

Need for Speed: Investigating Publication Times and Impact Factors of Plastic Surgery Journals

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Background: Prolonged publishing time in scientific journals can be discouraging for researchers because earlier publication can mean a higher h-index and more academic opportunities. In this study, we evaluated the publication time for articles in plastic surgery journals compared with journals in surgery and medicine. We also assessed correlations between publication speed and journal impact factors (IFs).

Methods: The overall indexes of all plastic surgery journals were compared with journals in the discipline of surgery and medicine. In addition, we evaluated original articles published in all plastic surgical journals and the highest-ranking journals from various surgical subspecialties listed in the 2018 Journal Citation Report, assessing the time intervals from submission to publication, submission to acceptance, and acceptance to publication. Correlation between time interval and journal IF were analyzed.

Results: A total of 18 plastic surgery journals were compared with 210 surgical journals. Our study found that the IFs of journals significantly affect submission-to-acceptance times of the articles ($P < 0.05$, Wilcoxon test). The median submission-to-publication time for all plastic surgery and all surgical journals was 29.7 weeks (IQR, 12.1 and 35.8) and 22.1 days (IQR, 18.8 and 36.8), respectively.

Conclusions: There is a significant submission to publication time lag in plastic surgery journals when compared with other nonplastic-surgery journals. There was a positive correlation between submission-to publication time and IF for plastic surgery journals but a negative correlation for surgery journals (Spearman Correlation). In the last 14 years, plastic surgery journals have remained slow in publishing articles. (*Plast Reconstr Surg Glob Open* 2021;9:e3838; doi: [10.1097/GOX.0000000000003838](https://doi.org/10.1097/GOX.0000000000003838); Published online 4 October 2021.)

INTRODUCTION

Over the last three decades, technology has revolutionized our world and daily lives. It takes 2 minutes to bio-print skin tissue,¹ 30 seconds to order an Uber, and less than a few seconds to text someone on the other side of the world. Undisputedly, since the advent of open access journals, electronic submission portals, and preprint servers, the process of peer reviewing and article submission has changed greatly.

A publication in a scientific journal can mean the difference between receiving credit or not. Such was the case in the discovery of DNA structure for which Rosalind Franklin received little credit (if any).² Despite Franklin producing clear and accurate diffraction images of DNA crystals, it was ultimately Crick and Watson's 900-word article published in the 1953 issue of *Nature* that led to their fame and Nobel Prize.³

The significant time from initial submission to publishing in scientific journals remains a challenge and disappointing experience at best. In a review of randomized vaccine trials, Manzoli et al reported a median of 26 months from completion to publication.⁴ In Reyes et al's meta-analysis of pediatric antidepressant clinical trials, they noted that trials with negative findings had a significantly longer time to publication compared with those

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with positive findings.⁵ Other studies have also confirmed this time lag bias.^{6,7} This suggests that studies with positive results will appear at the forefront of scientific literature several years before those with negative results. While both require similar rigor and resources and are equally important, it is high time that this systemic publication bias is curtailed. Evidently, it is important that journals minimize the publication delays, which would benefit patients, authors, and the values of the standardized measures created by the Institute of Scientific Information's Journal Citation Report.

The impact factor (IF), cited half-life, and immediacy index are three standardized measures created by the Journal Citation Report to provide insight on the citations received by a specific journal's articles over time. The journal IF represents the average number of citations that articles from a journal receive over the previous 2 years. However, this may vary greatly for each article because there are various other factors that affect how much a publication attracts attention. The cited half-life represents the number of years required of current citations of all the articles in a journal, to decline to 50% of their initial value. The immediacy index measures how frequently the average articles of a journal are cited in the current year.

To the best of our knowledge, a similar study in 2007 was conducted for plastic surgery journals.⁸ Labanaris et al reported that plastic surgical journals demonstrated low overall index values and a greater turnaround time in comparison with journals in other disciplines of surgery and medicine. In our study, we compared the publication speed of the articles in plastic surgery journals compared with journals in other disciplines of surgery and medicine. Our study additionally assessed the changes in publication speed of plastic surgery journals across the last 14 years.

METHODS

This methodology has been validated from several similar publications.⁸⁻¹⁰ In total, five tables were created using the Journal Citation Report and open access journal articles. For the first table, the 2019 Journal Citation Report was used to compare overall indexes for surgical journals and various disciplines of medicine ($n = 36$). The indexes studied were the highest IF, average IF, cited half-life, immediacy index, and the total number of journals in the discipline. For the second table, all surgical disciplines ($n = 16$) were compared with each other according to the above-mentioned indexes. For the third table, all plastic surgery journals were assessed according to their IFs throughout the years of 2014 to 2019 by the Journal Citation Report.

