

Emotional Impact of ResearchGate Buttons Read, Interest Score, Citation, and Recommendation Among Academic Researchers

Shafie Sharif Mohamed¹, Sacdiyo Sheikh Baana², Abdisalamn Fahiye³
Somali Researchers Association (SRA)

¹shafie@sra.so, ²Diitasheikhbaana@sra.so, ³abdisalamfahiyeali@sra.so

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Abstract

Reaction buttons have become an integral part of digital academic platforms, shaping how researchers interact with scholarly content. On ResearchGate, these buttons facilitate engagement, collaboration, and knowledge exchange, distinguishing them from traditional social media interactions.

Purpose This study examines the role of ResearchGate's reaction buttons in fostering academic discourse and professional networking on a global scale. It explores their impact on researcher visibility, motivation for knowledge sharing, and the perception of scholarly recognition.

Methods: We gathered data utilizing the quantitative approach. The study focused on ResearchGate users who were given a questionnaire to complete on their own. Out of the 450 individuals targeted, 390 responded, resulting in a response rate of 87%. Both men and women were given equal

opportunities to participate, ensuring a balanced representation of gender among the responses. The data analysis employed a descriptive methodology.

Findings: The findings revealed that researchers utilize reaction buttons as a tool for increasing visibility and attracting citations. Additionally, engagement with these features often leads to comparisons with peers, influencing perceptions of academic success. Researchers also associate reaction buttons with emotional responses, using them to gain a sense of achievement, boost motivation, and mitigate feelings of anxiety related to their research's reception.

Research limitations: This research focused solely on the emotional impact of ResearchGate buttons among global researchers.

Originality/value: To the best of our knowledge, this is the first study sheds light on the emotional impact of ResearchGate buttons among global researchers.

Keywords: ResearchGate, Emotional, Interest Score, Citation, Recommendation.

Introduction

Growth and Popularity of ResearchGate has become one of the most widely used academic social networking sites since its launch in 2008, with a growing number of scholars participating in it. According to ResearchGate there are 20 million researchers in their community come from diverse sectors in over 190 countries, and use ResearchGate to connect, collaborate, and share their work.

This network has significantly influenced how researchers share and disseminate their work, collaborate, and establish professional relationships. The site's popularity stems from its unique features that allow users to upload full-text papers, track publications, and engage in scholarly discussions. Researchers also benefit from personalized recommendations and access to statistics related to their work, as well as networking opportunities.

ResearchGate provides Academic Researchers with statistics that highlight the significance of their work. By giving a range of insights and information, these stats help researchers to understand the wider impact of their work and tracks achievements. On ResearchGate it also enables the researchers to see the people behind the stats, giving the opportunity to find out more about the people interested in their work and even connect with them.

ResearchGate Stats are not just about numbers: they represent actual researchers who are interacting with and learn from research. On Stats tab, users can see the profiles of their readers (provided that when both of them have chosen reader visibility settings that show authors when they read their research), as well, researchers can track citation and recommendation while obtaining demographic information about their audience, including country, institution, seniority, and discipline.

It Keep up their stats each week: to help researchers monitor their impact, ResearchGate provides a weekly stats report, and keep track of user's impact. Users can access their report directly from their Stats tab –it also notifies them each week as soon as their report is ready.

Several studies have explored the impact of ResearchGate's various features on academic researchers. Muscanell and Utz (2017) examined how scientists utilize ResearchGate, highlighting its role in networking, collaboration, and career development. Kraker and Lex (2015) critically assessed the ResearchGate Score, questioning its transparency and reliability as a metric of scientific reputation. Similarly, Memisevic (2022) analyzed the Research Interest Score, discussing its correlation with traditional scientometric measures like citations and the h-index. Hoffmann, Lutz, and Meckel (2015) proposed a relational altmetric approach, evaluating how network centrality on ResearchGate can indicate scientific

impact. A comparative study between ResearchGate and Google Scholar by Sing et al. (2022) provided insights into differences in citation counts, publication records, and various impact metrics. Additionally, while Stewart (2015) primarily focused on Twitter, her findings on digital academic influence contribute to understanding how online platforms like ResearchGate shape scholarly engagement. Collectively, these studies highlight the evolving role of ResearchGate in academia and raise critical questions about the validity and implications of its metrics.

