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Altmetrics Analysis of IRINS Profiles of Faculties in the Dr. Harisingh Gour Vishwavidyalaya, Sagar (M.P.)

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Abstract

This study performs Altmetrics Analysis with the aim to identify the significant contributions of faculties of Dr. Harisingh Gour Vishwavidyalaya, Sagar. Faculty contribution on social media platforms has increased rapidly. Altmerics is used to analyse research work shared on social media platforms, which can be used to prioritize authors. This research work is based on the secondary data of faculty profiles of IRINS web-based Research Information Management (RIM) service of Dr. Harisingh Gour Vishwavidyalaya, Sagar Madhya Pradesh, which has 8 disciplines and 175 faculty. The maximum faculty contribution is in Social Sciences subject with 21 Professors, 2 Associate Professors and 51 Assistant Professors. The highest contribution is in Chemical Sciences subject with 8156 (53.62%). The maximum and minimum faculty contribution is on Mendeley and Facebook social media platform. The highest research work on social media is shared by Professor Dr. Mohammad Latif Khan.

Keywords: Research output, Altmetrics analysis, Social media tools, IRINS web-based research information management (RIM).

1. Introduction

IRINS (Indian Research Information Network System) is the research information management platform developed by INFLIBNET under UGC, created for academic and research institutions in India. It allows researchers to create and manage their profiles, which include publications, projects, patents, awards, and collaborations. The system has an integration feature with external databases such as Scopus, Web of Science, ORCID, and Google Scholar, which helps automatically update the research records. IRINS enhances the institution's visibility by showcasing its research output and helps promote open access by linking with repositories like DSpace. The platform also offers analytics and reporting tools that help track research impact, support decision-making, and identify potential collaborators. With customizable interfaces, IRINS helps institutions align the platform with their branding. While IRINS offers great benefits, such as better data management and improved visibility, challenges will arise in ensuring the accuracy of data and promoting user adoption. Proper training and integration support from INFLIBNET are very much required for successful implementation.

Dr. Harisingh Gour Vishwavidyalaya, Sagar, established in 1946, is the oldest and largest university in Madhya Pradesh. The university uses IRINS (Indian Research Information Network System) to manage and showcase faculty research outputs. IRINS integrates with global databases such as Scopus and ORCID to provide a one-stop solution for faculty profiles, publication tracking, and collaboration, increasing the research visibility of the institution and its academic impact. In altmetrics analysis, study is done about research contribution on social media platforms. Through altmetrics study, the contribution of research work by the faculty of Dr. Harisingh Gour Vishwavidyalaya Sagar, Madhya Pradesh on social media platforms has been done. In this, data has been analysed from social media platforms like News, Facebook, Mendeley, Twitter, and Google Plus. This data has been collected from IRINS faculty profiles of Dr Harisingh Gour University Sagar.

2. Review of Literature

Muruli & Harinarayana (2023) evaluated the research performance of western Himalayan region‘s central universities utilizing SCOPUS data between 2012 and 2021. It used some bibliometric indicators to measure the research activity, major disciplines, periodicals, and their usage and showed an impressive increase in the number of publications and international co-authorships. The study of Chetry, Dey & Chhetry (2022) noticed the research output of the Faculty of Agriculture of the Assam Agricultural University from 2009 to 2018, based on 378 papers collected from Scopus. According to the study, a total of 77 articles were published in the year 2017 which accounts for 20.37 %, and 25.4 % had an authorship of more than five persons. The law commissioned was Lotka’s Law but the distribution of core journals was not in accordance with Bradford’s Law. According to Anaraki, Razmgir & Moradzadeh (2020), the faculty activity of the staff of Iran University of Medical Sciences on ResearchGate was also scrutinised by the authors. The evaluation demonstrated that 91% of the documents they shared were articles of journals, which resulted in an average ResearchGate scoring of 15.26, 94% of them being from publications. The ResearchGate metrics were found to have a good correlation with the metrics provided by Scopus and Google Scholar. Ahmad (2019) analysed altmetrics for researchers' profiles from Aligarh Muslim University and Jawaharlal Nehru University on ResearchGate to assess the engagement and impact of research from both universities on this academic social network. The study objectives include assessing overall research productivity through various factors, including RG scores, publications, citations, departmental contributions, and engagement metrics like reads, downloads, and views. It also wanted to know about the potential scope of research collaborations and the most cited authors in terms of both citations and h-index. Data was gathered using Scientometrics and altmetrics methods by visiting individual researcher profiles manually. The results showed that AMU had published more than JNU, and the membership numbers of both universities were almost the same. The RG score of AMU was more than that of JNU, and its senior members had a remarkable presence on ResearchGate. Erfanmanesh (2017) studied the altmetrics impact of articles published in Scopus-indexed LIS journals. The objectives included how frequently LIS publication were discussed on social media, identifying the top-rated items, and which ones have attracted the most online attention. It considered 193 Scopus-indexed LIS journals from 2015. The DOIs of articles were fetched, and then they were searched in Altmetrics Explorer to track social media mentions. Results indicated that 28.8 percent of the LIS publications possessed nonzero altmetrics scores, and engagement was most prominent on the platform of Twitter. Social media mentions were much higher than Scopus citations, and altmetrics, webometrics, and scientometrics dominated the top 20 most-attended articles. Costas, Zahedi & Wouters (2014) investigated whether Mendeley Readership Scores (RS) better identify highly cited