To assess publication times, we evaluated a total of 12 original articles provided by each of the highest-ranking journals of each surgical discipline and compared this with 12 original articles provided by each of the plastic surgical journals listed in the 2019 Journal Citation Report. Twelve articles were chosen to have an accurate representation across the year and so this study could be consistent with Labanaris et al's study methodology. All articles were chosen at random between January 1, 2018 and

December 31, 2018. If a journal had 12 issues published per year, one article from each issue was selected. When the number of issues published per year varied, 12 articles were chosen evenly across all available issues. Only original research articles were included. The exclusion criteria were supplementary issues, review articles, editorials, and correspondences.

From each of the selected articles, the dates of submission, acceptance, and publication were obtained. The date of submission was defined as the date when the article was submitted to the journal. Date of acceptance refers to the date on which communication of acceptance was made from the publisher to the author. Date of publication denotes the date on which the article was published either online in advance or in print (for journals with no advanced online publication feature). The periods taken from submission to revision, from submission to acceptance, from acceptance to publication, and from submission to publication were calculated for each journal.

Statistical Analysis

Statistical analysis was conducted using SAS 9.4 software (SAS, Cary, N.C.). A univariate analysis was performed to check the normality of the data, and to evaluate the quartiles. Pearson correlation was utilized to analyze the association between IF and submission to acceptance, acceptance to publication, and submission to publication, individually, stratified by journal category (surgery versus plastic surgery). Scatter plots were created to demonstrate interrelationship between various variables.

RESULTS

According to the 2019 Journal Citation Report, approximately 36 distinct medical disciplines were identified and further assessed. In [Table 1](#), the number of journals for each medical discipline ranged from 13 for the discipline of psychology (psychoanalysis) to 271 for neurosciences (mean = 103.8, median = 79.5). The discipline of surgery had 210 journals. The highest IF for each medical discipline ranged from 1.044 for psychology (psychoanalysis) to 292.278 for oncology (mean = 27.757, median = 15.392). The highest IF for the discipline of surgery was 13.625. The median IF for each medical discipline ranged from 0.416 for psychology (psychoanalysis) to 3.348 for immunology (mean = 2.250, median = 2.238). The median IF for the discipline of surgery was 1.901. The cited half-life for each medical discipline ranged from 6.3 years for the discipline of medicine, research & experimental to more than 10.0 years for the following disciplines: psychology (psychoanalysis), ornithology, psychology (social), psychology (applied), psychology, and physiology. Because the specifically cited half-life was not available for those disciplines with cited half-lives greater than 10 years, a mean could not be calculated (median = 8.0). The cited half-life for the discipline of surgery was 8.0. The immediacy index for each medical discipline ranged from 0.267 for psychology (psychoanalysis) to 4.357 for cardiac & cardiovascular systems (mean = 0.946, median = 0.868). The immediacy index for the discipline of surgery was 0.716.

Table 1. Overall Indexes for Surgical Journals versus Various Medical Journals

Discipline	Highest Impact Factor	Median Impact Factor	Cited Half-life (y)	Immediacy Index	No. Journals
Oncology	292.278	3.297	6.5	1.115	244
Medicine, general & internal	74.699	1.681	7.9	0.988	165
Pharmacology & pharmacy	64.797	2.678	7.5	0.866	270
Psychiatry	40.595	2.500	8.1	1.033	155
Immunology	40.358	3.348	7.7	1.200	158
Medicine, research & experimental	36.130	3.119	6.3	0.760	138
Neurosciences	33.654	3.047	8.7	1.032	271
Genetics & heredity	33.133	2.809	8.4	0.924	177
Clinical neurology	30.039	2.611	8.0	0.880	204
Physiology	25.588	2.456	>10.0	1.000	81
Respiratory system	25.094	2.680	7.3	1.266	64
Cardiac & cardiovascular systems	23.603	2.375	7.0	4.357	138
Peripheral vascular disease	23.603	2.669	9.0	1.190	65
Psychology	20.850	2.154	>10.0	0.802	77
Urology & nephrology	20.711	2.089	7.8	0.929	85
Hematology	17.543	2.826	7.8	1.264	76
Pathology	16.750	2.085	8.7	0.789	78
Virology	15.923	2.824	7.6	0.925	37
Ophthalmology	14.860	1.977	8.8	0.623	60
Psychology, applied	14.333	2.128	>10.0	0.784	84
Pediatrics	13.946	1.765	8.1	0.609	128
Psychology, clinical	13.692	2.013	9.6	0.878	131
Surgery	13.625	1.901	8.0	0.716	210
Radiology, nuclear, medicine & medical imaging	12.740	2.321	7.7	0.839	133
Obstetrics & gynecology	12.684	2.095	7.9	0.683	82
Psychology, social	12.321	1.881	>10.0	0.669	64
Chemistry, medicinal	12.000	2.733	7.5	0.804	61
Dermatology	8.277	2.118	7.8	0.869	68
Anesthesiology	7.067	2.506	8.7	1.164	32
Psychology, developmental	7.035	1.828	9.9	0.808	77
Neuroimaging	5.902	2.528	7.7	1.076	14
Emergency medicine	5.799	1.656	7.1	0.568	31
Anatomy & morphology	3.298	1.634	9.5	0.531	21
Medicine, legal	2.652	1.372	7.9	0.466	16
Ornithology	2.628	0.881	>10.0	0.373	28
Psychology, psychoanalysis	1.044	0.416	>10.0	0.267	13

