

# Innovation in the Learning Environment Using Research Gate among Faculty Members of Indian Institute of Management, Tiruchirappalli, Tamil Nadu

K. Murugan<sup>1</sup> and S. Ravi<sup>2</sup>

<sup>1</sup>Librarian, University VOC College of Engineering, Anna University, Thoothukudi, Tamil Nadu, India

<sup>2</sup>Dean, School of Communication & Professor and Head, Department of Library and Information Science, Central University of Tamil Nadu, Tiruvarur, Tamil Nadu, India  
E-Mail: skpmurugan@gmail.com

**Abstract** - The present study investigates the impacts of Innovation in learning environment by using research gate among faculty members of the Indian Institute of Management, Tiruchirappalli, Tamil Nadu, India. A creative environment is one that is capable of evolving naturally and adapting as effective tool in management related education and changes, stimulates tremendously in the academic area. The study reveals that the main subjects are the Finance and economics among the researchers. The research gate sufficiently motivates the needed research and learning tools for the faculty members and academic researchers. A country wise top-level reads states India as the 54th elected place of the research gate usage. It is overall total Research Gate scores 129.41. This consists of an Effective collaboration with the Indian Institute of Technology, Madras 9367 Members and Indian Institute of Management, Bangalore 786 members.

**Keywords:** Innovation, Learning, Research Gate, User Study, Indian Institute of Management, Tiruchirappalli and Faculty Members

## I. INTRODUCTION

The research gate is a free professional network for modern scientists. It offers effective tools and successful applications for academic researchers to typically interact and collaborate with fellows. It also offers a Science 2.0 social platforms designed for academic researchers. A social networking site that merely enables prominent scientists to familiar source, research, knowingly create academic communities, used find excellent jobs, promptly publish, share and collaborate the findings and much more. It was developed by scientists, and one of the largest and fastest-growing global networks of its specific kind. Research gate helps in connecting, developing Nations on the extensive network, so that the academic community is globally diverse and representative of scientific research in its totality since 2008. In recent years the research gate is widely applied in survey of the academic profiles. Many users used to search the research gate then accessing publications related to research and academic performance activities.

### A. Indian Institute of Management, Tiruchirappalli Profile

The Indian Institute of Management, Tiruchirappalli started on 4th January 2011. It has the campus area of 175 acres of

land on Trichy to Pudukkottai Highway. The facilities includes excellent quality and technologically equipped classrooms, the world-class library, 24\*7, Wi-Fi, elegantly well furnished air-conditioned hostels, 2 Megawatt Solar Power Plant and rainwater harvesting systems and environmentally green campus.

### B. Learning Resource Centre (LRC)

The Learning Resource Center popularly called as library is the Center for academic and professional knowledge resources. It facilitates knowledge creation through its core aim of management. The Access to electronic resources creates a learning environment for all Management and allied subjects.

## II. REVIEW OF LITERATURE

Farahnaz *et al.*, (2018) (2018) efficiently carried out an academic study on “academic Researchers Scientific performance in Research Gate: The prominent Case a Technology University”. The study presents the scientific communication and evaluation methods. The prominent Case a Technology University. Mapping profile of scientific activities followed by secondly, undoubtedly intends to test the direct correlation, H-index between the Research Gate and Web of Science and Scopus and Google Scholar (GS). Thirdly, make known the top cited research, Research Gate in three extensive databases, fourthly reveals that the altmetric score. The H-index and the sufficient number of published mentions of top cited research in various centralized databases.

Muscanel *et al.*, (2017) carefully examined the modern usage and practical utility of Research Gate and successful using the properly a social networking site of academic scientists and academician. The published study naturally found that most academics that, in common to tell the truth Research Gate Score account did not practice it very heavily and reasonably related to career satisfaction.

Yu *et al.*, (2016) an objectively analyzed on “principal Research gate: an effective altmetric used indicator for active researchers.” As research performance becomes increasingly important for academic institutions in personal

competition for used rankings, student recruitment and funding. It is merely the raw score, the flagship indicator calculated by an undisclosed algorithm, is with difficulty a used metric that measure scientific reputation. Its key metric function is first compared with those that Research Excellence Framework. The compared to Quacquarelli Symonds World University Rankings to accurately assess and excellent quality of UK academics and global universities of 300 notable faculty members.