papers than traditional citation metrics such as the Journal Citation Score (JCS). The study, based on more than 9 million publications from 2004-2013, found that Mendeley scores tended to accumulate faster than citation scores, and that readership varied across different academic fields. The analysis concluded that Mendeley RS were more effective than JCS in identifying top-cited papers, demonstrating the value of alternative metrics in academic evaluation. Alhoori & Furuta (2016) proposed a venue-ranking approach based on scholarly references from academic social media platforms. They compared the social-based rankings with the citation-based rankings, based on metrics like readership, article count, and active researcher ratings. With more than 550,000 files from CiteULike, the study showed that social-based rankings were significantly correlated with citation-based rankings, and open-access platforms was preferred over subscription-based ones. It also brought to light the fact that social metrics were a different way of looking at academic impact. Shrivastava & Mahajan (2016) studied the relationship between citation counts and Mendeley readership for the top 100 most-cited physics papers from 2005 and 2010. Their analysis resulted in a positive correlation with citations. Therefore, they suggest Mendeley might be a valuable altmetrics tool for evaluation in research whenever the coverage on this platform is robust for that particular discipline.

3. Objectives of the Study

i. To analysis subject-wise distribution of faculties.
ii. To determine the subject Categories of faculties.
iii. To find out distribution of subject-wise promotional tools/ altmetrics tools.
iv. To find out of number of faculties and their subjects.
v. To identify the top ten faculties contributing research work on social media.

4. Methodology

For the present study, Faculties Profile of IRINS Web Based Research Information Management (RIM) Service of Dr. Harisingh Gour Vishwavidyalaya, Sagar has been selected. For the study, faculties, subjects and their altmetrics analysis have been taken from the IRINS profile. There are total 8 subjects and 175 faculties covered under this study. Statistical tools like tabular presentation of various data, line diagram, bar diagram, and pie diagram are used to present the study effectively.

5. Data Analysis

Table - 1: Subject-wise number of faculties

S.N.	Subjects	Faculties	Percentage
1	Social Science	74	42.29
2	Art and Humanities	31	17.71
3	Physical Science	25	14.29
4	Biological Science	17	9.71
5	Chemical Science	12	6.86
6	Medical & Health Science	8	4.57
7	Engineering & Technology	6	3.43
8	Agriculture Science	2	1.14
Total		**175**	**100.00**

