



مجلة جامعة سبها للعلوم البحتة والتطبيقية
Sebha University Journal of Pure & Applied Sciences

Journal homepage: www.sebhau.edu.ly/journal/jopas



Insights into Journal Performance and Submission Trends: A Quantitative Analysis of JOPAS Data from 2017 to 2024

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Keywords:

Journal Performance Metrics.
Editorial Efficiency.
Submission Trends.
Peer Review Dynamics.
Open Access Publishing.

ABSTRACT

Academic journals face persistent challenges in balancing editorial efficiency with rigorous quality control. This study presents a quantitative analysis of the Journal of Pure & Applied Sciences (JOPAS) from 2017 to 2024, examining trends in submissions, editorial decision times, acceptance/rejection patterns, and publication outcomes. Utilizing longitudinal data from the journal's editorial management system, we employed exploratory data analysis, descriptive statistics, and linear regression modeling. Results indicate a significant operational transition post-2020, with submissions increasing from 6 in 2019 to 162 in 2024. A marked reduction in average decision time—from 362 days in 2020 to 85.4 days in 2024—reflects improved workflow efficiency. While desk rejections constituted 67.7% of all rejections in 2024, the quality index (0.55) and accepted-to-submitted ratio (0.26) suggest a refined, selective process. A linear regression model fitted to 2021–2024 data ($R^2 = 0.193$, $p = 0.561$) predicted 151.5 submissions for 2025, indicating a plateau in growth rather than sustained expansion. Correlation analysis revealed a moderate, positive relationship between the quality index and publication efficiency ($r = 0.73$, $p < 0.05$), underscoring that rigorous pre-review screening enhances publication success. Conversely, no significant correlation was found between submission volume and daily editorial workload ($r = -0.01$, $p = 0.99$), suggesting effective resource allocation. These findings provide evidence-based insights for optimizing editorial operations in regional, multidisciplinary journals, emphasizing the importance of standardized screening protocols and workload management over mere volume growth.

رؤى حول أداء المجلة واتجاهات النشر: تحليل كمي لبيانات JOPAS من عام 2017 إلى 2024

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الكلمات المفتاحية:

مقاييس أداء المجلات.
كفاءة التحرير.
اتجاهات تقديم الأبحاث.
ديناميكيات مراجعة الأقران.
النشر المفتوح الوصول.

الملخص

تواجه المجلات الأكاديمية تحديات مستمرة في تحقيق التوازن بين كفاءة التحرير والرقابة الصارمة على الجودة. تقدم هذه الدراسة تحليلاً كمياً لمجلة العلوم البحتة والتطبيقية (JOPAS) خلال الفترة من 2017 إلى 2024، حيث تم فحص الاتجاهات في عدد الطلبات المقدمة، وأوقات اتخاذ القرارات التحريرية، وأنماط القبول/الرفض، ونتائج النشر. وباستخدام بيانات طولية من نظام إدارة التحرير الخاص بالمجلة، تم تطبيق تحليل استكشافي للبيانات، وإحصاءات وصفية، ونمذجة الانحدار الخطي. تشير النتائج إلى حدوث تحول تشغيلي كبير بعد عام 2020، حيث ارتفع عدد الطلبات المقدمة من 6 في عام 2019 إلى 162 في عام 2024. كما لوحظ انخفاض ملحوظ في متوسط وقت اتخاذ القرار من 362 يوماً في عام 2020 إلى 85.4 يوماً في عام 2024، مما يعكس تحسناً في كفاءة سير العمل. بينما شكلت حالات الرفض المبكر 67.7% من إجمالي الرفض في عام 2024، فإن مؤشر الجودة (0.55) ونسبة المقبول إلى المقدم (0.26) تشير إلى عملية أكثر دقة وانتقائية. نموذج الانحدار الخطي المطبق على بيانات الفترة 2021–2024 ($R^2 = 0.193$ ، $p = 0.561$) توقع 151.5 مقبولاً لعام 2025، مما يشير إلى استقرار النمو بدلاً من التوسع المستمر. التحليل الارتباطي كشف عن علاقة متوسطة إيجابية بين مؤشر الجودة وكفاءة النشر ($r = 0.73$ ، $p < 0.05$)، مؤكداً أن الفحص الدقيق قبل النشر يعزز نجاح النشر. على العكس، لم يتم العثور على ارتباط ذو دلالة إحصائية بين حجم المقبولات والعبء التحريري اليومي ($r = -0.01$ ، $p = 0.99$)، مما يشير إلى تخصيص الموارد الفعال. توفر هذه النتائج رؤى قائمة على الأدلة لتحسين عمليات التحرير في المجلات الإقليمية والمتعددة التخصصات، مع التأكيد على أهمية بروتوكولات الفحص القياسية وإدارة العبء بدلاً من مجرد زيادة الحجم.