In Table 2, all surgical journals (n = 210) were identified and categorized into 16 surgical disciplines and these were further assessed. The number of journals for each surgical discipline ranged from one for the discipline of surgical radiology to 69 for general surgery (mean = 13, median = 8). There were 18 plastic surgery journals. The highest IF for each medical discipline ranged from 2.068 for maxillofacial surgery to 13.626 for general surgery

(mean = 5.041, median = 4.135). The highest IF in plastic surgery was 4.209. The mean IF for each medical discipline ranged from 1.439 for maxillofacial surgery to 3.666 for transplantation surgery (mean = 2.364, median = 2.324). The mean IF in plastic surgery was 1.829. The median IF for each medical discipline ranged from 1.347 for maxillofacial surgery to 3.177 for transplantation surgery (mean = 2.147, median = 2.062). The median IF in

Table 2. Overall Indexes for Journals of Surgical Disciplines

Surgical Disciplines	Highest Impact Factor	Mean Impact Factor	Median Impact Factor	Cited Half-life (years)	Immediacy Index	No. of Journals
Transplantation surgery	8.865	3.666	3.177	10.4	1.077	9
Oncology surgery	4.061	2.954	2.771	7.1	0.650	7
Surgical techniques	7.341	2.715	1.996	9.0	0.850	19
–Arthroscopy						
–Microscopy						
–Endoscopy						
Pathology surgery	4.958	2.714	2.769	11.6	0.609	9
Otorhinolaryngology surgery	3.848	2.713	2.713	11.5	0.816	4
Surgical radiology	2.473	2.473	2.473	4.0	0.448	1
Orthopedics surgery	4.578	2.407	1.967	14.0	0.455	12
Vascular surgery	3.405	2.389	2.513	9.3	0.469	4
General surgery	13.625	2.259	1.912	12.4	0.600	69
Neurosurgery	8.234	2.152	1.731	17.9	0.664	26
Laser surgery	3.020	2.137	2.130	10.5	0.599	5
Ophthalmology surgery	2.711	2.129	2.129	9.9	0.376	3
Pediatric surgery	2.807	2.024	1.811	10.7	0.425	4
Cardiovascular surgery	4.451	1.835	1.490	9.9	0.669	15
Plastic and hand surgery	4.209	1.829	1.429	13.4	0.462	18
Maxillofacial surgery	2.068	1.439	1.347	13.7	0.317	5

plastic surgery was 1.429. The cited half-life for each medical discipline ranged from 4.0 years for surgical radiology to 17.9 years for neurosurgery (mean = 11.0 years, median = 10.6 years). The cited half-life for the discipline of plastic surgery was 13.4 years. The immediacy index for each medical discipline ranged from 0.317 for maxillofacial surgery to 1.077 for transplantation surgery (mean = 0.593, median = 0.600). The immediacy index for the discipline of plastic surgery was 0.462.

In Table 3, the IFs for all plastic surgery journals from 2014 to 2019 were identified and further assessed. The variation in mean IF of the plastic surgical journals for the period from 2014 to 2019 increased from 1.216 to 1.829. The variation in median IF across the same time period also showed an increase from 0.956 to 1.429. The number of plastic surgery journals has also increased from 15 journals in 2014 to 18 journals in 2019 (Table 3).

