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# **Bibliometric Assessment of Intrinsic Motivation Research Trends of the Last Six Decades**

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## **Abstract**

Psychologists have posited two types of driving theories. By dualistic hypotheses, motivation is broken into two forms: Intrinsic and Extrinsic. The attainment of an instrumental purpose relates to Intrinsic Motivation. It has been observed that intrinsic motivation has been a topic of research interest of the researchers due to the importance of the term. Therefore, this paper evaluates the research output on intrinsic motivation since 1959 in different fields using the Scopus database. The data were collected from the Scopus database and were analyzed using Microsoft Excel to analyze the research trends on intrinsic motivation. It is concluded that intrinsic motivation has been a topic of researchers' focus since 1959 but higher attempts are made after 2007. Most of the researchers prefer journal article publications and only 1% are in the press, whereas all other articles are already published. Most of the publications are published in the English language and the researcher from the field of Psychology and Social Science is publishing the most on intrinsic motivation. As this paper compiles the archive over the last six decades accessible on Scopus, this paper will assist junior researchers to identify the void and plan their potential study on intrinsic motivation.

**Keywords:** Bibliometric Assessment, Intrinsic, Motivation, Psychology, Research Trends

## **Introduction**

Intrinsic Motivation (IM) refers to engagement in behaviour that is inherently satisfying or enjoyable. IM is no instrumental, that is, intrinsically motivated action is not contingent upon any outcome separable from the behaviour itself. According to Natarajan et al., (2015), motivation is a way to motivate the workforces to remain at the organization for long periods. Motivation is a source to inspire and encourage employees (Stoke, 1999). Mitchell et al., (2003) asserted that motivation produces positive performance and behaviour. Motivation is a process to achieve a higher level of satisfaction at the workplace (Houkes et al., 2001). Motivation increases the positive work environment in all fields (Hartel, 2008).

According to Liu et al., (2019) and Shaikh, Pathan, & Khoso (2018), intrinsic motivation is supportive and worth full instrument as well as have long-term positive effects in all areas including industries, hospitals, management as well as academic areas. Greener (2019) asserted that the performance of authors and researchers in the academic field, as well as management in industries, is improved by keeping consideration of the intrinsic factors. According to Hur (2017), motivators of two factors Herzberg theory create a positive impact on relations between non-profitable and profitable organizations. Sanjeev and Surya (2016) asserted that intrinsic factors increase the level of interest in jobs and motivate scholars in the modern world of research. Further, Chang et al., (2017) and Sumra et al., (2019) asserted that employees who are motivated internally enable to resolve their problems themselves rather than depending on the managers.

Dahlqvist and Matsson (2013) summarized that intrinsic rewards have given more importance than other rewards to boost the performance of researchers and authors efficiency. Universities must have to set their prizes for scholars to improve productivity. Employees are more motivated internally by providing opportunities, good recognition, positive feedback and interestable tasks (Palaniammal, 2013). Bhadoriya and Chauhan (2013) explained that intrinsic factors are successful key for high performance of students and achieve the mission of the organization. Tan (2013) emphasized that intrinsic motivation increases the employees as well as researchers output and efficiency. Dartey-Baah and Amoako (2011) believed that Ghanaian workers and research students were highly motivated by intrinsic factors as compared to hygiene factors. According to Robbins (2009), intrinsic factors are beneficial for increasing the scholars' work satisfaction. Intrinsic factors are contributing attentive role to the satisfaction of researchers (Ali et al., 2008). Intrinsic factors are a source of moving students at a high position and boost their living standards (Cremer, 2007). Intrinsic motivation increases the importance of work for an individual (Amabile, 1993). Intrinsic motivation increases the employees' performance that gives the best outcomes (Young, 1961; Deci and Ryan, 1987).

According to Ahmad et al., (2019), writing and publishing materials motivated and encouraged the researchers of universities, these factors makes the career and reputation of scholars. Akanbi (2008) asserted that work itself makes students their work interestable because they enjoy judging their work and controlling their performance. Publication type and selection of journals make positive relation at the workplace; through which students get positive feedback from their supervisors or editors due to which they feel good and take more interest in their work (Anr, 2010). The publication helps researchers in Growth, which is one of the important factors of intrinsic that provide opportunities to scholars to improve their performance that ultimately gives benefit to organizations (Attock et al., 2011).

