Trends in Female Abstract Authorship at the Craniomaxillofacial Paper Session of Plastic Surgery: The Meeting, 2016-2020

[1]Avo Bosnoyan OMSII, [1]Mason Kyle OMSIII, [1]Mitchell Rentschler OMSIII, [1]Nareg Thomas OMSII, [1]Alisa Liberman OMSIV, [1]Natalie Bell OMSII, [1]Jessica Bristol OMSII, [1]Frank Kirk OMSII, [1]Elizabeth Ferguson MD, [2]Eugene Sidoti MD and [1]John Ashurst DO

[1]Arizona College of Osteopathic Medicine – Midwestern University, Glendale, AZ; [2]Valleywise Health Medical Center, Phoenix, AZ

Introduction

The demand for research productivity in surgical subspecialties has risen in recent decades. Traditionally, male authors have occupied key authorship positions in research projects. However, recent initiatives have sought to promote female researchers, leading to increased female authorship. Despite this progress, little is known about whether traditional gender disparities persist in the transition from abstract presentation to manuscript publication.

Objective

This study investigates whether gender influences authorship position and retention in the transition from abstract presentation to manuscript publication in the Craniomaxillofacial Paper session at *Plastic Surgery: The Meeting* (2016–2020).

Methods

Study Design: Cross-sectional analysis of abstracts from *Plastic Surgery: The Meeting* (2016-2020).

Data Collected:

- Authorship position (first, second, and last)
- Gender of authors
- Publication status

Analysis Approach:

- Gender was determined using publicly available databases.
- A modified intention-to-treat analysis included all identified second and last authors to minimize selection bias.
- Statistical analyses: Chi-square tests for categorical data and Mann-Whitney U tests for continuous data.

Results

Authorship Position	Overall (n=649)	Male (n=454)	Female (n=195)	p-value
First Author	222	138 (62%)	84 (38%)	<0.001
Second Author	203	132 (65%)	71 (35%)	
Last Author	224	184 (82%)	40 (18%)	

Table 1: Chi Square analysis (Male and Female Craniomaxillofacial 2016-2020)

	Male (n=137) n(%)	Female. (n=83) n(%)	p-value
Second Author			
Male	86 (63)	43 (52)	0.071
Female	37 (27)	32 (39)	
Last Author			
Male	117 (85)	63 (76)	<0.001
Female	18 (13)	21 (25)	
Sample size	44.5 (17-197)	42.5 (15-124)	0.259
Manuscript Publication	55 (40)	35 (42)	0.905
First author same as abstract	43 (78)	24 (69)	0.42
Last author same as manuscript	44 (80.00)	35 (100.00)	**0.003**

Table 2: Chi Square analysis of characteristics of abstracts overall and stratified by first author gender (Craniomaxillofacial 2016-2020)

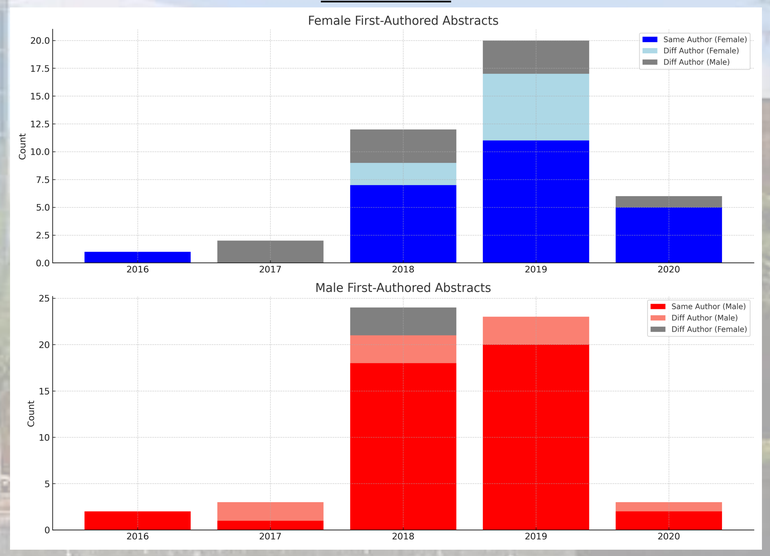
Discussion

Gender disparities persist in authorship positions within the Craniomaxillofacial Paper session. Male authors continue to dominate first and last authorship positions, despite efforts to promote gender equity.

Notably, male last authors were more frequently replaced upon manuscript publication, whereas female last authors retained their positions.

The absence of a significant difference in publication rates suggests that factors other than gender influence manuscript acceptance, but authorship composition changes highlight an area for further investigation.

Results



Graph 1: Authorship characteristics on manuscript publications from abstracts with female and male first authors (Craniomaxillofacial 2016-2020)

Conclusion

- Female first authors are underrepresented in presented abstracts.
- Gender does not impact the likelihood of manuscript publication.
- Male last authors are more frequently replaced upon manuscript publication, while female last authors tend to retain their position.
- Gender patterns persist in first and last author replacement.
- Further research is needed to explore the causes of these disparities and inform policies for equitable authorship opportunities.

References

Acknowledgments

We sincerely thank Dr. Ashurst, Dr. Sidoti, and Dr. Ferguson for their invaluable guidance and support, which were instrumental in this project.

Midwestern University

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