

Pre-registration of Study Protocols by Paper and Poster Presenters at 8th WCRI

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Preregistered: <https://osf.io/4eu32>

Background

- To be trustworthy, research must be transparent
- Researchers must be held accountable
- Open methods (pre-registration) and open data are essential for that
- By comparing pre-registration to later publication, absence of QRPs and presence of RRP can be checked
- Not common practice: We need to practice what we preach

Previous studies

- Sijtsma, K., Emons, W. H. M., Steneck, N. H., & Bouter, L. M. (2021). Steps toward preregistration of research on research integrity. *Research Integrity and Peer Review*, 6. <https://doi.org/10.1186/s41073-021-00108-4>
- Emons, W. H. M., Sijtsma, K., & Bouter, L. M. *Preregistration of Research on Research Integrity is still Not Common: Findings from the Abstracts Accepted for the 7th World Conference on Research Integrity* (under review).

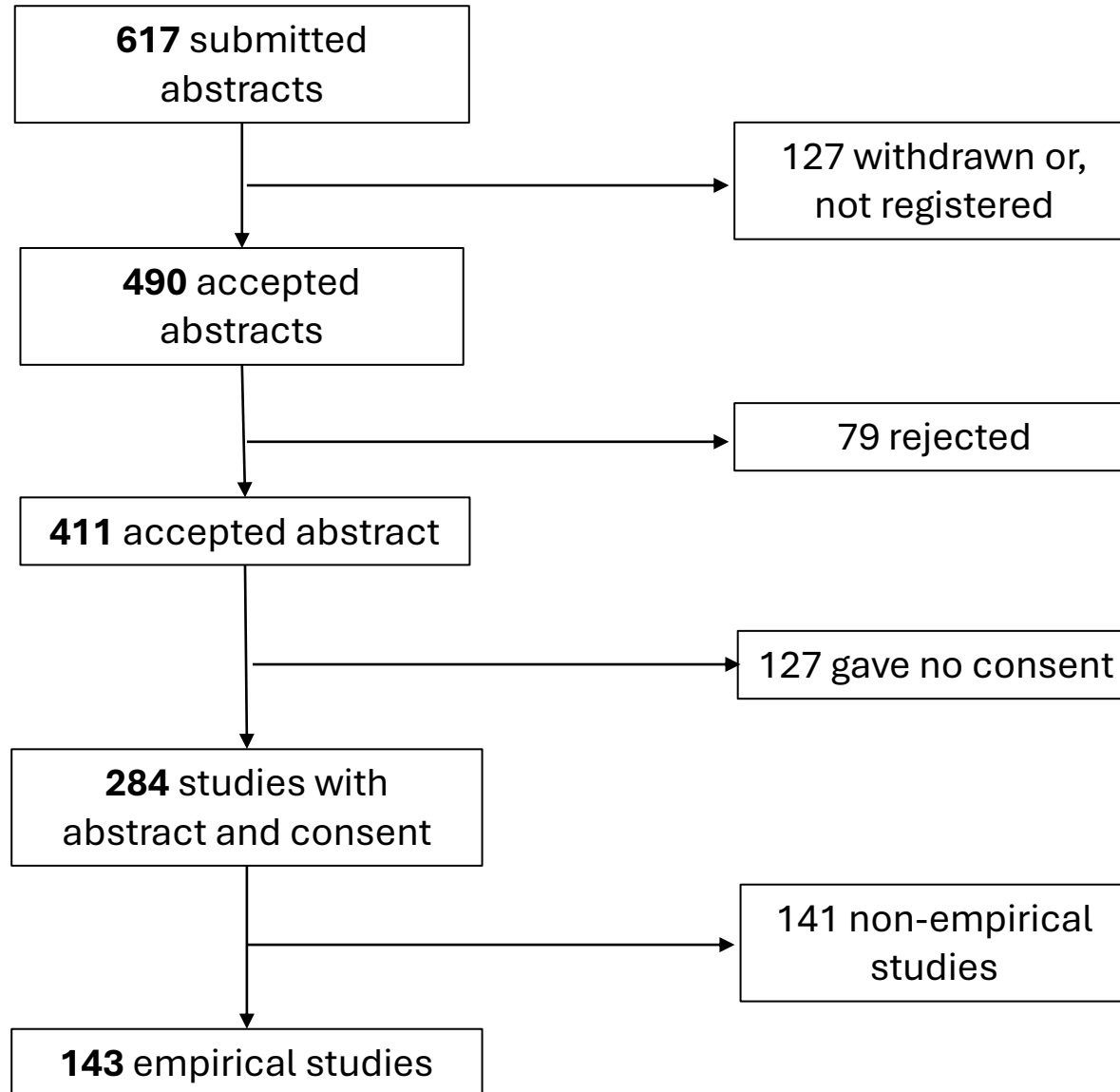
Studies report pre-registration by paper and poster presenters at

- WCRI in Hong Kong 2019
- WCRI in Cape Town 2022

Research questions

- What is the **prevalence** of preregistration of empirical research on research integrity for which an abstract was accepted for oral or poster presentation during the 8th WCRI?
- What are the **characteristics** of these abstracts, their lead authors, and the pre-registrations at issue?

Sample composition



Data for **143** accepted abstracts were available:

- Agreed to fill out questions while registering and gave consent for using the data
- Concerned **empirical** research, both quantitative and qualitative

Is the study pre-registered?

Pre-reg. status	Freq.	Total	
		Perc.	Verified
Unclear	1	1	
Not, no intention	92	64	
Preregistered	42	29	37/42 (26%)
To be pre-reg.	<u>8</u> +	6	
	143		

Pre-reg. status	Qualitative			Quantitative		
	Freq.	Perc.	Ver.	Freq.	Perc.	Ver.
Unclear	1	2		0	0	
Not, no intent.	44	70		48	60	
Preregistered	16	25	15/16 (24)	26	32	22/26 (27)
To be pre-reg.	<u>2</u> +	3		<u>6</u> +	8	
	63			80		

Reasons not to pre-register ($n > 143$; more reasons given)

Reason	<i>n</i>	Perc.
Invalid answer	3	4
No value	20	24
Time-consuming	1	1
Loss of flexibility	2	2
Distrust aversion	0	0
Unfamiliarity	17	20
Other	41 +	49
	<hr/> 84	
No response*	62	21.7

* includes pre-registration

Career stage, disciplinary background, and pre-registration

Career (yrs post-ed.)	Ver.	P-Reg	Total	Perc.
Early career (< 5)	21		67	31
Mid-career (5 - 10)	12		43	28
Established (> 10)	1		21	5

Background	Ver.	P-Reg	Total	Perc.
Biomedical science	23		51	45
Engineering & nat.sc.	0		12	0
Humanities & Arts	4		21	19
Social science	7		46	15

Results for Hong Kong, Cape Town, and Athens

WCRI	#emp studies	#P-Rer	Perc.
Hong Kong 2019	207	52 ¹	25
Cape Town 2022	102	33 ²	32
Athens 2024	143	42 ³	29

¹ Less than half provided relevant information

² 20 of 33 (61%) were verified

³ 37 of 42 (88%) were verified

Discussion

- Results of Athens are similar to the results from previous two conferences
- Verifiability of claim to pre-registration improves
- Biomedical field in the lead
- Reasons for not pre-registering are worrisome
- Participants to the WCRI should set a better example and should practice what they preach
- WCRI Governing Board should consider making pre-registration a condition for abstract submission