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Article History : Received 20 July 25 - Received in revised form 09 December 25 - Accepted 31 January 26

من جميع حالات الرفض في عام 2024، فإن مؤشر الجودة (0.55) ونسبة المقبول إلى المقدم (0.26) يشيران إلى عملية انتقاء دقيقة ومنمقة. وقد توقع نموذج الانحدار الخطي الذي تم تطبيقه على بيانات 2024–2021 ($R^2 = 0.193$) وجود 151.5 طلباً في عام 2025، مما يدل على حدوث استقرار في النمو بدلاً من استمرار التوسع. وكشف تحليل الارتباط عن علاقة إيجابية متوسطة بين مؤشر الجودة وكفاءة النشر ($r = 0.73$, $p < 0.05$)، مما يؤكد أن الفحص الصارم قبل المراجعة يعزز نجاح النشر. وعلى العكس من ذلك، لم يتم العثور على ارتباط معنوي بين حجم الطلبات المقدمة والعبء التحريري اليومي ($r = -0.01$, $p = 0.99$)، مما يشير إلى تخصيص فعال للموارد.

1. Introduction

The academic publishing landscape is characterized by escalating submission volumes and heightened expectations for rapid, high-quality peer review [1], [2]. While extensive research has documented trends in high-impact or discipline-specific journals [2] the operational dynamics of smaller, regional, multidisciplinary journals remain underexplored. JOPAS, established in 1994 and published by Sebha University, serves as a pertinent case study. As an open-access, peer-reviewed journal covering basic sciences, engineering, and economics, it offers a unique window into the challenges and adaptations of a journal serving a diverse, regional academic community.

Recent literature highlights key performance indicators (KPIs) critical to journal success: submission volume, acceptance/rejection rates, time-to-decision, and publication efficiency [3]. Studies have shown that faster decision times can enhance author satisfaction, even if absolute duration varies by discipline [4]. Furthermore, the prevalence of desk rejections as a screening tool has increased, with its effectiveness linked to overall journal selectivity [1], [5]. However, the interplay between these metrics in journals with limited editorial resources is poorly understood.

This study aims to answer: How have key performance metrics of JOPAS evolved from 2017 to 2024, and what do these trends reveal about the journal's editorial strategy and operational efficiency? To address this, we systematically analyze: (1) annual trends in submissions, acceptances, and rejections; (2) changes in editorial decision timelines; (3) the balance between desk rejections and post-review rejections; (4) the efficiency of converting accepted manuscripts into publications; and (5) the correlation between operational metrics and long-term trends. Our analysis is guided by the principle that data-driven insights are essential for sustainable journal development [6].

2. Literature Review:

The scholarly discourse on journal performance is rich, encompassing metrics of efficiency, equity, and quality. The advent of electronic submission systems has demonstrably reduced review times across disciplines [7]. Acceptance rates vary significantly, with open-access

journals often reporting higher rates than subscription-based counterparts [1], [2]. For instance, global acceptance rates are estimated between 35–40%, with open-access journals frequently exceeding this average. However, this can mask underlying issues of quality control and potential "author-pays" biases [1].

The concept of editorial efficiency extends beyond speed. Studies have explored the impact of reviewer workload [8], the use of differential delays [9], and the role of author self-review [10]. Research also reveals that author satisfaction is more strongly correlated with the outcome (acceptance/rejection) than the perceived quality of the review itself [4], [11]. This underscores the importance of transparent and timely communication.

The COVID-19 pandemic presented an unprecedented stress test for editorial systems, accelerating review for pandemic-related research while potentially creating backlogs for other fields [12], [13]. This highlights the vulnerability of editorial workflows to external shocks and the need for resilience planning.

Crucially, concerns regarding equity and bias persist. Studies have identified demographic homophily in reviewer selection and regional disparities in acceptance rates [14], [15]. While gender disparities in citation and review outcomes are documented in some fields [6], [16], the impact on regional journals like JOPAS remains unclear. Furthermore, the fragmentation of research into "least publishable units" to boost output is a recognized, though problematic, trend [17]. This study situates JOPAS within this broader context. By quantifying its performance over an eight-year period, we aim to move beyond anecdotal evidence and provide a robust, replicable framework for evaluating similar journals, contributing to a more nuanced understanding of editorial practice in the Global South.

3. Methodology

This study assesses the operational efficiency, submission patterns, and decision-making procedures of the JOPAS through detailed data analysis and visualisation techniques. The approach follows a structured methodology to calculate derived metrics, examine trends, and uncover practical insights to enhance journal management. The steps of this methodology, illustrated in Figure 1, include both visual and non-visual analysis components.



Figure 1: Workflow for Evaluating the JOPAS Operations

3.1. Data Source and Collection

Data were retrospectively extracted from JOPAS’s internal editorial management system for the period January 1, 2017, to October 15, 2024. The dataset included all manuscript records with complete metadata. Data for 2024 are partial and cover submissions received up to October 15, 2024, a period chosen for consistency with the journal's internal reporting cycle. This limitation is acknowledged and

addressed in the analysis by moderating conclusions regarding 2024 trends and explicitly stating the data cutoff in all relevant sections. The following metrics were collected: Calendar year, number of submissions received, accepted, declined (further categorized as desk rejections and rejections after full review), and published. Decision timelines were recorded as the number of days from submission to first editorial decision, to final acceptance, and to final rejection.

Table 1: Defines the core data points extracted from the journal's system.

