

Research Misconduct (What It Means?): A Biblio-Profile From 1983 – 2020

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ABSTRACT

Background of research: Research misconduct, a bad dream for an original author, institute, and for a country, which discolors the name, reliability, integrity, and credibility of an organization of the same discipline.

Methods: we used this composite word to explore the documents written, produced, and published in all medium, recognized by academia's, such as articles, review articles, conference papers, editorials, book chapters, books, erratum, letters to editors, notes, and short surveys, in the Scopus-Elsevier database with 31st December 2020 as a limitation.

Results: The 654 documents contain the word "research misconduct" in ten mediums of information, and these papers were published from 1983 – 2020 at 326 places. A total of 522 documents were scripted by 1082; 2.06 authors, 114 articles shows the clarifications by departments, and authors of 18 documents not traced out of 132 papers. Social sciences and Technology (Applied sciences) are on the top of the DDC scheme's six classes. This study found authors who wrote 522 documents and 293; 56.1 single or solo authors contributed. The affiliation of authors with 46 countries highlighted the importance of this word. The United States and United Kingdom stands on the top in an understanding of the sensitivity of darkening activity, and respondent immediately through notifications and provision of guidelines.

Conclusion: The quantity of publications is the most esteemed indicator of rational productivity, regardless of the inconsistency the researchers have, every one of these archives intended to advance examination trustworthiness and develop a decent exploration climate in the canvas of research

KEYWORDS: Research misconduct, bibliometric, cheating, research ethics, plagiarism.

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INTRODUCTION AND LITERATURE REVIEW:

Misconduct is an activity done by one unethically, illegally, and incorrectly to manage work with dishonest manners, misinterprets the deeds, situations, and the reputation of a person, an institute, and a country. Misconduct in research shows the mishandling of the data about facts, expert opinions, scientific behaviors, and prestige of an individual, groups, companies, or organization in literary format.

From the individual level to the executive ranks, efficient and precise policies made for eradicating misconduct in research. Resnik, D.B., et al. (2015) focused on misconduct

behavioral approaches that can assume a critical role in deterrence and policing research offenses, and numerous foundations have built up their arrangements. While institutional arrangements believe a vital job in prevention and policing wrongdoing, public strategies are additionally critical to guarantee reliable proclamation and authorization of moral guidelines.

Mulero Portela, A.L. et al. (2015) vocals about institutional arrangements on research to control studies to leading investigations. The strategies broke down quantitatively to decide the degree to which these remembered applicable explicit data for methods expected to address gives that emerge in an exploration wrongdoing claims. The detection of fabricating in scholarly articles

is a perplexing cycle. It requires not merely quantitative investigation with the familiarity recording by against copyright infringement programming yet additionally an appraisal of the perusers' assessment, highlighting the robbery of thoughts, approaches, and designs.

However, research misconduct seems to be every discipline, such as; medical sciences. Mardani, A. et al. (2020) studied to determine the relationship among factors influencing unfortunate research behavior inside the exploration arrangement of clinical sciences, the view of people engaged with the exercises of full scale, and miniature degrees of the examination framework. The outcomes indicated that essential factors, for example; a) checking and managing unfortunate research behavior, b) straightforwardness in exploration, c) the executives of diaries, and d) moral contemplations in the distribution of examination results.

Li, D., and Cornelis, G. (2020) analyzed university misconduct policies in Chinese and European universities. Researchers assure that research institutions are liable for advancing examination respectability and taking care of unfortunate exploration behavior charges. The outcomes show that their strategies for dealing with research wrongdoing contrast in meanings of examination deplorable behavior from all recovered arrangements go past creation, distortion, and counterfeiting yet incorporate various sorts of flawed exploration rehearses.

Craig, R. et al. (2020) evaluates the 160 articles in financial matters, business, and the board, profile, and rehearses that will probably be risky in related sociology disciplines from detailed, insightful diaries somewhere in the range of 1998 and 2017. The impacts of pre-enrolling research and supports more grounded strategies to confirm the realness of information. In research papers, the nature, and effect of investigation, unfortunate behavior in brain research by investigating.

Vie, K.Jø. (2020) contend that it is necessary to require a report on research wrongdoing is excessive. This sort of intercession can now and again act naturally damaging for the scientist revealing the unfortunate behavior. He, further suggesting the conversation starter as a paired quandary, veils significant moral parts of such circumstances, those analysts should investigate them. The issue as an inquiry regarding the obligations of individual scientists covers the duties of exploration foundations. A rare bibliometric study conducted by Ali, I., and Aboelmaged, M. in the year 2020 on investigating critical clusters like; plagiarism, constricting cheating, misconduct in online academic and scientific education, and academic involvement is handling misconduct in research. Collaboration among authors and countries, evaluating academic research on approaches to deal with misconduct difference, methods, and races time between writing to publications. Researchers sought 779 manuscripts published in twenty-one years.