Publication of work increase the level of satisfaction, which helps in the job. Job satisfaction is defined as emotions of works regarding jobs (Aziri, 2011; Jones & Sloane, 2007). Job satisfaction is essential in every stage of a career, which motivates the people (Spector, 1997). For successful and competitive strategies, job satisfaction plays a crucial role in the organization through publication (Yim et al., 2018). Publishing materials are paying a primary role in enlightening the performance of students (Suprianto et al., 2018). Publication in different journals crosses the multidisciplinary areas, which allows authors to hard efforts, apply more time and force to achieve their goals (Maksuc, 2016). According to Rias et al., (2017), Rockmann et al., (2017), Turner, A., (2017), Bear et al., (2017), Brehma et al., (2017) and Maksuc (2016), the publication builds career advancement and growth, interesting work, high pay, rewards, the security of jobs and flexible

workplace during job life. As satisfaction of job is achieved by the motivation of authors, so writers are motivated and satisfied through certain aspects including high impact factor journals, selection of journals, documentation type, paper security, promotion and growth (Palaniammal, 2013). Good behaviour from reviewers and editors create high satisfaction and progress of authors (Mahfood, 2012). Work satisfaction is placing a fundamental condition which is employed in industries (Chandrasekar, 2011). Researchers can work hard and take interest in their work through more concentrating on the importance of publications (Hasibuan, M. 2009).

The main purpose of this study is to assess the research output on intrinsic motivation in different industries using published articles since 1959. Previous studies, Kuvaas et al., (2017), Delaney et al., (2017) and Rias et al., (2017) asserted that intrinsic factors are contributing a great role in improving the level of the researcher's in the academic field and employees' performance in the organization. Therefore, this paper evaluates the research trends and output on intrinsic motivation. It will assist the researchers to observe the research trend and identify the gap for future research.

### **Research Methodology**

In the first phase of this research, the complete database available on Scopus since 1959 till 15th November 2020 collected in .exe formate and the later phase, all data were analyzed using Microsoft excel for trend assessment of different features targeted in this research.

### **Data Collection and Analysis**

The data is collected using the Scopus database dated November 15, 2020. The raw data was downloaded from the Scopus database and the data was cleaned in the next phase to get the results for this paper.

### **Results & Discussions**

The subsequent figures are displaying the overall study of different trends in terms of intrinsic motivation followed by researchers, students, authors, editors and scholars, who are involved in writing and publishing materials based on documentation, status, journal selection, language, access type and countries. Figure 1 shows the total number of open access publications and others.

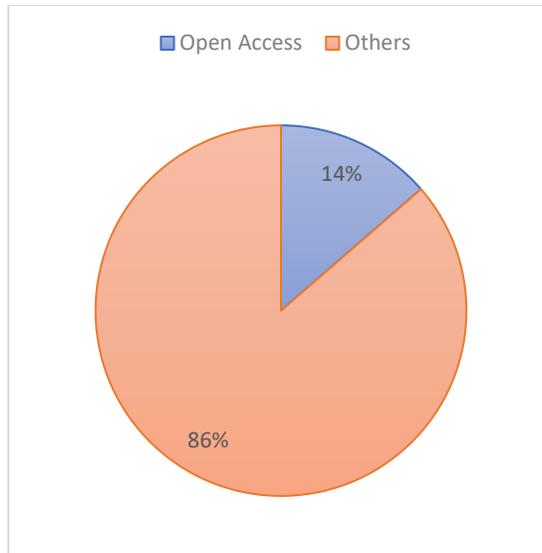


Figure 1: Open Access and Other Publications

This figure analyzed the intrinsic motivation publications access types, which shows 14% access belong to open access whereas 86% belong to other access. Figure 2 shows the status of publications.