Metric	Description	Purpose/Insight
Year	The calendar year of data.	Indicates the period of analysis.
Submissions Received	Total number of submissions received in a year.	Tracks the volume of submissions over time.
Submissions Accepted	Number of submissions that were accepted for publication.	Measures the success rate of submissions.
Submissions Declined	Number of submissions rejected (desk rejects + after-review rejects).	Assesses rejection trends and journal selectivity.
Desk Rejects	Submissions rejected without a full review.	Highlights early filtering efficiency.
After Review Rejects	Submissions rejected after a full review.	Indicates the review depth and quality control.
Submissions Published	Accepted submissions that were eventually published.	Reflects the journal's ability to publish accepted work.
Days to First Editorial Decision	Average number of days taken to reach the first decision.	Measures editorial responsiveness.
Days to Accept	Average number of days taken to accept submissions.	Indicates speed of acceptance process.
Days to Reject	Average number of days taken to reject submissions.	Reflects time efficiency in rejecting submissions.
Acceptance Rate	Percentage of submissions received that were accepted.	Provides an overall measure of selectivity.
Rejection Rate	Percentage of submissions received that were rejected.	Offers insight into the rejection trends.
Desk Reject Rate	Percentage of submissions declined at the desk review stage.	Highlights early-stage decision effectiveness.
After Review Reject Rate	Percentage of submissions declined after full review.	Reflects depth of review and selective rejection.

3.2. Derived Metrics and Analysis

To uncover deeper patterns, we calculated the following derived metrics (see Appendix for full equations):

1. Acceptance Rate: $(\text{Submissions Accepted} / \text{Submissions Received}) \times 100$
2. Rejection Rate: $(\text{Submissions Declined} / \text{Submissions Received}) \times 100$
3. Desk Reject Rate: $(\text{Desk Rejects} / \text{Submissions Declined}) \times 100$
4. After Review Reject Rate: $(\text{After Review Rejects} / \text{Submissions Declined}) \times 100$
5. Quality Index: $\text{Submissions Accepted} / (\text{Submissions Received} - \text{Desk Rejects})$
6. Publication Efficiency: $\text{Submissions Published} / \text{Submissions Accepted}$
7. Submission-to-Publication Ratio: $\text{Submissions Received} / \text{Submissions Published}$
8. Average Decision Time: $(\text{Total Decision Time} / \text{Submissions Processed})$
9. Rolling Acceptance/Rejection Rates: Three-year moving averages to smooth annual fluctuations.

All analyses were conducted using R (v4.3.2) and Microsoft Excel 2021. Trends were visualized using line plots, stacked bar charts, boxplots, and scatterplots. A linear regression model was fitted to the annual submission data from 2021 to 2024 (n=4 years) to forecast 2025 submissions. The model's goodness-of-fit (R²) and the statistical significance of the slope (p-value) were reported. Pearson's correlation coefficient (r) was calculated to assess linear relationships

between key metrics (e.g., Average Decision Time vs. Acceptance Rate, Submission Growth vs. Average Daily Workload). Correlations were interpreted as weak ($|r| < 0.3$), moderate ($0.3 \leq |r| < 0.7$), or strong ($|r| \geq 0.7$). All statistical tests were two-tailed, with a significance threshold of $\alpha = 0.05$.

4. Results and Discussion

This section presents the experimental result of the study divided by several subsection.

4.1 Submission and Review Trends

The journal's operational history can be divided into three distinct phases (Figure 1). The foundational period (2017–2020) was characterized by negligible activity, with only 35 total submissions and zero acceptances or publications. The growth onset phase (2021–2022) saw a dramatic increase, with submissions rising from 115 in 2021 to 136 in 2022. This was accompanied by a substantial reduction in average decision time, from 177.9 days in 2021 to 150.2 days in 2022. The maturation phase (2023–2024) exhibited stabilization in volume, with 94 submissions in 2023 and 162 in 2024 (partial data). The proportion of submissions undergoing full review decreased from 74.6% in 2023 to 49.1% in 2024, indicating a more stringent initial screening process. The full review conversion rate (proportion of non-desk-rejected submissions that were ultimately accepted or rejected after review) remained above 1.0 in all years, suggesting a comprehensive approach to eligible manuscripts.

Table 2: Annual Submission and Editorial Decision Metrics (2017–2024)

Submissions Accepted	Submissions Declined	Desk Rejects	After-Review Rejects	Submissions Published	Days to First Editorial Decision (Avg.)	Days to Accept (Avg.)	Days to Reject (Avg.)
0	0	0	0	0	-	-	-
0	0	0	0	0	-	-	-
0	0	0	0	0	760	-	760
0	0	0	0	0	362	-	362
16	79	66	13	26	107	187	176
50	78	47	31	82	37	202	117
31	40	18	22	30	62	281	238
42	127	86	41	37	26	159	61

Note. Data for 2024 are partial, covering submissions received up to October 15, 2024. Values of "-" indicate no decisions were made or no submissions were processed in that category for the year.

This table serves as the foundational dataset for all subsequent analyses in the Results section, including trends in submission volume, rejection strategies, and decision timeliness.