Methods/ Approach: Research misconduct is a composite word that explains a wrong, incorrect, indelicate, and indecent activity caused deliberately or by researchers' errors. We used the "Research misconduct" term as the default "Article title" in the Scopus-Elsevier database's menu bar with a limit of 31 December 2020. We downloaded 654 documents on comma-separated value (CSV) file for tabulation in MS Excel 2016. The year wise research productivity, type of documents, classification of documents according to DDC scheme, top authors and the pattern of authorship year wise, cited documents with top cited articles, places of publications, and the first author association with their countries.

Results: We retrieved 654 documents from the Scopus-Elsevier database in terms of research misconduct published in 36 years with an average of 18.1 documents, a minimum 1, and a maximum of 57 documents. Figure 1 shows the function of publications from 1983 – 2020.

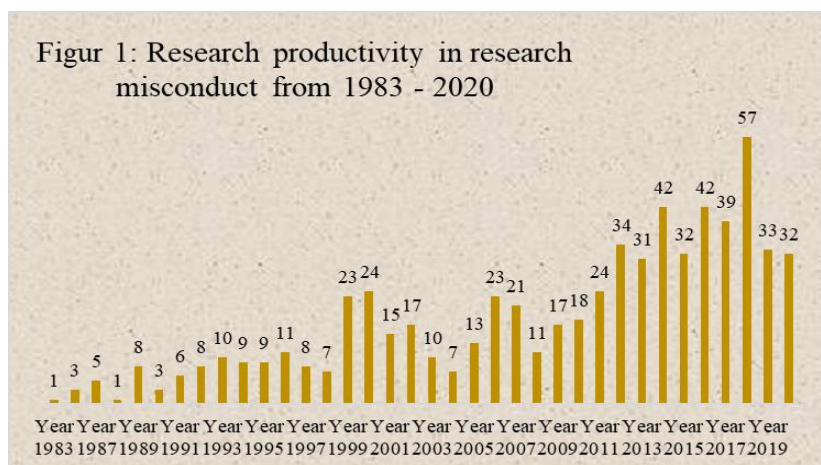


Figure 2 explains the publication medium of published documents. The documents published in ten categories; a) articles 257, b) review articles 158, c) note 67, d) letters to editor 60, e) editorial 49, f) book chapters 16, g) short surveys, 16, h) conference papers, 9, i) erratum, 8, and j) books four were produced in studied years.

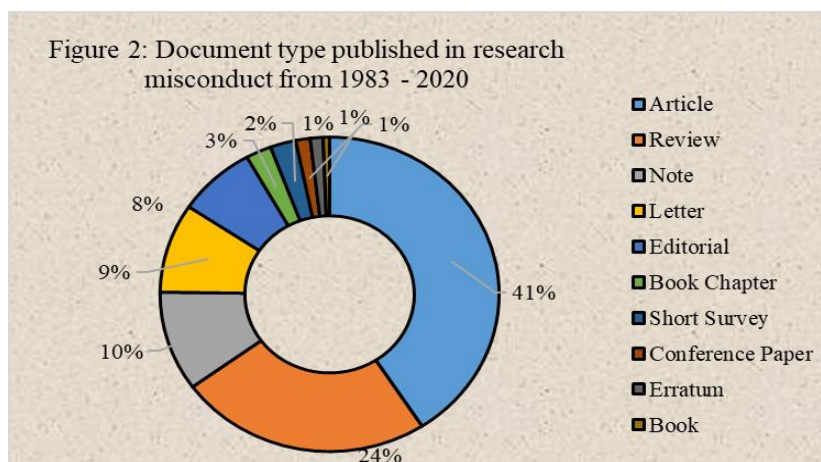


Table 1 describes the categories of documents that fall in the famous Dewy Decimal Classification scheme for managing the library systems. All forms segregated into six big groups; Social Sciences and Technology (Applied sciences) appeared as big groups.

Table 1: Classification of documents according to Dewy Decimal Classification (DDC) scheme.				
S. No	Call No.	According to DDC Classification	Documents	%
1	100	Philosophy and Psychology	28	4.28%
2	300	Social Sciences	277	42.35%
3	500	Science (Pure sciences)	44	6.73%
4	600	Technology (Applied Sciences)	246	37.61%
5	700	Arts and Recreation	45	6.88%
6	900	History and Geography	14	2.14%
Total documents			654	

Figure 3 and Table 2 spells-out the nomenclature of authorship pattern in the production of

research misconduct from 1983 – 2020. The majority 361; 55.1 documents written collaboratively, and 293; 44.8% documents

scripted and published by single or solo authors out of 654 documents. Dyer, C., Resnik, D.B., and Titus, S.L are the top authors with a contribution of eight articles, followed by Amin,

L., Redman, B. K., and Wiwanitkit, V shared seven items each, and Chalmers, I., Godlee, F., Horton, R., Kornfeld, D.S., Mahadi, Z., Olesen, A.P., and Wells, F produced six articles each.