### III. OBJECTIVES OF THE STUDY

The objective of the study as follows:

1. To analyze the usage pattern of Research gate among the faculty members of Indian Institute of Management, Tiruchirappalli
2. To find the usage pattern by Faculty Members wise Research Publication
3. To find out the usage pattern by Publication Category
4. To assess the Following Vs Followers pattern among the research gate users.
5. To find out the top 5 Publications by Total Reads and
6. To find the top collaborating institutions.

### IV. RESEARCH METHODOLOGY

The data were collected from the official Research Gate website on 18th October 2018. This investigation confined to the academic study limited to Indian Institute of Management, Tiruchirappalli Faculty Members only. The present study is analyses by the Department, Faculty Members publication, paper category, published references, Research Gate Score, H-index, and Followers and Following, academic Top publication of fantastic reads and top Publications by last week Reads.

The Fig.1 explained the Home page of Indian Institute of Management, Tiruchirappalli.

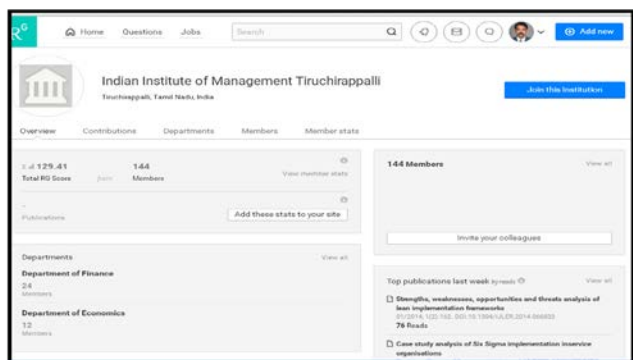


Fig.1 Home page of Indian Institute of Management, Tiruchirappalli using the Research Gate

TABLE I RESEARCH GATE USER OF FACULTY MEMBERS AMONG INDIAN INSTITUTE OF MANAGEMENT TIRUCHIRAPPALLI

S. No	Description	Numbers
1	Publications	99
2	Department of Finance	24
3	Department of Economics	12
4	Research Score	129.41

Table I shows the Research Gate usage by Faculty Members among Indian Institute of Management, Tiruchirappalli. This table describes those 24 active members in the Department of Finance and 12 from the Department of Economics. The research publications with 99 numbers in various academic disciplines and total Research Gate Score 124.41.

TABLE II DEPARTMENT WISE RESEARCH CONTRIBUTION OF FACULTY MEMBERS

S. No.	Department	Faculty Members	Percentage
1	Economics	1	7.69
2	Economics and Public Policy	2	15.38
3	Finance	1	7.69
3	Finance and Accounting	2	15.41
4	Marketing	1	7.69
5	Organizational and HRM	3	23.07
7	Director	1	7.69
8	Strategy	1	7.69
9	Learning Resource Centre	1	7.69
Total		13	100.00

In Table II indicates the Department wise Research Contribution by Faculty Members. This Institute has a total of 13 faculty members using the Research Gate. The Department of Economics, Finance, Marketing, The Director, Department of Strategy, and Learning Resource Center has each one active supporter contribution. An Economics and Public Policy, Finance and Accounting contribute two active members, and organizational and Human Resource Management includes three faculty members' contributions.

TABLE III INDIAN INSTITUTE OF MANAGEMENT TIRUCHIRAPPALLI FACULTY MEMBERS WISE RESEARCH PUBLICATION OF THE RESEARCH GATE

S. No	Faculty Name	Research Items	Percentage
1	Alka Chadha	11	11.11
2	Prabhir Vishnu Poruthiyil	3	3.03
3	Sanja Pattnayak	10	10.11
4	Narahari Hansoge	2	2.02
5	Rohan Chinchwadkar	9	9.09
6	K. V. Nithyananda	7	7.07
7	Anirban Som	2	2.02
8	Bhimaraya A Metri	34	34.34
9	Papri Nath	11	11.11
10	Smita Chattopadhyay	2	2.02
11	Upam Makhecha	3	3.03
12	Sankalp Pratap	5	5.05
13	K.Elavazhagan	-	-
Total		99	100.00

Table III explained that the Faculty Members wise Publication in the Research Gate. Out of the total Research Items of 99, the “Alka Chadha” and “Papri Nath” published eleven peer-reviewed publications (11.11%), followed by “Prabhir Vishnu Poruthiyil”, three topics (3.03%), “Sanja Pattnayak” ten issues (10.11%), “Kalahari Hansoge”,

Anirban Som” have two titles, “Rohan Chinchwadka”, nine official papers, “K. V. Nithyananda”, seven academic titles (2.02%). The “Bhimaraya A Metri” has highest put out in thirty four (34.34%). “Upam Makhecha”, three academic works (3.03%) and “Sankalp Pratap”, five possible publications (5.05%).