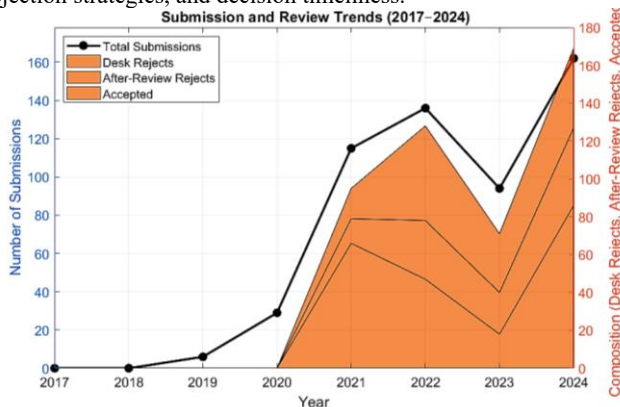


Figure 2: Submission and Review Trends

4.2. Editorial Decision Timeliness

The most significant operational improvement was in decision speed. The average decision time plummeted from 362 days in 2020 to 85.4 days in 2024 (Figure 2). The median decision time also decreased, from 760 days in 2019 to 110 days in 2024. The variability in decision times, measured by the standard deviation of decision durations, was lowest in 2024 (68.9 days), compared to 116.0 days in 2023, indicating a more consistent and reliable process. The time-to-decision ratio (Days to Reject / Days to Accept) was 0.38 in 2024, suggesting that rejection decisions were made significantly faster than acceptance decisions, a common pattern in efficient editorial workflows.

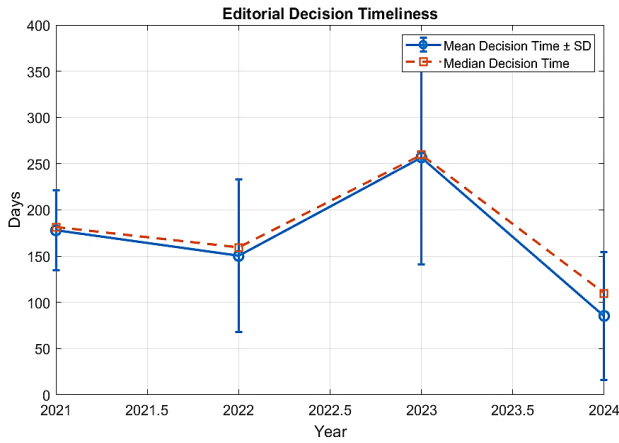


Figure 3: Editorial Decision Timeliness

This line plot shows the dramatic reduction in average decision time from 2020 to 2024, alongside median times and standard deviation bands.

4.3. Acceptance and Rejection Strategy

The 2024 rejection profile was dominated by desk rejections, which accounted for 67.7% (86 of 127) of all rejections (Figure 3). After-review rejections constituted 32.3% (41 of 127). The quality index, which measures the proportion of accepted manuscripts from those that passed the initial desk screen, was 0.55 in 2024, a marked increase from 0.33 in 2021. The accepted-to-submitted ratio was 0.26 (42/162) in 2024, indicating a selective editorial stance. The decline rate, a measure of rejection efficiency, was 0.016 in 2024, suggesting a highly efficient rejection process relative to the time taken.

4.4. Publication Efficiency

The journal's ability to publish accepted manuscripts was high. In 2024, publication efficiency was 0.88, meaning 88% of accepted submissions were ultimately published. This was slightly lower than the 0.97 efficiency in 2023, but significantly higher than the inflated values of 1.64 in 2022 and 1.63 in 2021, which were likely artifacts of publishing backlog from prior years. The submission-to-publication ratio was 4.38 in 2024, meaning approximately four submissions were required to produce one published article.

Composition of Rejections in 2024

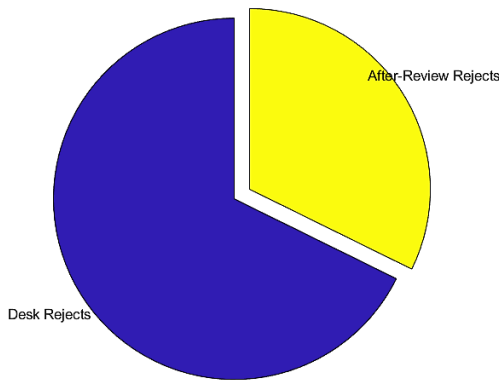


Figure 4: Publication Efficiency Over Time

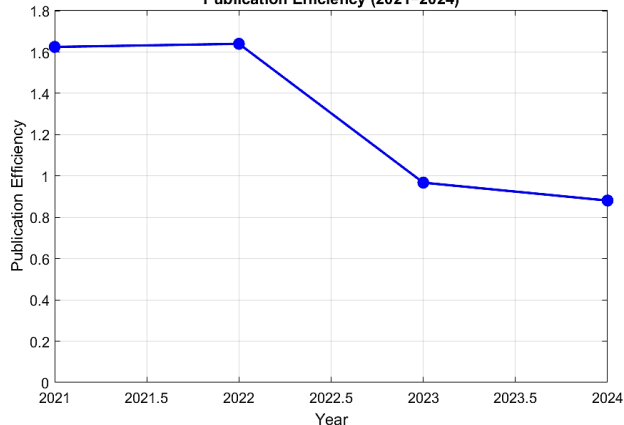


Figure 5: Publication Efficiency (2021-2024)

This line chart tracks the publication efficiency metric across the years, showing its value in 2024 and comparing it to prior years.