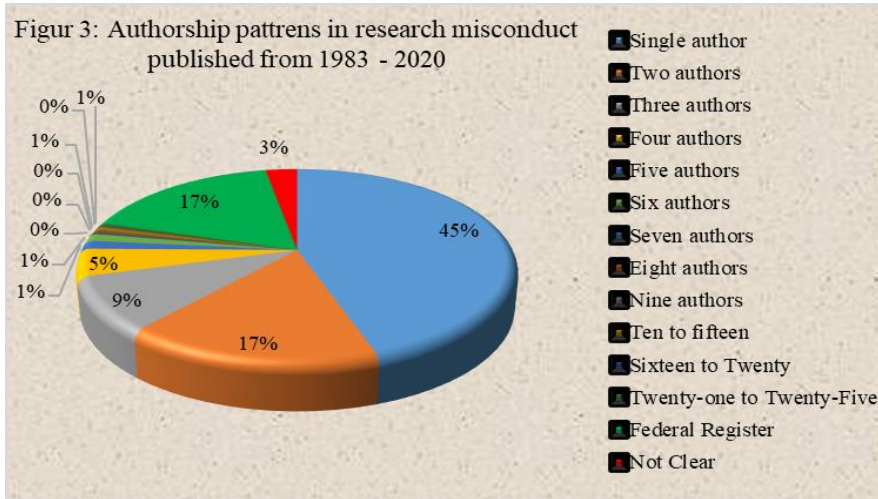


Table 2: Authorship pattern in research misconduct published in journals indexed in Scopus-Elsevier database from 1983 – 2020.

S. No	Years	Single author	Two authors	Three authors	Four authors	Five authors	Six authors	Seven authors	Eight authors	Nine authors	10 – 15	16 – 20	21 – 25	Federal Register	Not Clear	Total
1	Year 1983	1														1
2	Year 1985	2													1	3
3	Year 1987	2		3												5
4	Year 1988	1														1
5	Year 1989	6	1												1	8
6	Year 1990	3														3
7	Year 1991	3			1										2	6
8	Year 1992	6	1												1	8
9	Year 1993	7	1	1			1									10
10	Year 1994	8	1													9
11	Year 1995	6	2	1												9
12	Year 1996	10	1													11
13	Year 1997	8														8
14	Year 1998	5	1	1												7
15	Year 1999	19	1	2											1	23
16	Year 2000	13	7	1							2				1	24
17	Year 2001	9	2	2			2									15
18	Year 2002	13	4													17
19	Year 2003	5	4						1							10
20	Year 2004	3		2											2	7
21	Year 2005	8	2	1										1	1	13

22	Year 2006	12	4	3			1						3		23
23	Year 2007	7	5	2	1								6		21
24	Year 2008	6	1	2	1									1	11
25	Year 2009	7	2	1	1								6		17
26	Year 2010	7	4	2	2								3		18
27	Year 2011	8	4		2								9	1	24
28	Year 2012	12	5	1	2		1						12	1	34
29	Year 2013	10	4	1	1		1	1	1				1	10	31
30	Year 2014	18	6		1						1		16		42
31	Year 2015	11	5	1	1								14		32
32	Year 2016	15	6	2		3						2	14		42
33	Year 2017	6	10	11	5								6	1	39
34	Year 2018	18	13	8	1	1				1			13	2	57
35	Year 2019	14	3	5	5	3		1			1		1		33
36	Year 2020	4	9	7	6	2	2					1		1	32
37	Total	293	109	60	30	9	8	2	2	1	4	1	3	114	654

Table 3 reveals the positions of citations, which articles get since they published. A total of 400 documents get attention to cite 4040 citations out of 654 documents. Ten articles got 1299; 32.1% of citations and 2741, 67.8% citations went to 390 documents.

