



WWJMRD2022; 8(03):100-102
www.wwjmr.com
International Journal
Peer Reviewed Journal
Refereed Journal
Indexed Journal
Impact Factor SJIF 2017:
5.182 2018: 5.51, (ISI) 2020-
2021: 1.361
E-ISSN: 2454-6615
DOI: 10.17605/OSF.IO/MYKTN

Sazir Nsubuga Mayanja
University of Kigali, Rwanda.

Mabingo Sharif Hakim
Cavendish University

A Concise Review of Literature on bias against Women in Academia, Research and Leadership in Higher Learning Institutions

Sazir Nsubuga Mayanja, Mabingo Sharif Hakim

Abstract

Underrepresentation of women in Academia, Research and Leadership in Higher Learning Institutions is a topical and contentious issue. In this article representative cases from various regions of the world have been used to reveal the gravity of the issue, following extensive review of available literature. Findings were analysed, synthesised, concisely summarised and presented. It was conclusively established gender bias widely exists in what are expected to be institutions guided by liberalism, enlightenment impartiality and clear-headedness, the universities. This must change in the modern knowledge society for balanced development to take place globally.

Keywords: Gender Bias, underrepresentation, citation, funding.

1.0 Introduction

Production, reproduction and cementing social relations, roles euphemistically referred to as the triple burden, have always been carried out by women in society admirably and heroically, even in sometimes very challenging circumstances. Unfortunately, they have been consistently, unjustly and most times deliberately discriminated against.

2.0 Methodology

Rigorous and extensive review of literature was carried out. The findings were analysed, synthesised and concisely summarised and presented mostly by qualitative narrative supported by minimal quantitative data.

3.0 Literature Review

Although the literature was extensively reviewed, most recent research findings in the respective areas was emphasised.

3.1 Women in Leadership in Academia

Six misconceptions or views held by some members of society, namely, constraints by society and social norms, restrictions regarding how women contribute to development, gender stereotypes, lack of understanding of how gender plays out in organizations, association of leadership with men by society and intense examination of women in leadership are given as to why women are discriminated against.^[1] They are closely associated with what has been described as a faulty or leaky pipeline which is deliberately aligned to discriminate against women ^[2]. However, proponents of the skewed thinking are increasingly being proved wrong. Evidence of this are the many women leaders to have been occupying or currently at the top positions in corporate and state governance, especially in the two recent decades ^[3] Historical inequities partly explain why women remain underrepresented relative to men across almost all Science and engineering (S&E) fields, even when research takes into account factors of demographic inertia such as time lags in career stage transitions.^[4]

Correspondence:

Sazir Nsubuga Mayanja
University of Kigali, Rwanda.

The assumedly emancipated western world in terms of gender empowerment are not encouraging. The American Council on Education and the Center for Policy Research and Strategy (ACE/CPRS), reported that female participation on US university and college boards of trustees public institutions was 31.5% in 2015 unimpressively rising from 28.4% in 2010. Percentages for private institutions improved slightly from 30.2% in 2010 to 31.7% during the period. Only 27% of universities and colleges in the USA had women as presidents as of 2011. The notable difference was between public and public institutions where the former had 29.1% and the later 24.1% women as presidents, respectively. [5] The report by

the American College President Study 2017 (ACPS) presented the same position of women underrepresentation in leadership at institutions of higher learning continue. [6][7] Gender bias begins long before the struggle for leadership positions. In an experiment involving online classes, the genders of some of the assistant instructors were falsified. Those identified as male were rated higher than those identified as males, regardless of the instructor's actual gender, demonstrating gender bias.[8]

3.2 Research Supervision

Table 1 below present a representative picture of the global situation after extensively review of research studies.

Table 1: Principal Supervisors at Colleges at Makerere University, Kampala 2018.