In Table 4, all highest-ranking journals from each surgical discipline listed in the Journal Citation Report for 2018 were identified, and the time interval from submission to acceptance to the publication of an article was assessed. A total of 16 journals were included. Among them, nine (56.3%) and four (31.3%) did not report the date of article submission and acceptance. The time intervals from article submission to publication ranged from 16.3 weeks for *Annals of Surgical Oncology* to 57.9 weeks for *Plastic and Reconstructive Surgery* (mean = 28.2 weeks, median = 29.7 weeks). The time intervals from article acceptance to publication ranged from 1.8 weeks for *International Journal of Computer Assisted Radiology* to 29.0 weeks for *Plastic and Reconstructive Surgery* (mean = 10.3 weeks, median = 7.0 weeks). The time intervals from article submission to acceptance ranged from 15.5 weeks for *Journal of Vascular Surgery* to 28.9 weeks for *Plastic and Reconstructive Surgery* (mean = 18.2 weeks, median = 21.0 weeks). The annual number of issues ranged from six issues for *Seminars in Pediatric Surgery* to 24 issues for *Journal of Bone and Joint Surgery – American Volume*.

In Table 5, all plastic surgery journals (n = 18) listed in the Journal Citation Report for 2018 were identified, and

the time interval from submission to acceptance to the publication of an article was assessed. Among them, nine (50.0%) and six (33.3%) did not report the date of article submission and acceptance. The time intervals from article submission to publication ranged from 16.3 weeks for *Handchirurgie Mikrochirurgie Plastische Chirurgie* to 40.0 weeks for *Plastic and Reconstructive Surgery*. The time intervals from article acceptance to publication ranged from 2.1 weeks for *Journal of Plastic Reconstructive and Aesthetic Surgery* to 26.1 weeks for *Annals of Plastic Surgery*. The time intervals from article submission to acceptance ranged from 0.6 weeks for *Handchirurgie Mikrochirurgie Plastische Chirurgie* to 28.4 weeks for *Journal of Plastic Reconstructive and Aesthetic Surgery*. The annual number of issues ranged from two issues for *Seminars In Plastic Surgery* to 12 issues for *Plastic and Reconstructive Surgery*, *Journal of Plastic Reconstructive and Aesthetic Surgery*, and *Annals of Plastic Surgery*.

When analyzing both Tables 4 and 5, there was a statistically significant difference in the IFs of plastic surgery and other surgical journals based on their reporting of submission to acceptance times of the articles ($P < 0.05$, Wilcoxon test) (Fig. 2). There was also a positive Spearman correlation of 0.38 between acceptance-to-publication time and IF for plastic surgery journals but no correlation for surgery (Fig. 1). A positive Spearman correlation of 0.736 and 0.496 is noted between IFs and submission to-publication and -acceptance times, respectively, for plastic surgery journals (Figs. 2, 3). Hence, as the IF for plastic surgery journals increases, the number of weeks from submission to acceptance increases as well. Interestingly, surgery journals were observed to publish faster when the IF was higher. This needs to be interpreted with caution because the range of IFs for plastic surgery is much smaller than for surgery. When comparing the time for submission to acceptance and acceptance to publication, there was a negative correlation of -0.174 for plastic surgery journals; yet, there was a strong positive correlation of 0.652 for surgery journals (Fig. 4).