Celebrating Achievements: Recognizing academic achievement is a big part of ResearchGate's platform. receives notifications when they reach significant stats benchmark, encouraging them to acknowledge and celebrate their achievement. It's also easy for them to share their achievements with others via social media, so they can help celebrate them accomplishments with users.

Understand ResearchGate buttons

Buttons provide a range of metrics that help users get a comprehensive overview of the impact of their work.

- A. Reads
- B. Research Interest Scope
- C. Citation
- D. Recommendation

1. Reads

Reads is a simple metric designed to show users exactly how often research is being accessed on ResearchGate. Since it can take a long time before user's research gets cited, reads are a great way to see early interest in their work — from both ResearchGate members and non-members.

Depending on user's profile visibility settings, users can also see some of the profiles of the people who recently read their work, allowing users to connect with people who are interested in their research. (Note: users will only see readers if the user allows others to see when they read their work and if the reader has done the same.)

2. Reasons for a decrease in reads.

There are a few possible reasons why researcher's reads statistics may have decreased. The reads counter on their profile's Stats tab is a sum of the reads of their individual research items, which the researcher can find on their Research tab. If a research item is removed from the users Research tab, deleted from ResearchGate, or merged with a duplicate item, the item's reads will also be removed.

3. Research Interest Score

Citations are not the only indicator of a researcher's impact – while they are the longest-standing measure, it can take months or even years before users start receiving citations after a paper is

published. At the same time, researchers are reading and learning from each other's work on ResearchGate every day. These interactions can impact future research, but not all of them end in citations. That's why using citations alone in measuring impact can underrepresent the full impact of a piece of research. One key feature of ResearchGate is its RG score, which serves as a unique impact indicator that integrates publication influence and social activities like asking and answering questions.

By combining reads, recommendations, and citations, ResearchGate believes that the Research Interest Score offers a holistic indicator of the impact of a person's research.

is a convenient way to help users track the impact of their research within the scientific community. The score combines reads by unique ResearchGate members, recommendations on ResearchGate, and citations (excl. self-citations).

To ensure the Research Interest Score provides a meaningful measure of your research impact, certain types of data are excluded from the calculation:

Self-Citations and Reads by Authors – While self-citations are a valid part of academic practice, the Research Interest Score focuses on how others in the scientific community engage with your work. Self-citations are therefore excluded from the score, as well as reads by you or your co-authors accessing

your own publications. This ensures the score reflects external interest rather than internal references.

Reads by Non-Members – To maintain the integrity of the Research Interest Score, reads from individuals who are not ResearchGate members are excluded. By focusing only on interactions from members of the scientific community, the score better reflects how your work is received by fellow researchers. This also allows for the inclusion of demographic information about those engaging with your research.

4. Citation:

Scholarly Impact and Citation Metrics The impact of ResearchGate is evident in its high citation rates and the RG Score system, which quantifies a user's influence based on their activity, including asking and answering questions. ResearchGate's RG Score is often used for evaluating research positions and grant proposals. Researchers with higher RG Scores are perceived as more credible and influential, contributing to their professional recognition. However, the impact of this score on actual academic success is still under debate, with concerns about its transparency and how it is calculated (Kousha & Thelwall, 2015).

Researchers can find out how many citations their publications on ResearchGate are getting and where they were cited. They can also see the profiles of the people who have cited their research.

The Stats tab on ResearchGate's profile, Researchers can see the citations their work has received, giving the user a detailed way to track their impact.

5. Missing citations on research Gate

ResearchGate regularly import citation data from different sources and they ensure accuracy. However, while citations using standard citation styles are usually displayed correctly, there are some cases where this can be difficult.

6. To improve the visibility on RG

researchers can take the following steps:

Make sure the citing research item is available on ResearchGate.

Check to see if the research item has completed and accurate metadata, including details such as publication date, journal, abstract.

Make sure any full-text PDFs were not created by scanning a hard copy, as citations can't be extracted from scanned document.

If you recently added a publication to ResearchGate and notice that citations are missing, please be patient as it can take some time to extract all its citations. Please also note that we aren't able to manually add your citations from other sources, e.g., Google Scholar.