College	Female	Male	Total	% of female
CAES College of Agricultural & Environment Sciences	22	104	126	17.5%
College of Engineering, Design, Art and Technology	15	95	110	13.6%
College of Education and External Studies	4	29	33	12%
College of Health Sciences	15	38	53	28.3%
College of Humanities and Social Sciences	23	50	73	31.5%
College of Business and Management Science	2	42	44	4.5%
College of Computing and Information Science	14	26	40	35%
College of Natural Sciences	13	50	63	21%
College of Veterinary Medicine, Animal Resources and Bio-Security	14	47	61	23%
Total / average	122	488	610	20%

Source: Gradtrack (www.gradtrack.ac.ug)

Gradtrack enables analysis of human resource by gender in respective Colleges. The average of 20 % is representative of most universities.

4.0 Possible Existence of Citation Groups

In a study where more than 3,000 articles published between 1980 and 2006 in twelve influential peer-reviewed were examined [9] Women are systematically cited less than men after controlling for a large number of variables including year of publication, venue of publication, substantive focus, theoretical perspective, methodology, tenure status, and institutional affiliation. It was further

observed that articles authored by women were systematically less central than articles authored by men, all else equal. Surprisingly, women tended to cite themselves less than men. On the other hand, articles published by men are less likely to cite work by women than are articles published by women. [10][11][12]

Table 2 below presents findings on citations. Among reasons for the patterns noted is the very likely existence of citation groups dominated by men. Unfortunately, the rationale for doing so appears to be compounded by parameters such as colour and academic institutional biases.

Table 2: Dyadic citations by gender, percentages represent the mean for all articles of each type.

Type citing	All articles	Male authored	Female authored	Co-authored
All male citing	71.07%	75.00%	59.6%	63.17%
All female citing	9.62%	8.65%	18.56%	10.03%
Coed citing	10.92%	9.63%	14.96%	18.2%

Source: Daniel Maliniak (2013)

There is abundant evidence of low levels of confidence in scientific findings by women in Scientific, Technological, Engineering and Mathematical (STEM) areas as a result of which they are likely to be cited. [13] In a study of likelihood of funding for research, it was noted that it was only in engineering that women were likely to obtain funding for research than men, followed by social, behavioral and economic sciences, biological science, geo sciences, computers and information science followed by mathematical and physical sciences in decreasing order. [14]

4.1 Gender Bias and Funding for Research

It has been consistently established by research that discrimination exists with regard to funding research on the basis of gender. [15][16][17]

Research on funding patterns are paradoxical, indicating

that funders in fields with more women, mainly the biological sciences, receive fewer grant submissions. This is partly due to lower retention of women in active research at all career stages (19.5% higher risk of leaving academia each year), relative to men, especially in fields with more women. [18]; In a study of Leiden University International Study Fund (LISF), for the period 1995 to 2018, in which data from 2651 applications was analysed, funds had been dedicated to support students to study or conduct research abroad. It was established that men and women applied equally often to the LISF. Findings were that women had a lower success rate, which seemed to only get worse over recent years. [19] Inequalities in grant allocations do not just happen. They occur through acts and the failures to act by the people who run societies and institutions. [20]

4.2 Double Jeopardy and The Requirement to Prove One's Ability

In a study it was established that nearly two-thirds of the women surveyed (63.9%) had been discriminated against on the basis of gender. Of these 66.7% were required to provide more evidence of competence than men. Worse still, the discriminated was stratified in the way they experienced bias. In increasing order whites (62.7%), Asian-American (63.6%), Latinos (64.5%) and Blacks (76.9%).^[21]

It is evident was that the darker the skin, the more one had to prove competence. This is a case of double jeopardy.^{[22][23]}

4.3 Efforts at Promoting Gender Balance

The Global Institute for Business and Society presents an example of the multipronged efforts geared at promoting gender balance. It does so by wisely promoting interventions that promote outcomes. It emphasises that stereotypes and misinterpretations of research findings should not be used to reinforce myths about gender difference. It urges that society should be resilient in fighting gender bias, for example by use of simple, low-cost psychological tools to enable and buttress gender balance.^[24]

5.0 Conclusion

Gender bias is an unfortunate vice inherent in what are expected to be institutions guided by liberalism, enlightenment impartiality and clear-headedness. If these virtues were observed in practice the bias and related constraints to progress by humanity would not occur with the result of the desirable resounding and unequivocal success.