Table 3. Change in IFs for Plastic Surgery Journals from 2014 to 2019

Plastic Surgery Journals	2014	2015	2016	2017	2018	2019
<i>Plastic and Reconstructive Surgery</i>	2.993	3.087	3.843	3.621	3.946	4.209
<i>Aesthetic Surgery Journal</i>	1.373	1.699	1.792	1.928	2.418	3.799
<i>JAMA Facial Plastic Surgery</i>	1.161	1.744	2.703	2.388	3.056	3.787
<i>Journal of Plastic Reconstructive and Aesthetic Surgery</i>	1.421	1.743	2.048	2.158	2.228	2.390
<i>Journal of Hand Surgery-European Volume</i>	2.037	1.868	2.191	2.648	2.225	2.290
<i>Clinics in Plastic Surgery</i>	0.906	1.065	1.658	2.016	1.215	1.959
<i>Aesthetic Plastic Surgery</i>	0.956	1.065	1.320	1.484	1.399	1.798
<i>Facial Plastic Surgery Clinics of North America</i>	0.722	0.614	1.568	1.133	1.157	1.543
<i>Journal of Hand Therapy</i>	2.000	1.770	1.159	1.040	1.532	1.504
<i>Annals of Plastic Surgery</i>	1.494	1.535	1.596	1.536	1.448	1.354
<i>Ophthalmic Plastic and Reconstructive Surgery</i>	0.881	0.991	1.242	1.283	1.134	1.331
<i>Seminars in Plastic Surgery</i>	—	0.483	0.845	0.800	0.561	1.300
<i>Journal of Plastic Surgery and Hand Surgery</i>	0.695	0.791	0.901	1.100	1.037	1.235
<i>Facial Plastic Surgery</i>	0.640	0.631	0.761	0.813	1.329	1.108
<i>Hand Surgery and Rehabilitation</i>	—	—	—	0.308	0.571	0.961
<i>Handchirurgie Mikrochirurgie Plastische Chirurgie</i>	0.651	0.692	0.700	0.513	0.809	0.840
<i>Plastic Surgery</i>	—	0.022	0.202	0.606	0.667	0.754
<i>Annales de Chirurgie Plastique Esthétique</i>	0.306	0.581	0.865	0.585	0.714	0.752
Mean	1.216	1.199	1.494	1.442	1.525	1.829
Median	0.956	1.065	1.32	1.208	1.272	1.429

Table 4. Comparison of Highest-ranking Journals from Each Surgical Discipline in January–December 2018

Highest Ranked Journal	IF	Submitted–Accepted (wk)	Accepted–Published (wk)	Submitted–Published (wk)	No. Issues
<i>JAMA Surgery</i>	10.668	—	13.7	—	12
<i>American Journal of Transplantation</i>	7.163	15.7	3.1	18.8	12
<i>Annals of Thoracic Surgery</i>	3.919	—	9.4	—	12
<i>Journal of Vascular Surgery</i>	3.243	15.5	21.2	36.8	12
<i>Journal of Neurology Neurosurgery and Psychiatry</i>	8.327	16.7	5.4	22.1	12
<i>Journal of Refractive Surgery</i>	3.000	19.3	9.8	29.1	12
<i>International Journal of Oral and Maxillofacial Surgery</i>	1.961	—	3.1	—	12
<i>Jama Otolaryngology-Head and Neck Surgery</i>	3.502	—	11.2	—	12
<i>Lasers in Surgery and Medicine</i>	3.262	—	3.7	—	10
<i>Journal of Bone and Joint Surgery-American Volume</i>	4.716	—	—	—	24
<i>Plastic and Reconstructive Surgery</i>	3.946	28.9	29.0	57.9	12
<i>Seminars in Pediatric Surgery</i>	2.462	—	—	—	6
<i>American Journal of Surgical Pathology</i>	6.155	—	—	—	12
<i>International Journal of Computer Assisted Radiology and Surgery</i>	2.155	19.0	1.8	20.7	12
<i>Annals of Surgical Oncology</i>	3.681	—	—	16.3	12
<i>Endoscopy</i>	6.381	—	—	—	12

DISCUSSION

In this study, we compared the publication speed of the articles in plastic surgery journals compared with journals in other disciplines of surgery and medicine. In comparison with Labanaris et al's 2007 bibliometric assessment of plastic surgery journals, our study notes that there have been several positive changes, whilst other issues still remain. Previous studies have conducted bibliometric assessments specific to their specialties.^{8–10}

Fourteen years later, plastic surgery journals collectively still demonstrate low index values and a greater turnaround time in comparison with journals in other disciplines of surgery and medicine. Despite a steady increase in all surgical disciplines' journal IFs, plastic surgery still persists as the second-lowest median IF and mean IF (Table 2). Consistent with previous results, plastic surgery continues to have a relatively large number of journals and cited half-life, compared with other surgical disciplines. In contrast, the highest IF journal within the plastic surgery discipline has moved up to near the top relative to other surgical disciplines (Table 2). Despite

this, it is important to interpret these results with caution as assessing only the highest IF journal in a discipline does have its biases.

In considering the plastic surgical journal IFs for the period from 2014 to 2019, it is noticeable that 16 of the 18 journals have displayed an increase in IF value. However, only the *Aesthetic Surgery Journal*, *Canadian Plastic Surgery*, *Hand Surgery and Rehabilitation*, and *Journal of Plastic Reconstructive and Aesthetic Surgery* have consistently increased their IF every year. The IFs of all other plastic surgical journals fluctuated during this period (Table 3).

