Attitudes of referees in a multi-disciplinary journal: An empirical analysis

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TD COST Action TD1306 PEERE
"New Frontiers of Peer Review"
ETH Zürich
21-22 April 2015

From 1998
Published online
Multidisciplinary
1272 submissions
606 published articles
236 book reviews
75% rejection rate
60 days from the author submission to the editorial decision
Average report time by referees of 30 days
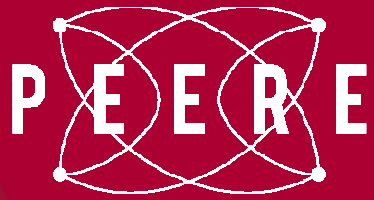20% of first submission authors from the US

ISSN 1460-7425

JASSS
The Journal of Artificial Societies and Social Simulation
an inter-disciplinary journal for the exploration and understanding of social processes by means of computer simulation
Published quarterly at the end of January, March, June and October
Edited by Flaminio Squazzoni   Review Editor Andreas Koch   Forum Editor Klaus G Troitzsch

Sample data

Data included 915 submissions, information on 1819 authors and referees, i.e., authors (921), referees (317) and both authors and referees (581)

For each submission, we had: review acceptance/refusal, referee name and recommendation, time taken for reporting, text of the report, editorial decision

For each personal record, we had: disciplinary background, status (e.g. full/associate professor, private researcher or junior researcher), position in the journal, i.e., membership in the journal's editorial board, affiliation and a rating of referee quality assigned by the editor
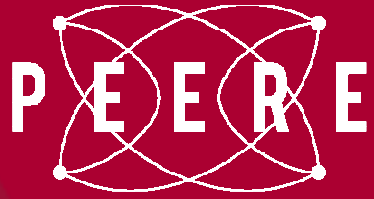
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Status	Number of requests	Number of refusals	Percentage
Professors	1178	145	12.31
Private researchers	162	19	11.73
Junior researchers	1222	112	9.7

referee status	Mean	Std. Err.	[95%	Conf. Interval]
full/associate professors	28.21	0.94	26.37	30.05
private researchers	27.63	2.09	23.53	31.73
junior researchers	25.23	0.74	23.78	26.69

referee status	Mean	Std. Err.	[95%	Conf. Interval]
full/associate professors	534.20	14.76	505.25	563.15
private researchers	532.57	36.23	461.50	603.64
junior researchers	622.98	16.17	591.27	654.70

cost
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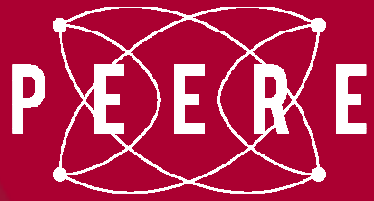
Disciplinary background of the referees	Number of requests	Number of refusals	Percentage
Humanities	152	12	7.89
Social sciences	430	46	10.70
Behavioral sciences	199	26	13.07
Physics	162	26	16.05
Environmental sciences	122	15	12.30
Computer sciences/engineering	742	53	7.14
Math	42	4	9.52
Geography	76	8	10.53
Medicine	35	1	2.86
Economics	400	64	16.00
Management	199	21	10.55

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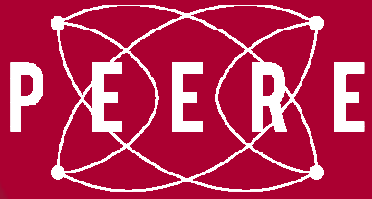
background	revision time	Std. Err.	[95% Conf.	Interval]
Humanities	23.05	2.21	18.72	27.38
Social Sciences	27.07	1.49	24.15	29.99
Behavioral Sciences	27.57	1.93	23.78	31.36
Physics	31.26	2.99	25.40	37.12
Environmental Sciences	31.85	2.66	26.63	37.07
Computer Sciences / Engineering	24.75	0.92	22.95	26.55
Math	15.50	2.32	10.95	20.05
Geography	31.39	3.26	25.01	37.78
Medicine	19.38	3.95	11.63	27.13
Economics	29.31	1.68	26.01	32.60
Management	26.24	1.93	22.45	30.02

background	revision length	Std. Err.	[95% Conf.	Interval]
Humanities	551.2	45.9	461.1	641.4
Social Sciences	648.0	29.8	589.4	706.6
Behavioral Sciences	576.6	38.7	500.6	652.5
Physics	533.8	40.5	454.3	613.2
Environmental Sciences	662.3	45.2	573.6	751.0
Computer Sciences / Engineering	545.6	17.7	510.8	580.5
Math	497.0	72.8	354.0	639.9
Geography	514.7	44.2	427.9	601.5
Medicine	544.0	67.8	410.9	677.2
Economics	541.6	26.7	489.1	594.1
Management	668.1	42.7	584.2	751.9
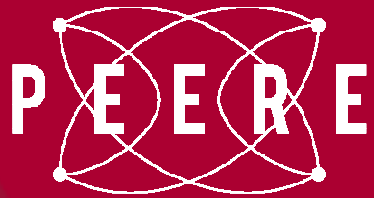
recommendation	report length	Std. Err.	[95% Conf.	Interval]
accepted	301.0	29.2	243.7	358.4
minor revisions	528.9	18.7	492.1	565.6
major revisions	696.7	17.6	662.0	731.4
rejected	534.8	19.4	496.6	572.9

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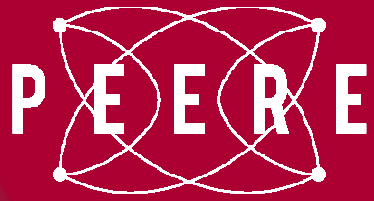
Disciplinary composition	Number	Percentage
Mono-disciplinary referee pool	112	18.1
Multidisciplinary referee pool	506	81.8
Referees pool with two disciplinary backgrounds	362	71.5
Referees pool with three disciplinary backgrounds	141	27.8
Referees with four disciplinary backgrounds	3	0.5

Nature of the reviewing	Number	Mean citations	Std. Err.	[95%	Conf. Interval]
Mono-disciplinary	129	18.46	2.21	14.08	22.84
Multi-disciplinary	48	29.43	6.49	16.36	42.50

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Conclusions

Reviewing is context-specific as it is sensitive to disciplinary & status effects

Diversity premium

No reciprocity between authors/referees

A small-community effect?

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