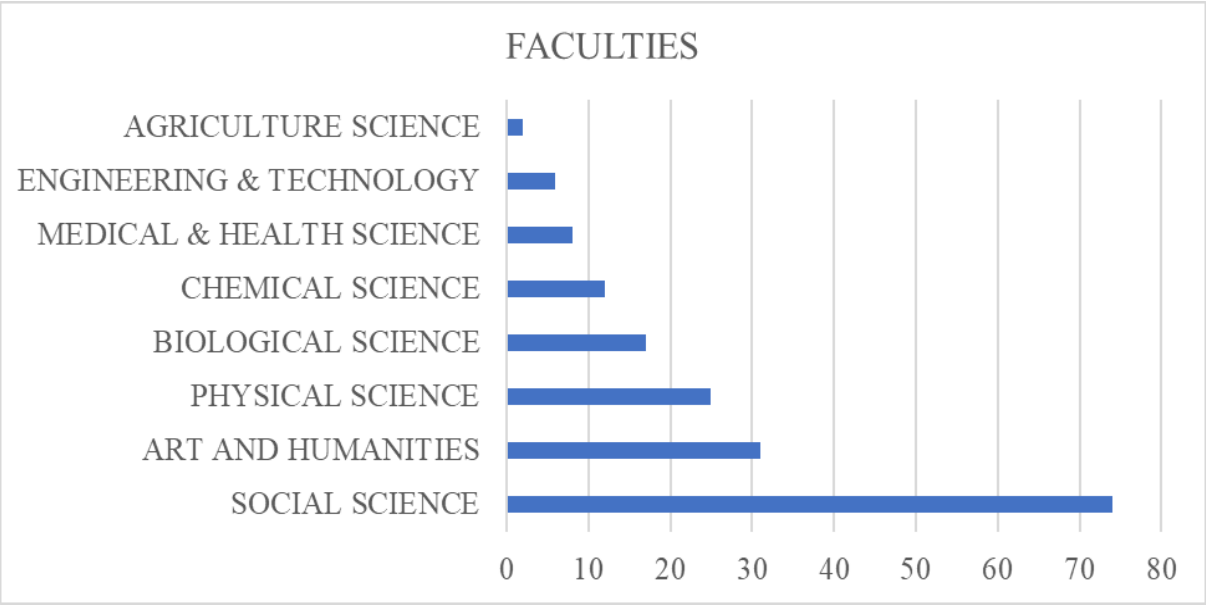

Figure - 1: Subject-wise number of faculties

In the above table 1, there are a total of 8 subjects and 175 faculties under them in the profile of IRINS web-based Research Information Management (RIM) service of Dr. Harisingh Gour Vishwavidyalaya, Sagar. In this, the first 74 (42.29%) faculties are of Social Sciences, the second 31 (17.71%) faculties are of Arts and Humanities and the third 25 (14.29%) faculties are of Physical Sciences.

Table - 2: Subjects wise Categories of Faculties

S. N.	Subject	Professor	Associate Professor	Assistant Professor	Total	Percentage (%)
1	Social Science	21	2	51	74	42.29
2	Art and Humanities	6	3	22	31	17.71
3	Physical Science	8	3	14	25	14.29
4	Biological Science	7	3	7	17	9.71
5	Chemical Science	4	2	6	12	6.86
6	Medical & Health Science	6	0	2	8	4.57
7	Engineering & Technology	1	2	3	6	3.43
8	Agriculture Science	1	0	1	2	1.14
Total		**54**	**15**	**106**	**175**	**100.00**