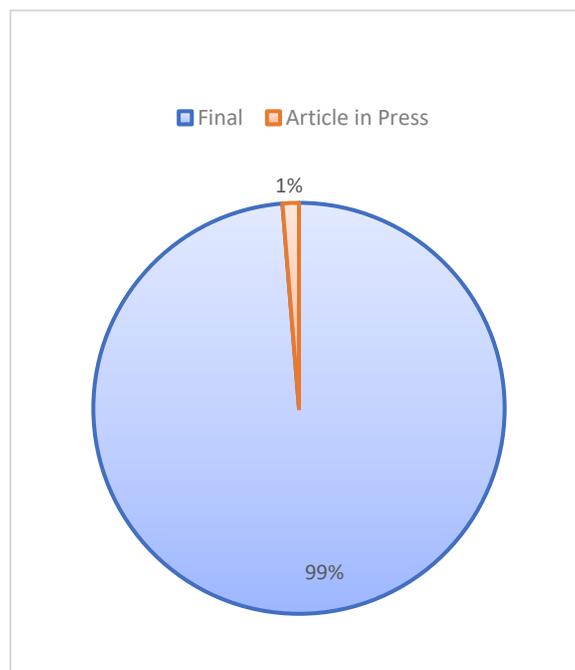


Figure 2: Publication Status

This figure analyzed that 1% of articles are in the press whereas 99% of articles are successfully published in journals. Publishing journals have great prestige and merit within the community service. Figure 3 shows the trend of publication on intrinsic motivation since 1959.

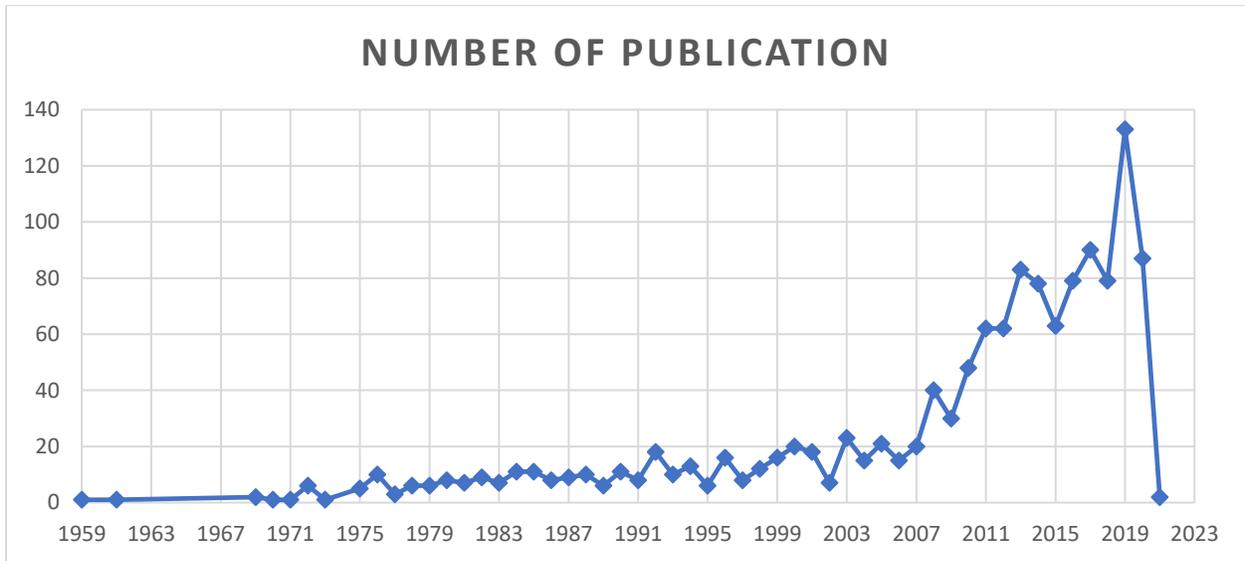


Figure 3: Intrinsic Motivation Publication Trend Since 1959

This figure analyzed the impact of research publication trend on the topic of intrinsic motivation in different industries. It is observed that the research trend on intrinsic factors is increasing after 2007. It is also analyzed that there is a significant contribution made by researchers in this research area as in 2019 more than 130 articles were published in a single year. Figure 4 shows the top authors frequently researching intrinsic motivation.