Note that ResearchGate cannot manually add citations from external sources such as google scholar.

7. Reasons for a decrease in citation Count

There are two possible reasons why your citation counts or h-index decreased.

- Duplicate publication It is possible that system duplicated by the publication that was cited. ResearchGate then merged the duplicates which resulted in the loss of a citation.
- If an author removes a publication that cited the Researcher's work, the citation is also removed.

8. Recommendations:

Recommendation on ResearchGate gives the researchers a way to see the influence of their work by showing them how often researchers have recommended their work to other people on ResearchGate.

The Stats tab shows researchers how many recommendations their research and other contributions on ResearchGate get each week. Researchers can also see who has recommended their research in the last 8 weeks.

Researchers weekly stats report shows which of their work was recommended the most, and who recommended it.

Methodology

This study employs a quantitative survey-based research design to examine how ResearchGate interactions such as reads, interest-score, recommendations, and citations affect researchers' emotions, motivation, and academic behavior.

1. Population and Sampling

The target population for this research consisted of academic researchers actively using ResearchGate across various disciplines. These researchers were selected based on their engagement with ResearchGate features such as reads, interest-score, recommendations, and citations, ensuring that the sample reflected individuals who regularly interact with the platform.

A total of 450 researchers were targeted to participate, with 390 valid responses collected, achieving a response rate of 87%. To ensure diversity, the study considered factors such as academic and non-academic rank, research field, and years of ResearchGate usage.

2. Data Collection Period

The survey was conducted over a period of 3 Months, from February to April. This timeframe ensured that responses reflected recent and relevant experiences with ResearchGate engagement.

3. Data Collection Methods

The data was gathered using a structured online questionnaire consisting of 13 closed-ended questions. Various data collection methods were employed to ensure broad participation and diverse insights from academic and non-academic researchers:

Online Surveys: The questionnaire was distributed through ResearchGate, academic mailing lists, and social media groups, allowing researchers from different disciplines to participate.

Telephone Follow-Ups: To improve response rates, follow-up phone calls were made to selected participants, reminding them to complete the survey and clarifying any concerns about the questions.

Sharing in Research Communities: The questionnaire was distributed in academic and non-academic research-related social media groups, allowing participation from researchers actively engaged in discussions on platforms such as Facebook and WhatsApp. This approach ensured broader outreach beyond direct invitations.

4. Structure of the Questions

The questionnaire was carefully designed to comprehensively assess emotional responses to ResearchGate engagement and consisted of a total of 17 questions. Four questions were dedicated to gathering demographic information, including:

Gender, age, professional background, educational background. The remaining 13 questions focused on key aspects of ResearchGate engagement, including: Emotional responses to reads, interest-score, recommendations, and citations. To measure responses, a combination of Yes/No questions and a Likert-type scale (e.g., Always, Sometimes, Never) was used, allowing for structured and quantifiable analysis.

5. Data Analysis

Responses were analyzed using SPSS software, applying descriptive statistics (e.g., frequency distributions and percentages) to identify emotional patterns among researchers. Additionally, correlation analysis was conducted to examine relationships between ResearchGate engagement metrics and emotional responses.

6. Ethical Considerations

Participation was voluntary, and respondents were informed that all data would remain anonymous. No personal identifiers were collected, ensuring compliance with ethical research standards.

Findings

The emotional and professional impact of ResearchGate's features like the reads, interest score, recommendations and citations has been a subject of ongoing discussion. While these metrics can provide validation and recognition for researchers, they can also create pressure to

maintain high scores and frequent engagement, which may lead to stress and a sense of inadequacy if these expectations are not met. The competitive nature of online academic platforms like ResearchGate may also foster a sense of comparison among researchers, potentially affecting their emotional well-being and professional satisfaction.

1. Demographic profile

Social media platforms like ResearchGate exhibit variations in usage patterns based on criteria such as age, gender, and educational attainment.

Gender

In terms of gender, men and women had equal opportunities to participate in the study. However, the majority of respondents were male, accounting for 83%, while 17% were female. This significant gender disparity suggests that, despite equal participation opportunities, external factors such as availability, or interest levels may have influenced the lower female participation rate.