In regard to publication speed, it is important to note that the overall time has reduced by ~9 weeks for all surgical disciplines, including plastic surgery. However, it is evident that plastic surgery journals still have the greatest article submission to publication time in comparison with other surgical journals. There is a general positive correlation between the plastic surgery IFs and article submission to publication time. This is in good agreement with logical expectations, as a journal's high IF may indicate the journal's published papers are of high relevance and

Table 5. Comparison of All Plastic Surgical Journals Listed in 2018 by the Journal Citation Report

Plastic Surgery Journal	Impact Factor	Submitted–Accepted (wk)	Accepted–Published (wk)	Submitted–Published (wk)	No. Issues
<i>Plastic and Reconstructive Surgery</i>	3.946	23.3	25.8	49.0	12
<i>Aesthetic Surgery Journal</i>	3.480	—	6.5	—	11
<i>JAMA Facial Plastic Surgery</i>	3.056	—	16.8	—	6
<i>Journal of Plastic Reconstructive and Aesthetic Surgery</i>	2.228	28.4	2.1	30.4	12
<i>Journal of Hand Surgery-European Volume</i>	2.225	24.7	4.6	29.3	10
<i>Clinics in Plastic Surgery</i>	1.215	—	—	—	4
<i>Aesthetic Plastic Surgery</i>	1.399	18.4	3.5	22.0	6
<i>Facial Plastic Surgery Clinics of North America</i>	1.157	—	—	—	4
<i>Journal of Hand Therapy</i>	1.532	26.9	8.9	35.8	4
<i>Annals of Plastic Surgery</i>	1.448	11.1	26.1	37.3	12
<i>Ophthalmic Plastic and Reconstructive Surgery</i>	1.134	—	—	—	6
<i>Seminars in Plastic Surgery</i>	0.561	—	—	—	2
<i>Journal of Plastic Surgery and Hand Surgery</i>	1.037	18.7	7.2	25.9	2
<i>Facial Plastic Surgery</i>	1.329	—	—	—	6
<i>Hand Surgery and Rehabilitation</i>	0.571	23.3	6.7	30.0	6
<i>Handchirurgie Mikrochirurgie Plastische Chirurgie</i>	0.809	0.6	10.0	10.6	6
<i>Plastic Surgery</i>	0.667	—	—	0	4
<i>Annales de Chirurgie Plastique Esthetique</i>	0.714	6.4	5.6	12.1	5

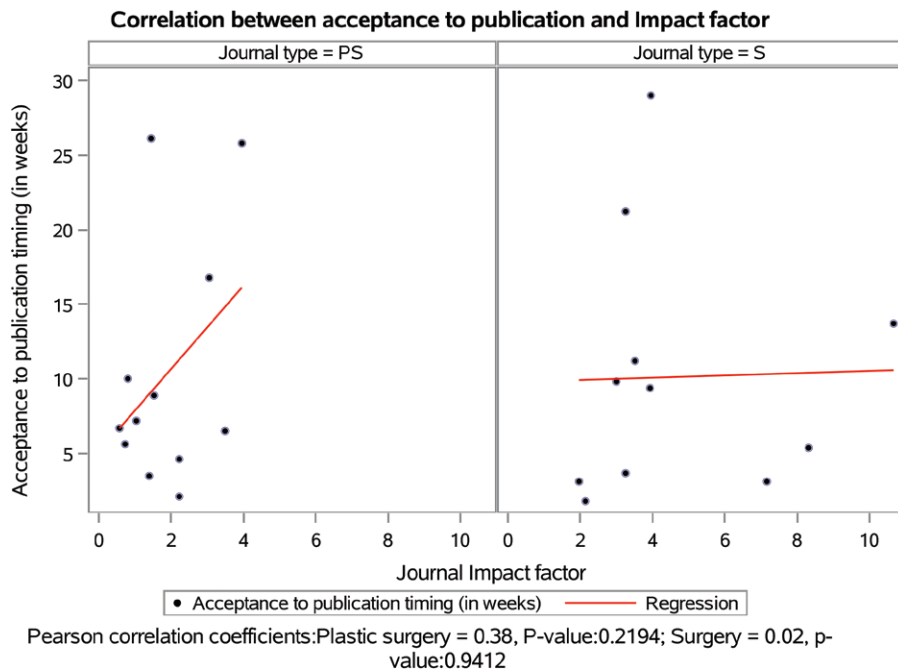


Fig. 1. Scatterplots showing correlation between acceptance to publication and IFs for plastic surgery journals and surgery journals. There is a positive correlation for plastic surgery journals ($r = 0.38$, $P = 0.2194$) and no correlation for surgery journals ($r = 0.02$, $P = 0.9412$). PS, Plastic surgery; S, Surgery.

