.844											
1	6269	NAT REV MOL CELL BIO	0072	31341	37.162	44.026	5.985	65	5.7	0.15052	22.646											
1	L 668	ANNU REV IMMUNOL	0732- 0582	15963	36.556	43.742	8.429	28	8.6	0.04898	23.273											
17	2 6247	NAT MATER	1122	46348	35.749	42.376	8.411	141	5.2	0.22788	19.481											
1	6240	NAT GENET	4036	81183	35.209	34.52	5.511	225	6.8	0.30955	17.442											
14	4 6260	NAT REV CANCER	175X	32628	35	39.361	6.333	69	6.3	0.11405	17.53											
1	5 277	ADV PHYS	8732	4849	34.294	31.167	0.857	7	>10.0	0.01393	18.913											
1	6267	NAT REV IMMUNOL	1733	24831	33.129	35.851	4.831	65	5.5	0.11114	16.9											
17	7 6263	NAT REV DRUG DISCOV	1776	19470	33.078	33.205	8.651	43	5.5	0.06568	12.004											
1	6232	NAT BIOTECHNOL	0156	38728	32.438	32.182	7.087	92	6.8	0.13409	14.933											*
1	1565	CELL	8674	178762	31.957	34.366	6.499	415	8.5	0.58942	19.327											Ŧ
		2013IF +									Sum	- 1439		-							-	-
		ncady									Sum	- 1435			T	7T		'irgin esearch	ia'I'eo	te te	rilion	า

Instructions for authors

 http://jama.jamanetwork.com/public/instruct ionsForAuthors.aspx



Identifying authors

- This is tricky
- DO IT EARLY!!!!!!!
- Author guidelines- ICMJE (international committee of medical journal editors)
- First and senior



Format

- Title
- Abstract
- Intro
- Method
- Results
- Discussion
- References
- Figs/Tables
- Acknowledgements



Order of reading vs order of writing

- Figures/tables
 - Data
 - Shows what's interesting
- Method
 - Very easy, early win (avoid delay discounting- lower value on a future reward vs immediate)
- Results
 - Statement, limit interpretation, figs and tables
- Intro/Discussion
 - Hard, but if you know where you want to go it's easier
- Abstract



Format

- Intro- why I did this
- Method- how I did this
- Results- what I found that's meaningful
- Discussion- what I think it means and implications



Style

- Formality
- 'we' vs 'the authors'
- Accuracy and clarity
- Grammar
- Standards for reporting: PRISMA, CONSORT



The hour glass



Virginia Tech Carilion Research Institute

Title/Abstract

- Concise
- Most widely read
- Whether or not to read the rest of the paper
- Structured vs unstructured



Intro

- What is your question
- Why does it matter
- Larger relevant literature
- What is the gap
- General vs specialist journals
- Make the reader think "this question is important, and one way to answer it is x"
 - Then follow up with x in your method.



Method

- Allow others to replicate
- Allow others to evaluate
- Level of detail can vary
- Picture is worth 1K words
- Subheaders?
 - Participants
 - Materials
 - Setting
 - procedure





Results

- Figs/tables
- Summarize findings
- Just the facts, ma'am
- Emphasize the finding not the figure
 - Not good: table 5 shows that researchers are cooler than accountants.
 - Better: Our results show that researchers are cooler than accountants (fig 3).



Figs/tables

- Tables
 - should be stand alone
 - Use same format if you can
 - Match text with tables, but do NOT restate table in text
- Figs
 - Large enough font
 - Color
- Title and description
- See instructions for authors



Discussion

- Why do your results matter?
- Where do your results fit in the context of the literature?
- What did you add?
- ANSWER THE QUESTION FROM THE INTRO!
- What additional research is needed?



Discussion cont'd

- Limitations
 - This is important and must be well thought through, shows rigor. If you don't mention reviewers think you think your paper is perfect. It isn't.
 - Defend why you did what you did for each limitations



References

- Show you have read and are not replicating something thinking its novel
- Give others credit
- Help readers find further information
- Shows you can relate to other work
- FORMATTING and ACCURACY
 - Mendeley, Endnote, others?