TABLE IV IIM TIRUCHIRAPPALLI FACULTY MEMBERS RESEARCH PUBLICATION CATEGORY

S. No.	Faculty Name	Department	Publication Category			Total		Percentile	
			Articles	Conference Paper	Research	Book	Chapter		
1	Alka Chadha	Economics	10			1		11	40%
2	Prabhir Vishnu Poruthiyil	Economics and Public Policy	3					3	22.5%
3	Sanja Pattnayak	Economics and Public Policy	10					10	30%
4	Narahari Hansoge	Finance and Accounting	2					2	
5	Rohan Chinchwadkar	Finance	8	1				9	22.5%
6	K. V. Nithyananda	Finance and Accounting Area	2	1	1		3	7	12.5%
7	Anirban Som	Marketing	2						17.5%
8	Bhimaraya A Metri	Director	25	3		2	4	34	55%
9	Papri Nath	Organizational Behaviour & HRM	9	2				11	15%
10	Smita Chattopadhyay	Organizational Behaviour & HRM	5					5	
11	Upam Makhecha	Organizational Behaviour & HRM	3					3	12.5%
12	Sankalp Pratap	Strategy	5					5	27.5%
13	K.Elavazhagan	Learning Resource Centre							

Table IV shows the details of the Faculty Members Vs Publication in the Research Gate. The faculty member “Alka Chadha” has published a total publication of 11 contributions in fundamental issues, as 10 articles and one book. The second highest is by “Prabhir Vishnu Poruthiyil” published 3 items, Sanja Pattnayak” have published ten numbers, Narahari Hansoge has published 3 articles, “Rohan Chinchwadkar” has published nine titles, where eight published themes and one conference paper. K. V. Nithyanand promptly published two selected articles, one

conference paper, 1 published article and 3 local chapters, “Anirban Som” two excellent articles. The “Bhimaraya A Metri” typically published 25 excellent papers, three Conference Papers, 2 books and four chapters are the highest level. “Papyri Nath” published 11 publications, where nine concerned papers, two Conference Papers. “Smita Chattopadhyay” assuredly has in common five leading articles and “Pam Makhecha” three leading articles. Finally, “Sankalp Pratap” publishes five informative articles.

TABLE V INDIAN INSTITUTE OF MANAGEMENT TIRUCHIRAPPALLI BY THIRTEEN FACULTY MEMBERS IN RESEARCH GATE

S. No.	Faculty Name	Department	Reads	Citations	Projects	RG Score
1	Alka Chadha	Economics	970	140	1	8.39
2	Prabhir Vishnu Poruthiyil	Economics and Public Policy	34	20	1	4.41
3	Sanja Pattnayak	Economics and Public Policy	195	67		5.73
4	Narahari Hansoge	Finance and Accounting	34	1		1.16
5	Rohan Chinchwadkar	Finance	286	0		4.30
6	K. V. Nithyananda	Finance and Accounting	883	2	1	2.72
7	Anirban Som	Marketing	5527	13		3.51
8	Bhimaraya A Metri	Director	2704	281		13.33
9	Papri Nath	Organizational Behaviour & HRM	1425	60		3.08
10	Smita Chattopadhyay	Organizational Behaviour & HRM	13		15	1.16
11	Upam Makhecha	Organizational Behaviour & HRM	66	9		2.72
12	Sankalp Pratap	Strategy	159	18		5.37
13	K.Elavazhagan	Learning Resource Center	-	-	-	-

In the table V explained that the Indian Institute of Management, Tiruchirappalli by 13 Faculty Members in Research Gate. The notable faculty member is “Alka Chadha” has 970 reads refers to, 140 mentions, one project and adequately secured score (8.39). The next is “Prabhir Vishnu Poruthiyil” has 34 reads, 20 published mentions, 1 project (4.41) followed by “Sanja Pattnayak” has 195 reads, seven mentions and properly score (5.73), “Narahari Hansoge” assuredly has 34 reads attentively, one proper cites, and (1.16). “Rohan Chinchwadkar” has 286 to follow and achieved the possible score (4.30), “K.V. Nithyananda”

has 883 reads, two cited references, 1 project (2.72), “Anirban Som” has 5527 reads, 13 mentions and reveals the score (3.51). The “Bhimaraya A Metri” has 2704 reads, 281 official references and secures a score of (13.33) and got the first place. “Papyri Nath” has 1425 reads , 60 character references and Research Gate Score (3.08), “Smita Chattopadhyay” has 13 reads, 15 projects and achieved a score (1.16), “Upam Makhecha” has 66 reads, nine specific references (2.72) and “Sankalp Pratap” has read 159 reads, 18 official citations (5.37).