References

1. Diehl, A. B., & Dzubinski, L. (2017). An overview of gender-based leadership barriers. In S. R. Madsen (Ed.), *Handbook of research on gender and leadership* (pp. 271–286).
2. Kellerman, B., & Rhode, D. L. (2017) Women at the top: The pipeline as pipe dream. *About Campus*, 21(6), 11–18.
3. Heather L. 2016. Pipelines, Pathways, and Institutional Leadership: An Update on the Status of Women in Higher Education. Washington, DC: American Council on Education.
4. Shaw AK, Stanton DE. 2012. Leaks in the pipeline: Separating demographic inertia from ongoing gender differences in academia. *Proceedings of the Royal Society B* 279: 3736–3741.
5. Johnson, H. L. (2016). Pipelines, pathways, and institutional leadership: An update on the status of women in higher education. American Council on Education and the Center for Policy Research and Strategy.
6. Gray, A. L., Crandall, J. R., & Taylor, M. (2019, October 21). The 5 percent: Action steps for institutions investing in women of color. *Higher Education Today*.
7. Madsen, S. R., & Longman, K. A. (2020). Women's leadership in higher education: Status, barriers, and motivators. *Journal of Higher Education Management*, 35(1), 13-24.
8. Lillian MacNell & Adam Driscoll & Andrea N. Hunt (2014) *What's in a Name: Exposing Gender Bias in Student Ratings of Teaching*, Springer Science Business Media New York 2014:
9. Daniel Maliniak, Ryan Powers and Barbara F. Walter the Gender Citation Gap in International Relations. International Organization,
10. Mitchell, Sara McLaughlin, Samantha Lange, and Holly Brus Forthcoming+ Gendered Citation Patterns in International Relations Journals, *International Studies Perspectives*.
11. Østby, Gudrun, Håvard Strand, Nils Petter Gleditsch, and Ragnhild Nordås (2018) *A Study of Publication Patterns and Citation Rates for Journal of Peace Research, 1983–2008+* *International Studies Perspectives*.
12. *International Studies Quarterly and International Studies Perspectives Journal of Peace Research*
13. Handley IM, Brown ER, Moss-Racusin CA, Smith JL (2015) Quality of evidence revealing subtle gender biases in science is in the eye of the beholder. *Proc Natl Acad Sci USA* 112(43): 13201–13206.
14. [NSF] National Science Foundation. 2016. Report to the National Science Board on the National Science Foundation's Merit Review Process, Fiscal Year 2016. NSF.
15. Albers CJ (2015) Dutch research funding, gender bias, and Simpson's paradox. *Proc Natl Acad Sci USA* 112: E6828–E6829.
16. Van der Lee R, Ellemers N (2015) Gender contributes to personal research funding success in The Netherlands. *Proc Natl Acad Sci USA* 112(40):12349–12353.
17. Simpson EH (1951) The interpretation of interaction in contingency tables. *J R Stat Soc Series B Stat Methodol* 13(2): 238–241.
18. Huang J, Gates AJ, Sinatra R, Barabási. (2020). Historical comparison of gender inequality in scientific careers across countries and disciplines.
19. Cruz-Castro, Laura Sanz, Louis Sanz and Sanz-Menendez (2019) *Grant Allocation Disparities Gender Perspective: Literature Review*. Synthesis Report
20. Marjolijn N, Jorgj.M. Massen and Mariska E.Kert (2021) Gender bias in the allocation of student grants, *Scientometrics* <https://doi.org/10.1007/s11192-021-03985-0>
21. Joan C. Williams, Katherine W. Phillips & Erika V. Hall (2014) *Double Jeopardy, Gender Bias Against Women in Science*, www.worklifelaw.org.
22. Fiske, S.T. (2010). Interpersonal stratification: Status, power, and subordination. In Fiske, S.T., Gilbert, D.T., & Lindzey, G. (Eds.), *Handbook of social psychology* (5th ed.). New York: Wiley.
23. Goff, P.A., Thomas, M.A., & Jackson, M.C. (2008). "Ain't I a woman?" towards an intersectional approach to person perception and group-based harms. *Sex Roles*, 59, 392-400.
24. INSEAD 2017/2018 Year Review Report, knowledge.insead.edu