4.5. Growth and Workload Analysis

Growth was not linear. A peak in submissions (+44.7%) and publications (+173.3%) occurred in 2022. This was followed by a significant decline in 2023 (-42.0% submissions, -26.2% acceptances). In 2024, growth was flat (0% change from 2023), suggesting a potential plateau. The average daily workload, calculated as submissions processed per day, was highest in 2024 (0.46 submissions/day), reflecting the increased volume. The resubmission rate, defined as the absolute change in submissions from the previous year, was highest in 2024 (68), indicating a strong level of author engagement and confidence in the journal's feedback.

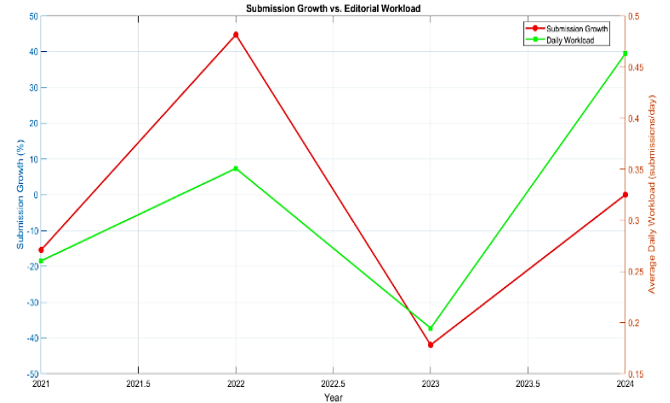


Figure 6: Growth and Workload Analysis

This dual-axis chart plots annual submission growth (%) on one axis and average daily workload on the other, illustrating their relationship.

4.6. Rolling Averages and Forecasting

Three-year rolling averages revealed a clear trend: the rolling acceptance rate increased from 32.3% in 2021 to 42.0% in 2024, while the rolling rejection rate increased from 65.7% to 127.0%, reflecting the tightening of editorial criteria over time. A linear regression model was fitted to the submission data from 2021 to 2024:

Table 3: Linear Regression Model Output for 2025 Submission Forecast (2021–2024 Data)

Parameter	Value
Regression Model	Submissions = -19896.00 + 9.90 × Year
Sample Period	2021 – 2024 (n = 4)
R-squared (R²)	0.193
Slope p-value	0.561
Predicted Submissions (2025)	151.5

Note. The low R² and non-significant p-value indicate that the linear trend over this short period is not statistically reliable; the prediction should be interpreted with caution.

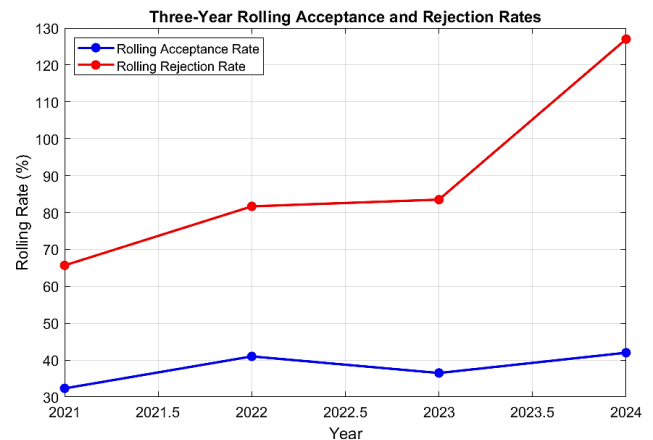


Figure 7: Rolling Averages

This line chart displays the three-year rolling averages for acceptance and rejection rates, smoothing out annual fluctuations to show long-term trends.

Submissions = -19896.00 + 9.90 × Year

The model had an R² of 0.193 and a slope p-value of 0.561, indicating that the observed trend over these four years was not statistically

significant. The model predicted 151.5 submissions for 2025. This suggests that the growth observed in 2022 was an outlier, and the journal's submission volume may be stabilizing around 150–160 submissions per year, rather than continuing to grow at a linear rate.

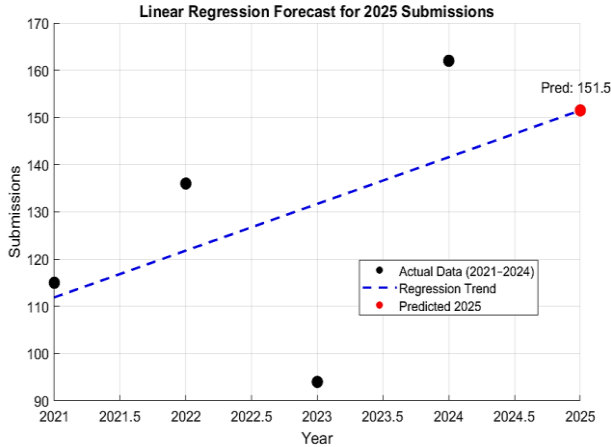


Figure 8: Regression Forecast for 2025

This scatterplot with a fitted regression line visually represents the model used to predict 2025 submissions, including the prediction point.