TABLE VI INDIAN INSTITUTE OF MANAGEMENT TIRUCHIRAPPALLI BY THIRTEEN FACULTY MEMBERS VS H-INDEX

S. No.	Faculty Name	Department	H-Index
1	Alka Chadha	Economics	5
2	Prabhir Vishnu Poruthiyil	Economics and Public Policy	2
3	Sanja Pattnayak	Economics and Public Policy	5
4	Narahari Hansoge	Finance and Accounting	1
5	Rohan Chinchwadkar	Finance	-
6	K. V. Nithyananda	Finance and Accounting Area	1
7	Anirban Som	Marketing	1
8	Bhimaraya A Metri	Director	8
9	Papri Nath	Organizational Behaviour & Human Resource Management	3
10	Smita Chattopadhyay	Organizational Behaviour & Human Resource Management	-
11	Upam Makhecha	Organizational Behaviour & Human Resource Management	1
12	Sankalp Pratap	Strategy	2
13	K.Elavazhagan	Learning Resource Center	-

The table VI indicated exactly that the Indian Institute of Management, Tiruchirappalli by Thirteen Faculty Members Vs H-index. The notable faculty member is “Alka Chadha” and “Sanja Pattnayak” has five H-indexes. “Prabhir Vishnu Poruthiyil” and “Sankalp Pratap” have two H-index,

“Narahari Hansoge”, “K. V. Nithyananda”, “Anirban Som” and “Upam Makhecha invariably has each one H-index, a “Bhimaraya A Metri” includes eight exact H-indexes and “Papri Nath” promptly has three effective H-indexes.

TABLE VII INDIAN INSTITUTE OF MANAGEMENT TIRUCHIRAPPALLI BY THIRTEEN FACULTY MEMBERS FOLLOWING VS FOLLOWERS

S. No	Faculty Name	Department	Following	Followers
1	Alka Chadha	Economics	11	88
2	Prabhir Vishnu Poruthiyil	Economics and Public Policy	-	19
3	Sanja Pattnayak	Economics and Public Policy	31	61
4	Narahari Hansoge	Finance and Accounting	-	18
5	Rohan Chinchwadkar	Finance	1	19
6	K. V. Nithyananda	Finance and Accounting	28	13
7	Anirban Som	Marketing	26	2
8	Bhimaraya A Metri	Director	40	82
9	Papri Nath	Organizational Behaviour & Human Resource Management	29	97
10	Smita Chattopadhyay	Organizational Behaviour & Human Resource Management	11	13
11	Upam Makhecha	Organizational Behaviour & Human Resource Management	17	4
12	Sankalp Pratap	Strategy	14	9
13	K. Elavazhagan	Learning Resource Center	72	107

The table VII explains whether the Faculty Members are properly using the facility, Following Vs Followers. Among the all faculty members, “Alka Chadha” in the Department of Economics has 11 followers and 88 occupied supporters and “Prabhir Vishnu Poruthiyil” 19 prominent supporters and “Sanja Pattnayak” 31 associates and committed supporters 61 active attributes. “Narahari Hansoge” in the Department of Finance and faithful accounting followers 18 honorary fellows. “Rohan Chinchwadkar” “Hansoge” in the Department of Finance naturally following one and worthy followers 18 leading members. K. V. Nithyananda, “extraordinary Anirban Som” 28 and 13. A top-level “Bhimaraya A Metri” in the Director 40 and 82 members. “Papyri Nath” in the Organizational Behavior and HRM 29 and 97. “Smita Chattopadhyay” have 11 and 13, “Upam Makhecha” have 17 and four. “Sankalp Pratap” in Strategy 14 and 9 and K. Elavazhagan in the Learning Resource Center 107 and 72.