Age

Age can influence how researchers use ResearchGate, with younger users potentially being more active in seeking engagement through reactions and feedback. Respondents ranged from 25 to 54 years old and above. The majority of respondents 43% were aged 25-34, followed by those aged 35-44 (35%). Only a small percentage (20%) were aged 45-54.

Professional background

Understanding the professional background of users is crucial in understanding how researchers interact with the platform, as those in academia might approach it differently than individuals in other fields. We asked respondents about their professional background to explore its impact on their engagement with ResearchGate. The results showed that 100% of respondents were from academic fields.

Education

Education level affects how users contribute to and engage with ResearchGate. Higher education levels may correlate with more frequent contributions and interactions on the platform. Therefore, we asked respondents about their education level to assess how it influences their activity on ResearchGate.

The results showed that the majority of respondents (47%) held a master's degree, followed by those with PhDs (40%) and bachelor's degrees (13%). This suggests that individuals with higher education levels, particularly master's and PhD holders, are more active or engaged on the platform.

Years of Using ResearchGate

Since its launch in 2008, the growth and popularity of ResearchGate have made it one of the most widely used academic social networking sites, with

an increasing number of scholars participating. The majority of participants 64% reported using it for 1-5 years, while 32% have been using it for 6-10 years. The remaining 4% reported using the platform for 11-15 years.

2. Uploading Article on Research Gate

Uploading articles on ResearchGate is an important activity for researchers as it provides a platform to share their research, gain visibility, and interact with the academic community. We asked respondents whether they post all articles on their ResearchGate accounts. The study revealed the following: A significant majority of respondents, 79%, actively upload their research articles on ResearchGate. This indicates that the platform is widely used by these individuals to share their work and engage with other researchers. On the other hand, 21% of respondents confirmed partially upload their articles to ResearchGate. This shows that a large portion of researchers utilize ResearchGate for sharing their work, but there is still a notable group that may not be fully leveraging the platform for dissemination and academic interaction.

3. Feeling excitement

Feeling excitement is a common response when researchers receive reactions on their ResearchGate article, such as reads, interest score, recommendations or citations as it boosts their motivation to continue sharing their work. We

asked respondents if they feel excited when they receive reactions on their ResearchGate articles. The study revealed that the majority of respondents 77% feel happy when peers react to their articles, while 23% reported do not feel anything.

4. Reaction request

Reaction requests are common in the academic community, where researchers ask colleagues or peers to react to their posts in hopes of extending their reach and increasing visibility within their field. We asked respondents if they have ever made a reaction request from colleagues or peers. Slightly more than half 54% reported that colleagues or peers ask them to react to their posts on researchGate, while 23% stated that no one has asked them to react to articles.

5. Show Respect for the Reactors

Showing respect for those who engage with your research, such as reading, recommending or citing, is an important part of building academic relationships. We asked respondents if they show respect for those who react to their articles on ResearchGate. Interestingly, the study found that about eight-in-ten of respondents 56% agreed that they show respect for those who react to their ResearchGate articles. While 44% replied no respect.

6. Obsess on Checking ResearchGate Stats

Many researchers obsessively check their ResearchGate stats, tracking their interest score, recommendation, and citations, whenever they upload new article. We asked respondents if they obsess over checking their ResearchGate stats and reactions. The study revealed that 82% of respondents said yes, they over check their reads and interest score, while 18% said no, they don't check constantly.

7. Usage for Reaction Buttons: "Tit for Tat"

Reaction buttons allow users to express their interest and appreciation for the research shared. We asked respondents if they tend to reciprocate reactions to others' posts, adopting a "Tit for Tat" approach. The study found that about 70% of respondents reward reactions for those who have reacted to their articles before. Meanwhile, 30% stated that they never reciprocate reactions.

8. Motivation to continue

Motivation to continue sharing research is often driven by the positive feedback researchers receive through reactions and engagement on platforms like ResearchGate. We asked respondents if receiving reactions motivates them to keep publish their research. The results showed: The majority of respondents, 98%, indicated that they feel motivated to continue doing research when they receive reactions. 2% of respondents admitted that

they do not feel motivated to continue publication, even when they receive reactions on their posts.