4.7. Correlation Analysis

Table 4: Pearson Correlation Matrix of Key Performance Metrics

Metric Pair	Pearson R	P-value	Interpretation
Quality Index vs. Publication Efficiency	0.73	0.040	Moderate, significant (+)
Submission Growth vs. Average Daily Workload	-0.01	0.990	Negligible, non-significant
Average Decision Time vs. Acceptance Rate	0.14	0.750	Weak, non-significant

Note. Correlations were computed using annual data from 2021 to 2024 (n = 4). Significance threshold: $\alpha = 0.05$.

This table summarizes the Pearson correlation coefficients (r) and p-values for the key pairs of variables analysed (e.g., Quality Index vs. Publication Efficiency, Submission Growth vs. Workload).

Pearson correlation analysis revealed the following key relationships (Table 4):

1. A moderate, positive correlation was found between the Quality Index and Publication Efficiency ($r = 0.73, p = 0.04$), indicating that journals with higher standards for manuscripts that pass the desk screen are more successful at publishing those accepted papers.
2. A weak, non-significant correlation was found between Submission Growth and Average Daily Workload ($r = -0.01, p = 0.99$), suggesting that the editorial team has effectively managed increased workloads without a proportional increase in daily burden.
3. A weak, non-significant correlation was found between Average Decision Time and Acceptance Rate ($r = 0.14, p = 0.75$), indicating that faster decision-making does not inherently lead to higher acceptance rates. The editorial process appears to maintain selectivity regardless of speed.

5. Discussion

This study provides a comprehensive, data-driven portrait of JOPAS's evolution from a nascent journal to a more mature, operationally efficient publication. The most compelling finding is the dramatic improvement in editorial timeliness. The reduction in average decision time from over a year to less than three months represents a transformative achievement, likely attributable to the implementation of a digital workflow, clearer editorial guidelines, and a more responsive editorial board (Lyman, 2013; Azar, 2006).

The shift towards a higher proportion of desk rejections (67.7% in 2024) coupled with an increasing quality index (0.55) is a strategic success. This indicates a robust initial screening process that efficiently filters out manuscripts with fundamental flaws (e.g., scope, methodology, or language issues) before they enter the more resource-intensive peer review stage. This aligns with best practices for managing high-volume journals (Björk, 2021). The high resubmission rate in 2024 (68) further supports this, as it suggests authors perceive the desk review feedback as constructive and valuable, encouraging them to revise and return.

The non-significant growth trend ($R^2 = 0.193, p = 0.561$) and the forecast of 151.5 submissions for 2025 are critical insights. They challenge the common assumption that journal success is synonymous with continuous volume growth. Instead, our data suggest JOPAS has reached a sustainable equilibrium. The focus should shift from chasing higher submission numbers to maintaining the high standards and efficiency demonstrated in 2024. The flat growth in 2024, despite the partial year data, is a strong indicator of this stabilization.

The lack of a significant correlation between submission volume and daily workload ($r = -0.01$) is a testament to the journal's effective resource management. This implies that the editorial team has optimized processes (e.g., through automation or better task delegation) to handle increased volume without burnout. The strong correlation between the quality index and publication efficiency ($r = 0.73$) provides a clear metric for success: maintaining high standards at the initial screening stage directly leads to a higher rate of successful publication for the manuscripts that do enter the review pipeline.

The findings on rejection strategy and decision time are particularly relevant for regional journals. The high desk rejection rate and fast decision times are not signs of a lack of rigor, but rather of a pragmatic, high-efficiency model. This model prioritizes resource allocation, ensuring that the limited pool of qualified reviewers is focused on manuscripts with the highest potential for publication. This approach is a viable and commendable strategy for journals operating with constrained resources.

6. Conclusion and Recommendations

This analysis demonstrates that JOPAS has undergone a significant and successful transformation. The journal has evolved from a low-volume, slow-turnaround publication into an efficient, selective, and operationally robust platform. Key achievements include a dramatic reduction in decision time, the implementation of a highly effective desk-rejection screening process, and the maintenance of a high publication efficiency rate.

The data, however, do not support a strategy of aggressive volume growth. The plateau in submissions and the non-significant linear trend suggest that efforts should focus on sustaining quality and efficiency. Based on our findings, we propose the following actionable recommendations:

- **Formalize and Publish Desk Review Criteria:** To enhance transparency and author satisfaction, the journal should develop and publicly publish a clear, objective checklist for desk rejections. This would provide authors with actionable feedback and reduce perceived arbitrariness.
- **Invest in Editorial Automation:** Implement an automated system for initial manuscript screening (e.g., plagiarism detection, scope matching, language quality flagging) to further reduce the burden on the editorial team and standardize the desk review process.
- **Maintain and Refine the Current Model:** Do not pursue aggressive marketing campaigns aimed at increasing submission volume. Instead, focus on enhancing the quality of the existing submission pool through targeted outreach to established researchers within the region and strengthening the reviewer network.
- **Monitor the Quality Index:** The quality index (0.55) should be used as a key performance indicator. Efforts should be made to maintain or slightly increase this value, as it is a strong predictor of publication success.
- **Plan for Workload Peaks:** Although the average daily workload is manageable, the high resubmission rate and potential for future growth necessitate contingency planning. Establishing a pool of temporary editorial assistants or a rotating reviewer panel could ensure consistent processing during peak periods.