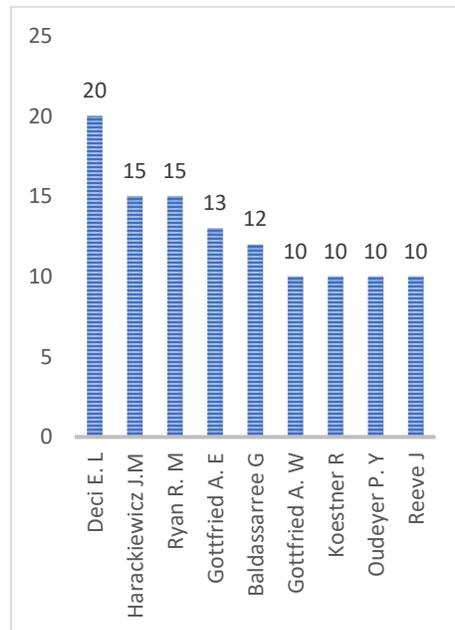


Figure 4: Authors Frequently Publishing Articles on Intrinsic Motivation

This figure mentions that authors are frequently writing materials on intrinsic motivation. Deci E.L. has contributed a more imperative and significant role in intrinsic motivation. Harackiewicz and Ryan, both were also playing a noteworthy role in the inscription the articles on intrinsic motivation. Gottfried to Reeve was also employed vital and commanding work over intrinsic

papers. Intrinsic motivation increases the involvement and participation of scholars at the time of critical situation regarding publication (Steers et al., 2011). High motivators will increase the performance, which ultimately increases the involvement, interest and growth among scholars. Figure 5 shows the different study fields the authors are researching intrinsic motivation.

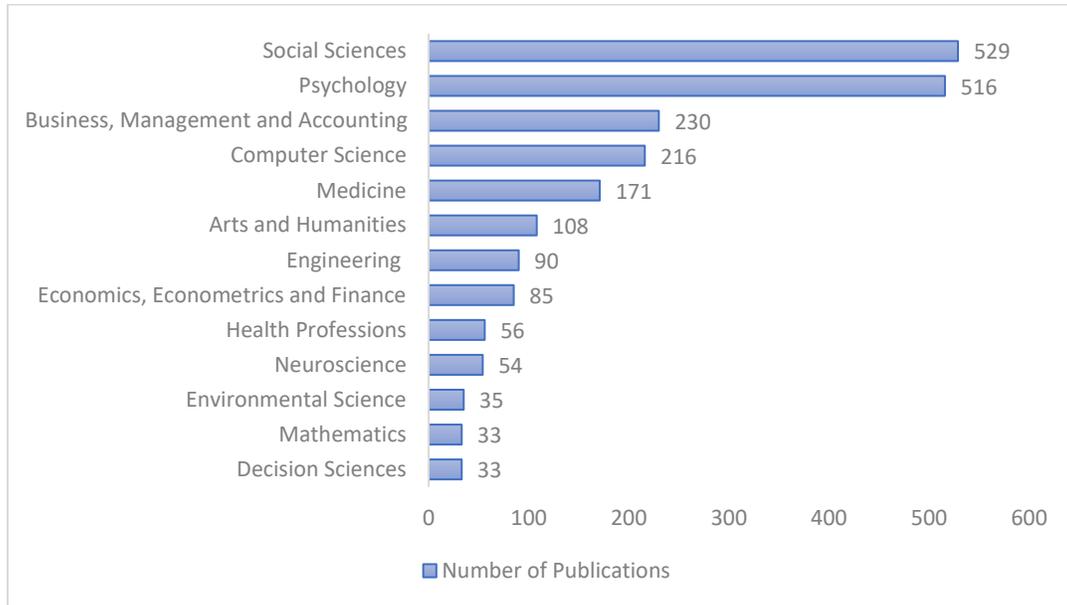


Figure 5: Intrinsic Motivation Research in Different Fields

This figure shows the Publication Trend in the different subject area. Among all Social Science and psychology is playing a major role in the contribution of intrinsic work as compared to other areas. Social science is the activity of gathering, analyzing and interpreting the information for a variety of social, economic, educational and political purposes. Researchers need a critical understanding for the need of social research methods and styles. The publications have also been published in many other areas like Business, Management and accounting, Computer science and Medicine to analyze the research work in intrinsic motivations field. From areas of Arts and Humanities to Decision Sciences, different subjects consider the principles of effective design of research projects with qualitative and quantitative approaches. Figure 6 shows the types of articles published on intrinsic motivation since 1959.