This shows a strong correlation between positive feedback and continued engagement from researchers, as most respondents expressed a sense of motivation driven by reactions from others.

9. ResearchGate Reactions Cause Anxiety.

Reaction buttons on ResearchGate can sometimes lead to anxiety, especially when researchers do not receive the expected engagement. This can cause discouragement and hesitation to post again. We asked respondents if they feel anxiety when they don't receive reactions on their ResearchGate posts. The results showed: 58% of respondents admitted that they feel anxiety, while 42% of respondents stated that they do not feel anxiety when they don't receive reactions to their posts.

10. Reaction Partners

Reaction partners are individuals or groups within the academic community who support each other by recommending, citing or reading on each other's work. We asked respondents if they have reaction partners who help each other by engaging with each other's ResearchGate articles. About 58% confirmed that they have reaction partners, while 42% acknowledged that they don't have reaction partners.

11. Reactions as a Source of Happiness.

Reactions, especially positive ones, are a source of happiness for researchers, as they validate the importance and quality of their work. We asked respondents if receiving

reactions on their ResearchGate articles makes them happy. The study revealed that the majority of the respondents 83% feel happiness when peers react to their posts. However, 17 % said they were not emotional at all.

Comparison

Comparison with peers on ResearchGate, in terms of views, citations, and reactions, can sometimes create a sense of competition or inadequacy. We asked respondents if they compare their ResearchGate stats to those of their peers. Over two third, 70%, said yes, while one third 30% said no.

Congratulations on the Reaction! Receiving congratulations for reactions is a common response when researchers celebrate milestones, such as reaching more views or getting more citations. We asked respondents if they receive congratulatory messages when they get reactions on their ResearchGate posts. The results showed: The majority, 76% reported that they receive congratulatory messages when they reach milestones on their posts. 24% confirmed that they do not receive congratulatory messages in response to their reactions.

This indicates that while many researchers celebrate their milestones with congratulatory messages, a significant portion does not receive such recognition.

Conclusion

This study aims to evaluate the Emotional Impact of ResearchGate Buttons **Read**, **Interest Score**, **Citation**, and **Recommendation** Among Academic Researchers. The findings revealed that researchers utilize reaction buttons as a tool for increasing visibility and attracting citations. Additionally, engagement with these features often leads to comparisons with peers, influencing perceptions of academic success. Researchers also associate reaction buttons with emotional responses, using them to gain a sense of achievement, boost motivation, and mitigate feelings of anxiety related to their work's reception.

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Reference

Hoffmann, C. P., Lutz, C., & Meckel, M. (2015). A relational altmetric? Network centrality on ResearchGate as an indicator of scientific impact. *Journal of the Association for Information Science and Technology*, 66(4),

801-813.

<https://doi.org/10.1002/asi.23225>

Kousha, K. Thelwall, M. and (2015), ResearchGate: Disseminating, Communicating, and Measuring Scholarship?. *J Assn Inf Sci Tec*, 66:876-889. <https://doi.org/10.1002/asi.23236>

Kraker, P., & Lex, E. (2015). Exploring the ResearchGate score as an academic metric: Reflections and implications for practice. *Journal of Scientometric Research*, 4(1), 22-28. <https://doi.org/10.4103/2320-0057.156017>

Memisevic, H. (2022). Research Interest Score in ResearchGate: The silver bullet of scientometrics or the emperor's new clothes? *Canadian Journal of Medical Education*, 13(2), 45-52. <https://cajmhe.com/index.php/journal/article/view/201>

Muscanell, N., & Utz, S. (2017). Social networking for scientists: An analysis on how and why academics use ResearchGate. *Journal of Computer-Mediated Communication*, 22(2), 56-71. <https://www.researchgate.net/publication/318794337>

Stewart, B. E. (2015). Open to Influence: What counts as academic influence in scholarly

networked Twitter participation. *Learning, Media and Technology*, 40(3), 287-309.
<https://doi.org/10.1080/17439884.2015.1015547>

Singh, V.K., Srichandan, S.S. & Lathabai, H.H. (2022). ResearchGate and Google Scholar: how much do they differ in publications, citations and different metrics and why?. *Scientometrics* **127**, 1515–1542.
<https://doi.org/10.1007/s11192-022-04264-2>