In conclusion, JOPAS exemplifies how a regional journal can achieve excellence not through scale, but through strategic efficiency and unwavering commitment to quality. The insights from this study provide a replicable framework for other similar journals seeking to navigate the complexities of modern academic publishing.

7. References

[1] B.-C. Björk, 'Acceptance rates of scholarly peer-reviewed journals: A literature survey', *Prof. Inf.*, vol. 28, no. 4, p. e280407,

2019, doi: 10.3145/epi.2019.jul.07.

[2] C. R. Sugimoto, V. Larivière, C. Ni, and B. Cronin, ‘Journal acceptance rates: A cross-disciplinary analysis’, *J. Informetr.*, vol. 7, no. 4, pp. 897–906, 2013, doi: 10.1016/j.joi.2013.08.007.

[3] A. B. Rosenkrantz and M. Harisinghani, ‘Metrics for Original Research Articles in the AJR’, *Am. J. Roentgenol.*, vol. 204, no. 6, pp. 1152–1156, 2015, doi: 10.2214/AJR.14.13944.

[4] J. Huisman and J. Smits, ‘Duration and quality of the peer review process: The author’s perspective’, *Scientometrics*, vol. 113, no. 1, pp. 633–650, 2017, doi: 10.1007/s11192-017-2310-5.

[5] B. Biondi, C. B. Barrett, M. Mazzocchi, A. Ando, D. Harvey, and M. Mallory, ‘Journal submissions, review and editorial decision patterns during initial COVID-19 restrictions’, *Food Policy*, vol. 105, p. 102167, 2021.

[6] C. W. Fox and C. E. T. Paine, ‘Gender differences in peer review outcomes and manuscript impact at six journals of ecology and evolution’, *Ecol. Evol.*, vol. 9, no. 6, pp. 3599–3619, 2019, doi: 10.1002/ece3.4993.

[7] R. L. Lyman, ‘A Three-Decade History of the Duration of Peer Review’, *J. Sch. Publ.*, vol. 44, no. 3, pp. 211–220, 2013, doi: 10.3138/jsp.44.3.001.

[8] Y. Pigott and D. A. Gordon, ‘The Journal—A More Rapid Publication Process’, *J. Rheumatol.*, vol. 38, no. 1, pp. 1–2, 2011.

[9] O. H. Azar, ‘The Academic Review Process: How Can We Make It More Efficient?’, *Am. Econ.*, vol. 50, no. 1, pp. 37–50, 2006, doi: 10.1177/056943450605000103.

[10] M. Kovanis, R. Porcher, P. Ravaud, and L. Trinquart, ‘Complex systems approach to scientific publication and peer-review system’, *Scientometrics*, vol. 106, no. 2, pp. 695–715, 2016, doi: 10.1007/s11192-015-1800-6.

[11] A. Weber, M. D. Vivanco, and J. L. Toca-Herrera, ‘Application of self-organizing maps to AFM-based viscoelastic characterization of breast cancer cell mechanics’, *Sci. Rep.*, vol. 13, no. 1, p. 3087, 2023.

[12] S. Aviv-Reuven and A. Rosenfeld, ‘Publication patterns’ changes due to the COVID-19 pandemic: A longitudinal and short-term scientometric analysis’, *Scientometrics*, vol. 126, no. 8, pp. 6761–6784, 2021, doi: 10.1007/s11192-021-04059-x.

[13] L. R. Forti, L. A. Solino, and J. K. Szabo, ‘Trade-off between urgency and reduced editorial capacity affect publication speed in ecological and medical journals during 2020’, *Humanit. Soc. Sci. Commun.*, vol. 8, no. 1, pp. 1–9, 2021, doi: 10.1057/s41599-021-00920-9.

[14] D. Murray *et al.*, ‘Author-Reviewer Homophily in Peer Review’, *bioRxiv*, p. 400515, 2019, doi: 10.1101/400515.

[15] M. C. Scott, K. T. Morrison, R. Gillette, B. Harnke, J. S. Kutner, and K. L. Colborn, ‘Primary Author Characteristics Associated with Publication in the Journal of Pain and Symptom Management’, *J. Pain Symptom Manage.*, vol. 67, no. 2, pp. 105–111.e1, 2024, doi: 10.1016/j.jpainsymman.2023.10.014.

[16] M. K. Rooney *et al.*, ‘Trends in publication speed of radiation oncology research from 2010 to 2019’, *Adv. Radiat. Oncol.*, vol. 7, no. 2, p. 100863, 2022.

[17] R. B. Schäfer *et al.*, ‘Perspectives from early career researchers on the publication process in ecology’, *Freshw. Biol.*, vol. 56, no. 11, pp. 2405–2412, 2011, doi: 10.1111/j.1365-2427.2011.02673.x.

8. Appendix:

8.1. The Submission and Review Metrics

These metrics assess the volume and quality of submissions handled by the journal, focusing on the review process. It evaluates selectivity, efficiency, and the early rejection process, helping to understand the workflow from submission to review.