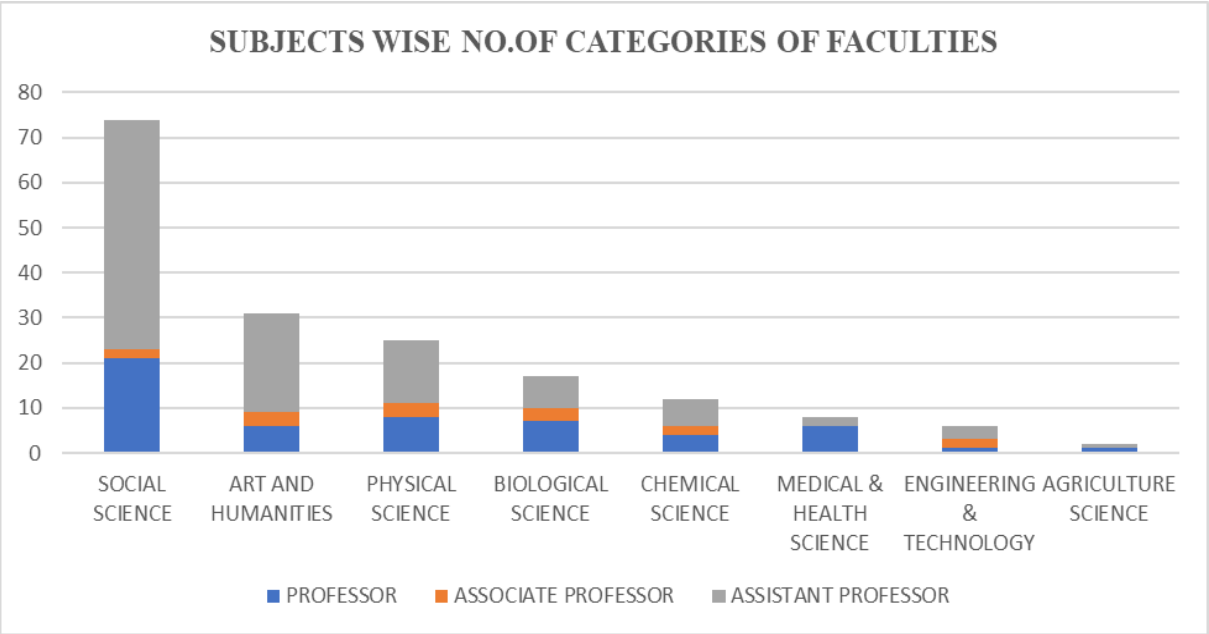

Figure - 2: Subjects wise Categories of Faculties

In the above Table 2, there are 54 Professors, 15 Associate Professors, 105 Assistant Professors. A maximum 21 Professors are in Social Science subjects, 3-3 Associate Professors each in Arts and Humanities, Physical Science, Biological Science, and 51 Assistant Professors in Social Science.

Table - 3: Subject wise no. Altmetrics Tools on Social Media

S. N.	Social Media	Social Sci.	Arts & Hum.	Phy. Sci.	Bio. Sci.	Chem. Sci.	Med. & Health Sci.	Engg. & Tech.	Agri. Sci.
1	News	1	0	183	51	988	50	533	19
2	Facebook	1	0	35	26	69	42	11	5
3	Twitter	1	0	43	58	2134	84	21	7
4	Mendeley	25	0	1235	597	4904	2969	390	407
5	Google Plus	1	0	24	180	61	44	9	4
Total		**29**	**0**	**1520**	**912**	**8156**	**3189**	**964**	**442**
Percentage		**0.19**	**0.00**	**9.99**	**6.00**	**53.62**	**20.96**	**6.34**	**2.91**