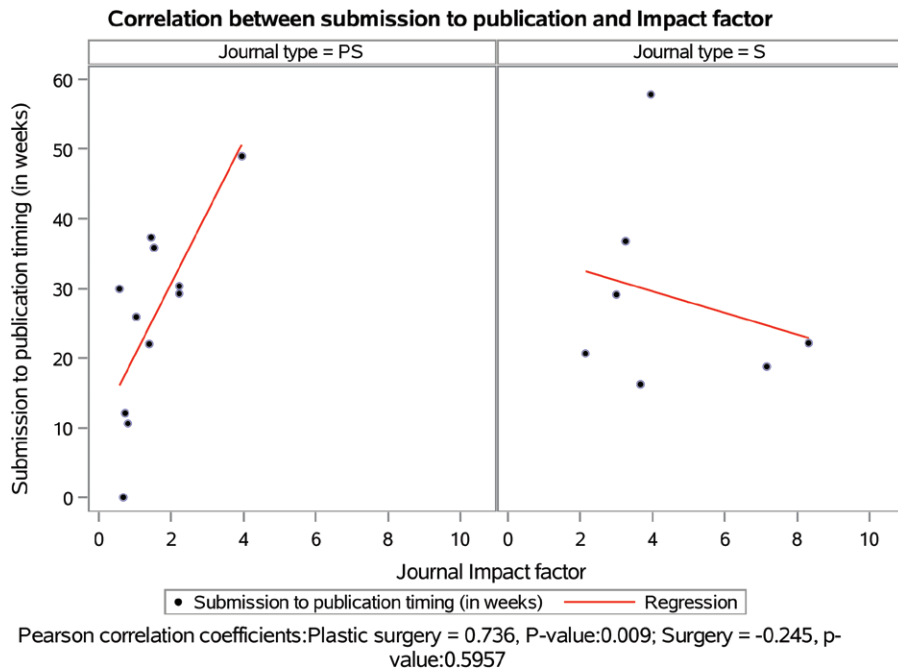


Fig. 2. Scatterplots showing correlation between submission to publication and IFs for plastic surgery journals and surgery journals. There is a positive correlation for plastic surgery journals ($r = 0.736$, $P = 0.009$) and a negative correlation for surgery journals ($r = -0.245$, $P = 0.5957$). PS, Plastic surgery; S, Surgery.

hence, that the journal needs to thoroughly peer-review the article before publication. Unfortunately, Labanaris et al.'s study did not include statistical analysis or assess for correlations between variables and so, it was not possible

to assess for a change in correlation between plastic surgery journal IFs and publication speed across 14 years.

Publication speed consists of two parts. Firstly, the time between submission to acceptance, which includes time spent