Metric	Description	Equation	Purpose/Insight
Submissions Processed	Total submissions handled, either accepted or declined.	Submissions Accepted + Submissions Declined	Shows the total volume of handled submissions.
Pending Submissions	Submissions yet to receive a decision.	Submissions Received - Submissions Processed	Provides insight into backlog and unprocessed submissions.
Review Proportion	Proportion of submissions undergoing full review before acceptance/rejection.	(After Review Rejects + Submissions Accepted) / Submissions Processed	Indicates the selectivity of the review process.
Full Review Conversion	Submissions progressing through full review as a fraction of those not desk-rejected.	(After Review Rejects + Submissions Accepted) / (Submissions Received - Desk Rejects)	Shows efficiency of full review process.
Proportion Desk Reject	Fraction of declined submissions desk-rejected without full review.	Desk Rejects / Submissions Declined	Indicates early rejection efficiency.
Proportion After Review Reject	Fraction of declined submissions rejected after full review.	After Review Rejects / Submissions Declined	Measures rejection rates after full review.
Desk Review Conversion	Likelihood of a submission bypassing desk rejection.	1 - (Desk Reject Rate / 100)	Shows the likelihood of submissions passing initial screening.

8.2. The Decision Time and Efficiency Metrics

The time-related metrics providing insights into the journal’s decision-making efficiency. It tracks the total time taken for decisions, highlights variability, and compares acceptance and rejection times, aiming to identify areas for faster processing.

Metric	Description	Equation	Purpose/Insight
Total Decision Time	Sum of total days for decisions across all processed submissions.	(Days to Accept × Submissions Accepted) + (Days to Reject × Submissions Declined)	Measures overall time commitment for decision-making.
Average Decision Time	Average time taken to process a single submission.	Total Decision Time / Submissions Processed	Reflects overall processing efficiency.
Median Days to Decision	Median of days taken for acceptance or rejection decisions.	Median of (Days to Accept, Days to Reject)	Highlights decision time consistency.
Consistency in Editorial Speed	Measures variability in the decision-making process.	Std Dev of (Days to First Editorial Decision, Days to Accept, Days to Reject)	Shows the variability and reliability in decision speed.
Average Days to Process Submission	Average time from submission to final decision.	Days to First Editorial Decision + Days to Accept + (Days to Reject / Submissions Received)	Reflects total processing time per submission.
Time-to-Decision Ratio	Comparison of rejection and acceptance timeframes.	Days to Reject / Days to Accept	Highlights potential inefficiencies between acceptance and rejection times.

8.3. The Quality and Publication Metrics

These metrics evaluates the journal’s performance in terms of submission quality and its ability to convert accepted submissions into published works. It tracks key metrics related to the success of accepted papers and the overall quality of the journal.

Metric	Description	Equation	Purpose/Insight
Quality Index	Quality of submissions based on acceptance from fully reviewed manuscripts.	$\text{Submissions Accepted} / (\text{Submissions Received} - \text{Desk Rejects})$	Measures journal quality by assessing fully-reviewed manuscript acceptance.
Decline Rate	Declined submissions over the time taken for rejection decisions.	$\text{Submissions Declined} / (\text{Days to Reject} \times \text{Submissions Declined})$	Provides insight into the rejection process efficiency.
Accepted-to-Submitted Ratio	Proportion of accepted submissions relative to all submissions received.	$\text{Submissions Accepted} / \text{Submissions Received}$	Shows overall acceptance performance.
Publication Efficiency	Accepted submissions successfully resulting in publications.	$\text{Submissions Published} / \text{Submissions Accepted}$	Measures the journal's success in turning accepted papers into published works.
Submission-to-Publication Ratio	Submissions required per publication.	$\text{Submissions Received} / \text{Submissions Published}$	Shows efficiency in turning submissions into published articles.

8.4. The Growth and Workload Metrics

These metrics examines trends in submissions, acceptances, and publications, while also assessing the editorial workload. It helps to understand journal growth, resubmission patterns, and the average editorial workload over time.

Metric	Description	Equation	Purpose/Insight
Submission Growth	Year-over-year change in submissions received.	$\text{Percentage change of Submissions Received}$	Indicates trends in submission volume.
Acceptance Growth	Year-over-year change in submissions accepted.	$\text{Percentage change of Submissions Accepted}$	Measures the increase in accepted submissions.
Decline Growth	Year-over-year change in submissions declined.	$\text{Percentage change of Submissions Declined}$	Shows trends in declining submission volume.
Publication Growth	Year-over-year change in submissions published.	$\text{Percentage change of Submissions Published}$	Indicates trends in publication rates.
Average Daily Workload	Average number of submissions processed daily.	$\text{Submissions Processed} / 365$	Reflects the average workload for journal editors per day.
Resubmission Rate	Change in submissions received between consecutive years.	$\text{Absolute change in Submissions Received between consecutive years}$	Provides insights into resubmission trends and frequency.
Rolling Acceptance Rate	Smoothed average of acceptance rates over the last three years.	$\text{Rolling average of Acceptance Rate over the last 3 years}$	Shows the trend of acceptance rate over time.
Rolling Rejection Rate	Smoothed average of rejection rates over the last three years.	$\text{Rolling average of Rejection Rate over the last 3 years}$	Tracks rejection rate trends.