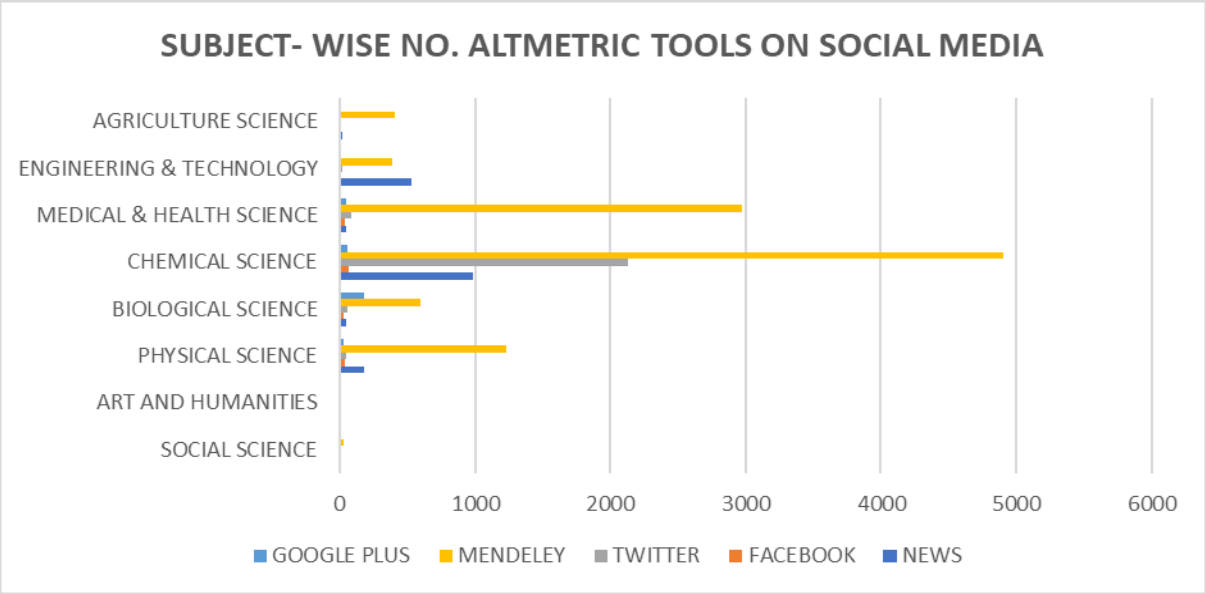

Figure - 3: Subject wise no. Altmetrics Tools on Social Media

Table 3 shows that a social media tool has done subject-wise altmetrics analysis. The first is Chemical Science 8156 (53.62%), the second is Medical and Health Science 3189 (20.96%), and the third is Physical Science 1520 (9.99%).

Table - 4: Subject-wise contribution of faculties on Social Media

Social Media	Socia l Sci.	Arts & Hum.	Phy. Sci.	Bio. Sci.	Chem. Sci.	Med. & Health Sci.	Engg. & Tech.	Agri. Sci.	Total	%
News	01	0	183	988	51	50	533	19	1825	12
Facebook	01	0	35	69	26	42	11	05	189	1.24
Twitter	01	0	43	2134	58	84	21	07	2348	15.44
Mendeley	25	0	1235	4904	597	2969	390	407	10527	69.2
Google Plus	01	0	24	61	180	44	09	04	323	2.12
Total	**29**	**0**	**1520**	**8156**	**912**	**3189**	**964**	**442**	**442**	**100**

In the above table 4, the number of categories of faculties under subjects is given, which includes Professor, Assistant Professor, and Associate Professor. These faculties have maximum and minimum contributions on social media in Mendeley and Facebook.

Table - 5: Top Ten Faculties Research Work Output on Social Media

S.N.	Name of Faculties	News	Facebook	Twitter	Mendeley	Google Plus	Total (%)
1	Dr. Mohammed Latif Khan (Professor)	332	34	2027	2746	23	5162 (40.36)
2	Dr. Shweta Yadav (Professor)	27	6	43	1355	12	1443 (11.28)
3	Dr. Sanjay K. Jain (Professor)	18	12	17	1174	16	1237 (9.67)
4	Dr. Vandana Vinayak (Assistant Professor)	532	10	20	390	8	960 (7.51)

5	Dr. Vandana Soni (Professor)	20	20	32	822	19	913 (7.14)
6	Dr. Ashish Verma (Professor)	9	9	16	757	9	800 (6.25)
7	Dr. Chandrama Prakash Upadhyaya (Assistant Professor)	524	4	10	160	7	705 (5.51)
8	Dr. Satyam Verma (Assistant Professor)	84	12	30	453	12	591 (4.62)
9	Dr. Gyanesh Kumar Tiwari (Asstt. Prof.)	1	1	19	560	1	582 (4.55)
10	Dr. Amit Kumar (Assistant Professor)	6	7	12	366	6	397 (3.1)

