

thematic analysis by both editorial staff and interns. Institutional review board approval was not required for this study.

Results Focus group data indicated that while *TLM* designed the program with antiracist intent, mentors did not foreground their race in the editorial/publishing process outside of the intern's minoritized status as a program selection criterion. Early on, mentors viewed the internship more as an opportunity to improve the journal's editorial work, for participants to gain experience working in a historically guarded space, and to contribute to achieving racial equity in medical education. Therefore, despite the program's specific antiracist focus, 6 months in, none of the mentors (who identified as White individuals) had explicitly discussed topics of race with their interns. Mentors' reasons for not discussing race varied, including uncertainty about how to invite interns into such a discussion and not seeing interns as racialized individuals. However, at the end of the 6 months, researchers realized the need to discuss this topic, thus moving the program into explicit conversations about race and the role it plays in publishing.

Conclusions Although the program met some antiracist goals, stakeholders did not explicitly discuss the role that race plays in the review process, therefore limiting the program's initial impact. Through this collaborative autoethnography, *TLM* stakeholders critically reflected on the program in real time and addressed this gap. In doing so, they engaged in the ongoing critical action needed to support equity within the editorial process. Editorial staff at *TLM* now have the opportunity to address ongoing power dynamics between interns and staff members that will advance the journal's efforts at antiracism. Plans are currently underway to ensure interns' experiences are incorporated.

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Editorial and Peer Review Process

Analysis of Timing of Manuscript Submissions and Assignment of Editors and Reviewers on Editorial Decisions at *eLife*

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Objective Editorial decisions can depend on factors, like the timing of submissions or the matching of editors and reviewers, that are independent of the quality of the work. This analysis investigates associations of these and other external factors with editorial outcomes at *eLife*, a major biomedical journal.

Design This study analyzed whether timing of submission (weekend vs weekday) was associated with the decision to send manuscripts for external review among senior editors, who can desk-reject submissions; compared peer review manuscript ratings by reviewer volume; and assessed whether submission time of month or year, preceding decisions to reject or review a manuscript, and matching of reviewer to manuscript specialty influenced editorial decisions. Data were analyzed by single variable regression.

Results Between January 2016 and December 2018 *eLife* received 23,190 total submissions, 6498 of which were sent for review. Among senior editors (n = 65), proportions of manuscripts sent for external review ranged from 9.6% to 49.3% and were statistically significantly lower on weekends (mean, 24% [SD, 1.3%]) than on weekdays (mean, 29% [SD, 0.6%]; $P < .001$), an association observed for most senior editors. Average peer reviewer rating (range, 0-1) increased with volume category: mean of 0.453 (SD, 0.003) for 1 to 5 submission reviews; 0.463 (SD, 0.008) for 6 to 10 submissions; and 0.472 (SD, 0.007) for 11 or more submissions, and reviewers' ratings increased with successive reviews. In a nonquantitative inspection of submission and decision trends, submission time of month or year, preceding decisions to reject or review a manuscript, and matching of reviewer to manuscript specialty did not appear to influence editorial decisions.

Conclusions This study found a statistically significant association between timing of submission during the week and editorial decisions. Peer reviewer ratings increased with review volume. Submission time of month or year, preceding decisions to reject or review a manuscript, and matching of

reviewer to manuscript specialty did not appear to influence editorial decisions.

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Association Between Number of External Peer Review Invites, Unsuccessful Invites, and Declined Reviews With Rejection of Manuscripts

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Objective Many journals encounter difficulties obtaining peer reviewers. However, it is unknown if this is associated with publication outcomes.^{1,2} The purpose of this research was to evaluate whether, for initial manuscript submissions that were eventually peer reviewed, there was a significant association between the number of external peer reviewers sought, unsuccessful invites, and declined invites for external peer review and the publication outcome.

Design This was a retrospective study of anonymized, unique, original research submissions to the *Emergency Medicine Journal (EMJ)* that received at least 1 external peer review over a 5-year period (January 2016 to December 2020). A database of deidentified original manuscripts submitted to *EMJ* during the study period was interrogated to

determine if there were significant associations between the number of unsuccessful external peer review invitations, the number of total invitations needed, and the acceptance or rejection of a research manuscript. Original submissions without any external peer review were excluded. Statistical review invitations were excluded from the data. Mann-Whitney *U* test was used to assess differences between the variables and their publication outcomes. Odds ratios (OR), likelihood ratios (LR), and positive predictive value (PPV) were used as measures of association for potential thresholds for variables and publication outcomes.

Results There were 806 deidentified peer-reviewed original submissions included with 85 manuscripts (10.6%) accepted for publication during the study period (**Table 79**). The ORs for a peer-reviewed original research submission eventually being rejected, according to number of invitations, were 77.5 (95% CI, 24.2-248.2; *P* < .001; LR, 21.0; 95% CI, 6.9-63.7; PPV, 99.4%; 95% CI, 98.3-99.8) for submissions with 4 or more invitations, 36.8 (95% CI, 9.0-150.9; *P* < .001; LR, 20.0; 95% CI, 5.1-78.8; PPV, 99.4%; 95% CI, 97.7-99.9) for submissions with 3 or more unsuccessful external peer review invitations, and 22.6 (95% CI, 3.1-163.8; LR, 18.0; 95% CI, 2.6-127.2; PPV, 99.4%; 95% CI, 95.6-99.9) for submissions with 2 or more peer reviewers who declined review invitations.

Conclusions The number of declined peer review invitations and total review invitations prior to a decision were associated with rejection of a manuscript. The wide 95% CIs in these results could be due to the high variability of underlying factors that could have influenced the difficulty in getting peer reviews and their interplay with the decision to publish. The findings of this study may also be potentially different for different journals.³ Further research should be done to provide further insights on specific factors that may be associated with difficulties in getting peer reviewers.¹⁻³

Table 79. Characteristics of Peer-Reviewed Original Article Submissions and Their Eventual Publication Outcomes

Submitted initial manuscripts with ≥1 external peer review (N = 806)	External peer reviewer invites for initial manuscript submission	External peer reviewer invites without a review	Unsuccessful external peer review invites with response				External peer review invites without a response ^a
			Total	Declined	Unavailable	Conflict of interest	
Rejected, total No. (n = 721)	4560	3084	1484	626	633	125	1600
Accepted, total No. (n = 85)	177	58	14	6	7	1	44
Rejected, range	1-27	0-24	0-12	0-7	0-8	0-3	0-19
Accepted, range	1-9	0-8	0-4	0-2	0-2	0-1	0-5
Rejected, mean (SD)	6.32 (4.14)	4.28 (4.05)	2.06 (2.23)	0.87 (1.19)	1.02 (1.28)	0.17 (0.48)	2.22 (2.54)
Accepted, mean (SD)	2.08 (1.25)	0.66 (0.11)	0.16 (0.59)	0.07 (0.30)	0.08 (0.31)	0.01 (0.11)	0.49 (0.82)
Rejected, median (IQR)	5 (3-8)	3 (1-6)	1 (0-3)	0 (0-1)	1 (0-2)	0	2 (0-3)
Accepted, median (IQR)	2 (2-2)	0 (0-1)	0 (0-1)	0	0	0	0 (0-1)
<i>P</i> value ^b	<.001	<.001	<.001	<.001	<.001	<.001	<.001

^aNo response or automatically declined.

^b2-Tailed, asymmetric *P* values calculated with Mann-Whitney *U* test.