References cont'd

- It's easy to not be rigorous
 - Read what you cite
- Sometimes authors of the work you cite will be asked to review



Submitting

Sarah Henrickson Parker, PhD

National Center for Human Factors in Healthcare

MedStar Health, Washington DC

To: Jonathon R. B. Halbesleben, PhD Editor- Journal of Occupational and Organizational Psychology

Re: Resubmission of manuscript- "Coordination in healthcare action teams: Utilizing expert understanding of task and team performance requirements"-JQQP_14_0097 by: Sarah Henrickson Parker, PhD; Jan A Schmutz; Tanja Manser.

Dr. Halbesleben,

On behalf of the coauthors, I'd like to thank you for the opportunity to resubmit our manuscript entitled *Coordination in healthcare action teams: Utilizing expert understanding of task and team performance requirements* (JOOP.14.0097). Based on our revisions, we would like to suggest a change in title, with the new title of: *Coordination in healthcare action teams: Utilizing task analysis to define coordination requirements in action teams.* We have worked to address your and the reviewers helpful comments, and hope the revised version will be considered for inclusion in JOOP. We have tried to pay particular attention to ensuring that our paper advances organizational psychology theory around action teams, and providing a stronger contribution to the literature.

All comments are listed below with specific answers to each query in italics.

Thank you again for the opportunity to resubmit. Please feel free to contact me if you have any questions.

Sincerely



• Website

• Cover letter

What happens next

What it feels like



What actually happens

- Desk/Technical eval
- Peer review
- Comments collated by editor
- Editor decision
- You are notified



Decision

- Accept as is (rare)
- Accept with minor revisions
- Revise and Resubmit
 - Reconsidered by the reviewers
- Reject



Accept with Revisions and Revise and Resubmit

- Deadlines to turn around
- Letter about the revisions
- Instructions to authors

Piled Higher and Deeper by Jorge Cham

www.phdcomics.com

ADDRESSING REVIEWER COMMENTS BAD REVIEWS ON YOUR PAPER? FOLLOW THESE GUIDE-LINES AND YOU MAY YET GET IT PAST THE EDITOR:

Reviewer comment:

"The method/device/paradigm the authors propose is clearly wrong."

How NOT to respond:

Yes, we know. We thought we could still get a paper out of it. Sorry."

Correct response:

✓ "The reviewer raises an interesting concern. However, as the focus of this work is exploratory and not performance-based, validation was not found to be of critical importance to the contribution of the paper."

Reviewer comment:

"The authors fail to reference the work of Smith et al., who solved the same problem 20 years ago."

How NOT to respond:

"Huh. We didn't think anybody had read that. Actually, their solution is better than ours."

Correct response:

"The reviewer raises an interesting concern. However, our work is based on completely different first principles (we use different variable names), and has a much more attractive graphical user interface.

Reviewer comment:

"This paper is poorly written and scientifically unsound. I do not recommend it for publication."

How NOT to respond:

You #&@*% reviewer! I know who you are! I'm gonna get you when it's my turn to review!"

Correct response:

"The reviewer raises an interesting concern. However, we feel the reviewer did not fully comprehend the scope of the work, and misjudged the results based on incorrect assumptions.

www.phdcomics.com

Carilion

0 2005

CHAM

title: "Addressing Reviewer Comments" - originally published 5/3/2005

Rejection

- Try, try, again
- Everyone, EVERYONE gets rejected
- Resubmit quickly
- Do NOT take it personally
- Use the critiques, make it better.
 - Same reviewer might get it again



Power of routine

- Successful researchers write. A lot.
- And get rejected. A lot.
- Write. It doesn't have to be good.
 - Routine/habit?
- Enjoy the process to an extent... LOVE the result.
- Ask for help



For your reference

- <u>https://www.elsevier.com/connect/8-reasons-</u> <u>i-rejected-your-article</u>
- <u>http://www.icmje.org/recommendations/bro</u> <u>wse/roles-and-responsibilities/defining-the-</u> <u>role-of-authors-and-contributors.html</u>



Avoiding the filing cabinet: Writing up your research study

Sarah Henrickson Parker, PhD VTCRI, VTCSoM, Carilion Clinic