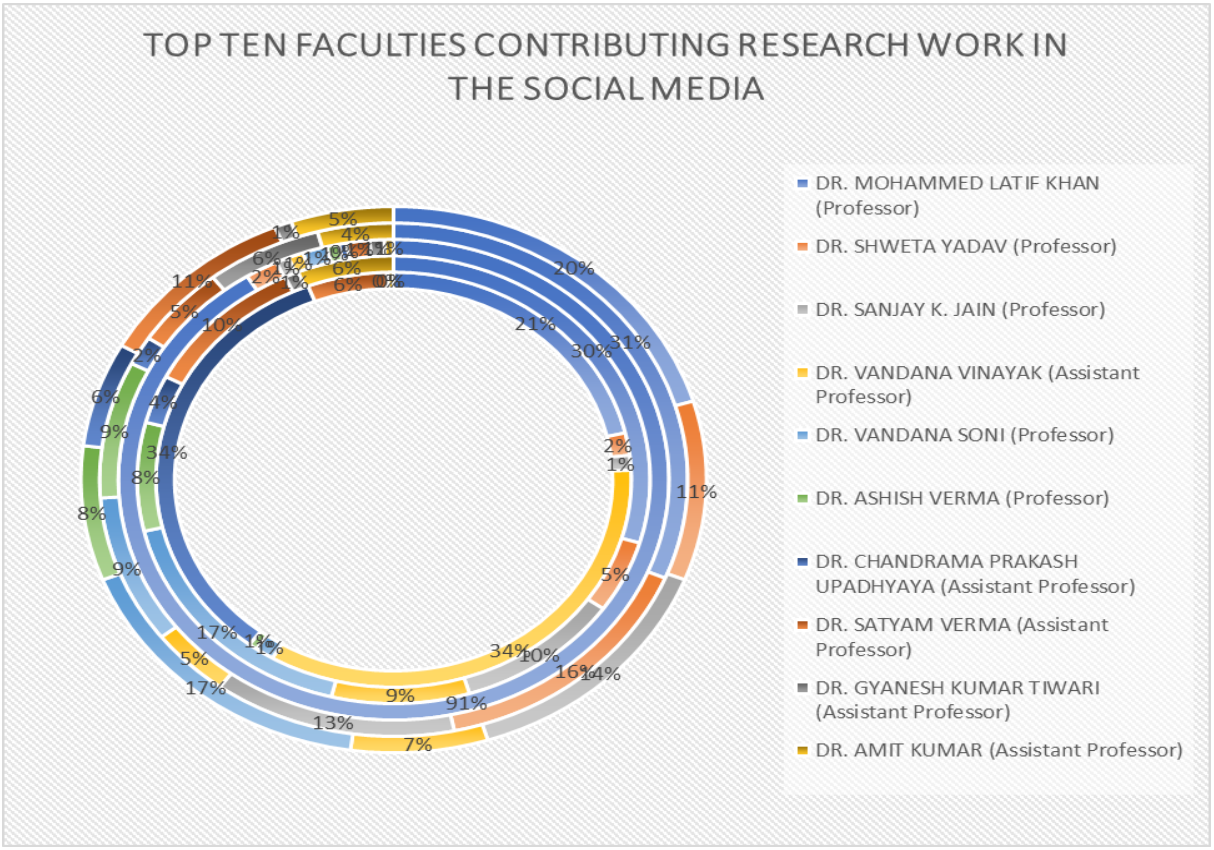

Figure - 4: Top Ten Faculties Research Work Output on Social Media

Table 5 above shows the top 10 prolific authors of Dr. Harisingh Gour Vishwavidyalaya Sagar. Using social media tools or altmetrics tools, the maximum number of research works shared on social media are by Professor Dr. Mohammad Latif Khan, followed by Professor Dr. Shweta Yadav and Professor Dr. Sanjay K. Jain.

6. Finding and Conclusion

During the present study, subjects, faculties and their altmetrics data have been collected through the profile of IRINS Web Based Research Information Management (RIM) Service of Dr. Harisingh Gour Vishwavidyalaya Sagar, which includes 8 subjects and 175 faculties.

In this, the first 74(42.29%) faculties are of social sciences, the second 31(17.71%) faculties are of arts and humanities and the third 25(14.29%) faculties are of physical sciences. During the study, it has been found that there are a total of 54 Professors, 15 Associate Professors, 105 Assistant Professors. Among these, the maximum 21 Professors are in social sciences subject, 3-3 Associate Professors in arts and humanities, physical sciences, biological sciences and 51 Assistant Professors in social sciences. Subject wise altmetrics analysis has been done through social media tools, in which Chemical sciences 8156 (53.62%) is in the first place, Medical and health sciences 3189 (20.96%) is in the second place and Chemical sciences 1520 (9.99%) is in the third place. These faculties have maximum and minimum contribution on social media in MENDELEY and Facebook. Prolific writer of Dr. Harisingh Gour Vishwavidyalaya, Sagar is first Dr. Mohammad Latif Khan second by Professor Dr. Shweta Yadav and third Professor Dr. Sanjay K. Jain for sharing maximum research work on social media.

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