TABLE VIII TOP 5 PUBLICATIONS BY TOTAL READS

S. No.	Top publications	by reads
1	Strengths, weaknesses, opportunities and threats analysis of lean implementation frameworks 01/2014; 1(2):162. DOI:10.1504/IJLER.2014.066833	76 Reads
2	Case study analysis of Six Sigma implementation in service organizations Business Process Management Journal 11/2012; 18(6):992-1019. DOI:10.1108/14637151211283384	73 Reads
3	Applying Six-Sigma in the Service Industry: A Review and Case Study in Call Center Services Management of Innovation and Technology, 2006 IEEE International Conference on; 07/2006 DOI:10.1109/ICMIT.2006.262316	73 Reads
4	Developing entrepreneurship policy in India – Looking for order in chaos Twelfth Biennial Conference on Entrepreneurship, Entrepreneurship Development Institute of India Ahmedabad; 02/2017	69 Reads
5	Leading the Tata Group (A): The Ratan Tata Years	34 Reads

The table VIII reveals that top five academic publications by total reads. The published paper “Strengths, economic weaknesses, possible opportunities and threats evaluation of lean implementation frameworks” properly obtained prime place with 76 reads followed by “Case study analysis of successful Six Sigma implementation in social service organizations” and “Applying Six Sigma in the Service Industry: A Review and prominent Case Study in Call Center Services” got other prominent place (two created titles) with 73 studies, “Developing entrepreneurship policy in India Looking for social order in chaos” got third place with 69 reads and “Leading the Tata Group (A): The Ratan Tata Years” instantly got fourth place with 34 reads.

Table IX shows the top collaborating institutions with Indian Institute of Management, Tiruchirappalli from all around the developed world. The Indian Institute of

Technology, Madras supports 9,367 with active members and tops in the expanding list and followed by Indian Institute of Management, Bangalore consists of 786 active members.

TABLE IX TOP COLLABORATING INSTITUTIONS WITH IIM, TIRUCHIRAPPALLI

S. No.	Top collaborating institutions	Members
1	Indian Institute of Technology Madras	9367
2	Indian Institute of Management Bangalore	786

## V. CONCLUSION AND RECOMMENDATIONS

In recent years the usage of research gate among the researchers and faculty are popularly gaining. The usage of research gate is positively motivating the members for general purpose, effective teaching and research activities in the academic Institutions. It primarily focuses on sharing in common about the published paper and a bit of published books, local chapter or Conference Paper, etc. The active Research Gate member is to refer the articles or if any certain questions and possible answers. The published article cited by other users for the potential benefit of the authors. Management study has developed into worldwide and the growing interest among the students needs the premier institutions like Institution of Indian Institute of Management. The faculty members of IIM, Tiruchirappalli are expected to increase the number of the scholarly publications in the Research Gate, for better utilization of research gate and as a good platform for students and research scholars.

## REFERENCES

- [1] Min-ChunYu. (2016). Research gate: an effective altmetric indicator for active researchers, *Computers in Human Behavior*, 55, Part B, 1001-1006.
- [2] Muscanell, N. Utz, S & Utz, S. (2017). Social networking for scientists: an analysis on how and why academics use Research Gate, *Online Information Review*, 41(5), 744-759.
- [3] Murugan. K & Ravanan. C. (2018). Online Tool of the Research Gate. In Tamizhchelvan, M and Dhanavandan.S (Eds.), *Online Tools for Librarians*, pp.189-195, *Dominant Publishers & Distributors Pvt Ltd, New Delhi*.
- [4] Naderbeigi, Farahnaz & Isfandyari-Moghaddam, Alireza. (2018). “Researchers’ Scientific performance in Research Gate: The Case of a Technology University”. *Library Philosophy and Practice*, 1752. Retrieved from <https://digitalcommons.unl.edu/libphilprac/1752>
- [5] Jeyapragash, B, Rajkumar. T & Muthuraj.A. (2018). Research Presence of the Gandhigram Rural Institute in Research Gate, In Tamizhchelvan,M and Dhanavandan.S (Eds.), *Online Tools for Librarians On line Tools for Librarians,Dominant Publishers & Distributors Pvt Ltd, New Delh* ,173-180
- [6] Yu, M.C., Wu, Y.C.J. & Alhalabi, W. (2016). Kao, H. Y. and Wu, W. H, Research Gate: An effective altmetric indicator for active researchers. *Computers in human behavior*, 55, 1001-1006,
- [7] Indian Institute of Management Tiruchirappalli (2018, October 18). Retrieved from <http://www.iimtrichy.ac.in/faculty-dept>
- [8] Research Gate. (2018, October 18). Retrieved from <https://www.researchgate.net/publication/273102948>.