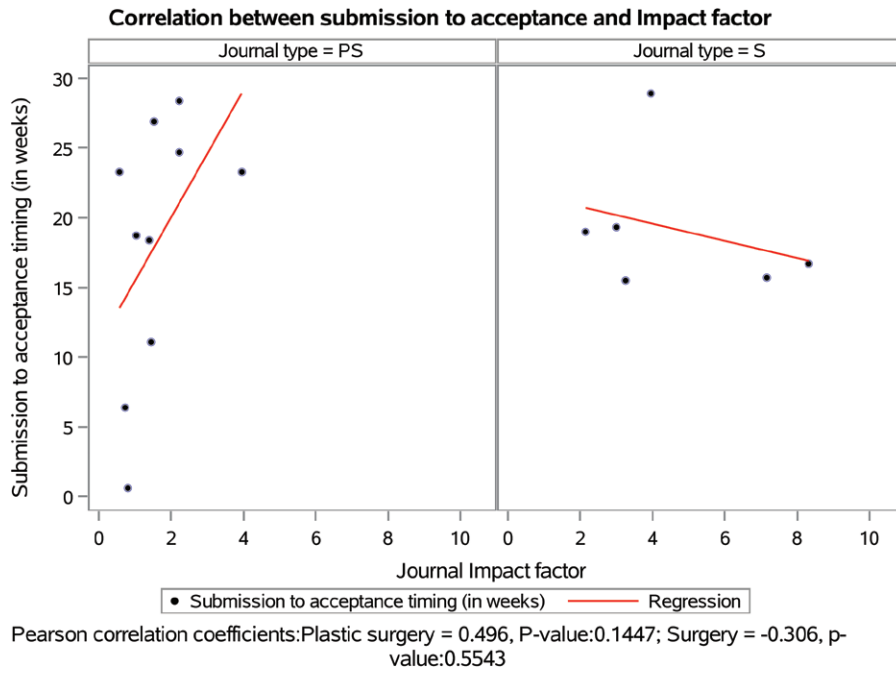


Fig. 3. Scatterplots showing correlation between submission to acceptance and IFs for plastic surgery journals and surgery journals. There is a positive correlation for plastic surgery journals ($r = 0.496, P = 0.1447$) and a negative correlation for surgery journals ($r = -0.306, P = 0.5543$). PS, Plastic surgery; S, Surgery.

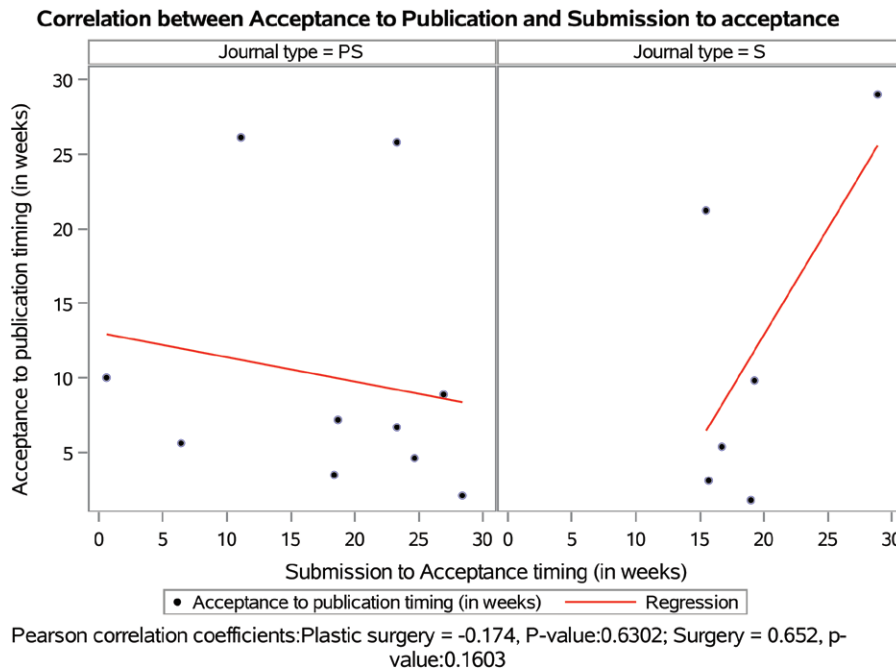


Fig. 4. Scatterplots showing correlation between acceptance to publication time and submission to Acceptance for plastic surgery journals and surgery journals. There is a negative correlation for plastic surgery journals ($r = -0.1742, P = 0.6302$) and a positive correlation for surgery journals ($r = 0.652, P = 0.1603$). PS, Plastic surgery; S, Surgery.

on peer review and sending revisions back to the authors, and secondly, the time spent between acceptance to publication, which includes further edits, typesetting, and printing.⁹ Hence, the revision period by authors can be variable and

may impact the journal’s overall reported publication speed. Despite being statistically insignificant, this may explain why the correlation between journal IF and submission to acceptance time is stronger than acceptance to publication.

LIMITATIONS

Our study has several limitations. Firstly, comparing journal IFs across different disciplines is an intrinsic weakness of the Journal Citations Report. Also, every journal did not report submission, acceptance, and/or publication dates, which resulted in missing data and requires correlation data to be interpreted with caution. Also, while the plastic surgery journals had low IFs, the surgery journals had spread out distribution, which might bias the results. Additionally, given that each article is unique with its content, authors, and its peer reviewing authors, some articles will require a lengthy amount of time to provide valuable feedback. On the other hand, upon receiving feedback, some articles can be revised quickly, whereas others will require more time. Our study design assumes uniformity among articles across different medical disciplines.

CONCLUSIONS

There is a significant submission to publication time lag in plastic surgery journals when compared with other surgical journals. There was a positive correlation between submission to publication and IFs for plastic surgery journals but a negative correlation for surgery journals (Spearman correlation). For the last 14 years, plastic surgery journals have remained relatively slow in publishing journals in comparison with other surgical disciplines. Plastic surgery journals should speed up the publication process, and this would benefit patients, authors, and the values of the standardized measures created by the Institute of Scientific Information's Journal Citation Report.

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