Table 3: Articles on research misconduct got citations			
	Name of articles	Citations	%
1	Chalmers I. (1990). Underreporting Research Is Scientific Misconduct	457	11.3%
2	Wooldredge J., et al. (2001). Considering hierarchical models for research on inmate behavior: Predicting misconduct with multilevel data	174	4.3%
3	Sox H.C., and Rennie D. (2006). Research misconduct, retraction, and cleansing the medical literature: Lessons from the Poehlman case	147	3.6%
4	Flanagant, T. J. (1983). Correlates of Institutional Misconduct Among State Prisoners: A Research Note	120	3%
5	Nath S.B., et al. (2006). Retractions in the research literature: Misconduct or mistakes?	85	2.1%
6	Smith R. (2006). Research misconduct: The poisoning of the well	69	1.7%
7	Kornfeld D.S. (2012). Perspective: Research misconduct: The search for a remedy	65	1.6%
8	Stern A.M., et al. (2014). Financial costs and personal consequences of research misconduct resulting in retracted publications	62	1.5%
9	Ana J., et al. (2013). Research Misconduct in Low- and Middle-Income Countries	62	1.5%
10	Davis M.S., et al. (2007). Causal factors implicated in research misconduct: Evidence from ORI case files	58	14%
11	06 Documents get 41 - 50 citations.	283	7.00%
12	10 Documents get 31 - 40 citations.	402	9.95%
13	22 Documents get 21 - 30 citations.	536	13.27%
14	35 Documents get 11 - 20 citations.	510	12.62%
15	12 Documents get 10 citations.	120	2.97%
16	08 Documents get 09 citations.	72	1.78%

17	12 Documents get 08 citations.	96	2.38%
18	14 Documents get 07 citations.	98	2.43%
19	19 Documents get 06 citations.	114	2.82%
20	25 Documents get 05 citations.	125	3.09%
21	31 Documents get 04 citations.	124	3.07%
22	32 Documents get 03 citations.	96	2.38%
23	46 Documents get 02 citations.	92	2.28%
24	73 Documents get 01 citation.	73	1.81%
25	Total Citations	4040	
26	Documents get citations	400	61.16%
27	Total Documents	654	

Table 4 discloses that 654 documents published in 326 places, majority 334; 51% documents published in six locations, and remaining 320; 49% documents produced from 320 sites of publications.

Table 4: Articles affiliation with publication places			
S. No	Place of publications	Documents	%
1	Federal register	114	17.43%
2	NIH guide for grants and contracts (Online)	86	13.15%
3	BMJ (Clinical research ed.)	41	6.27%
4	Accountability in Research	40	6.12%
5	Science and Engineering Ethics	38	5.81%
6	Nature	15	2.29%
7	102 Places publish 01 document	102	15.60%
8	30 Places publish 02 documents	60	9.17%
9	09 Places publish 03 documents	27	4.13%
10	07 Places publish 04 documents	28	4.28%
11	06 Places publish 05 documents	30	4.59%
12	03 Places publish 06 documents	18	2.75%
13	03 Places publish 07 documents	21	3.21%
14	02 Places publish 08 documents	16	2.45%
15	02 Places publish 09 documents	18	2.75%
		654	

Table 5 indicated the affiliation of the first author towards their country; in this study, we found the participation of 46 countries. The majority of articles 530; 81% produced by 4 countries, and the remaining 124; 19% research written and shaped by 40 countries.

Table 5: First author affiliation with country.			
S. No	Name of country	Documents	%
1	United States of America	441	67.43%
2	United Kingdom	67	10.24%
3	Australia	11	1.68%
4	India	11	1.68%
5	03 Countries shared 08 articles	24	3.67%

6	02 Countries shared 07 articles	14	2.14%
7	04 Countries shared 06 articles	24	3.67%
8	02 Countries shared 05 articles	10	1.53%
9	03 Countries shared 04 articles	12	1.83%
10	03 Countries shared 03 articles	9	1.38%
11	06 Countries shared 02 articles	12	1.83%
12	19 Countries shared 01 articles	19	42.22%
		654	

DISCUSSION AND CONCLUSION:

The frequency of 18.1 publications per annum shows the importance of research misconduct as subject to researchers, institutes, and organizations. Ten mediums of literary formats reveal that this subject attracts the ethically based associations, policymakers, and auditors on moral grounds to eradicate the bad, immoral, wicked, dishonest, and fraudulent activities in presenting inaccurate data and disrespecting the scientific opinions and misguide the readers. In this study, six main DDC library scheme classes show that the social sciences and technological sciences are the main motivating disciplines where the most research literature published and made open discussions. The presence of 1082 authors affiliated with 46 countries, and the majority from 4 countries in broadcasting their productions at 326 places that connected to journals, books, and conference papers podiums.

The scholars are always convinced with their conduct with research integrity. The design of many studies intervene by bias or interfere by researchers affiliations with some ideologies. This study observed that the researchers get direct or indirect pressures from;

1. To report publications.
2. Honorary authorship involvement.
3. Disarrangements of institutional policies.
4. Lack of ethics training programs regarding research integrity.
5. Shortage of departments similar to the United States Federal Register, which evaluate the violations.
6. Scarcity of funding to purchase plagiarism

software's.

7. Un-seriousness towards the cultivation of research environment.

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