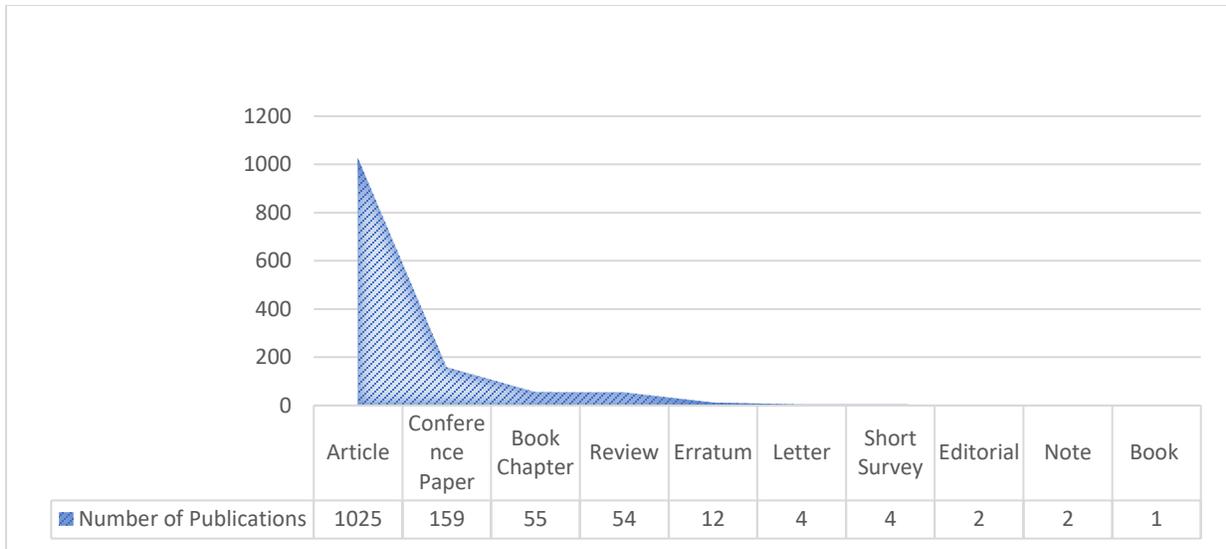


Figure 6: Publication Types of Intrinsic Motivation Research

This figure shows that Publication Document Type, which analyzes that most papers are recognized on the bases of articles in the final journal rather than publish in the conference, book or other sources. The article is based on the original report whereas papers are proceeding at the conference. While books consist of different specific topics although review, note, survey, etc. are appraising or identifying any topic. Articles publication bring tangible benefits to scholars and researchers because the publication is required for career advancement and growth. Figure 6 mentioned that more than one thousands of articles have been written on intrinsic motivation. The researcher focuses on researcher articles to analyze and review the intrinsic motivational factors in deeply. The conferences papers and Book chapter also contribute and guide the future researchers to evaluate and examine the intrinsic motivational research work. Figure 7 shows the publication sources which frequently publish the research on intrinsic motivation.



Figure 7: Journal Selection Trend of Intrinsic Motivation Research Publication

This figure analyzes the Journal Selection Trend of Intrinsic Motivation Research Publication. Journal of Personality and Social Psychology provide good knowledge of social as well as personality psychology and focus majorly on empirical research. The introduction is too lengthy which consists of several studies including multiple experiments. Motivation and emotion journal mainly focus on how to motivate the employees in industries and scholars or researcher in the academic field. It will increase the way of motivation and decrease the level of demotivation by employing different intrinsic factors. Every journal mention in this figure gives their importance in related to their topics. The journals like Motivation and Emotion and Frontiers in Psychology play an important role to publish the major articles in the area of intrinsic motivational factors. The other journals like Lecture Notes in computer science, Learning and Individual differences and Journal of Education psychology publish an equal number of research papers on intrinsic motivation factors. Figure 8 shows the institutes publishing the research on intrinsic motivation.

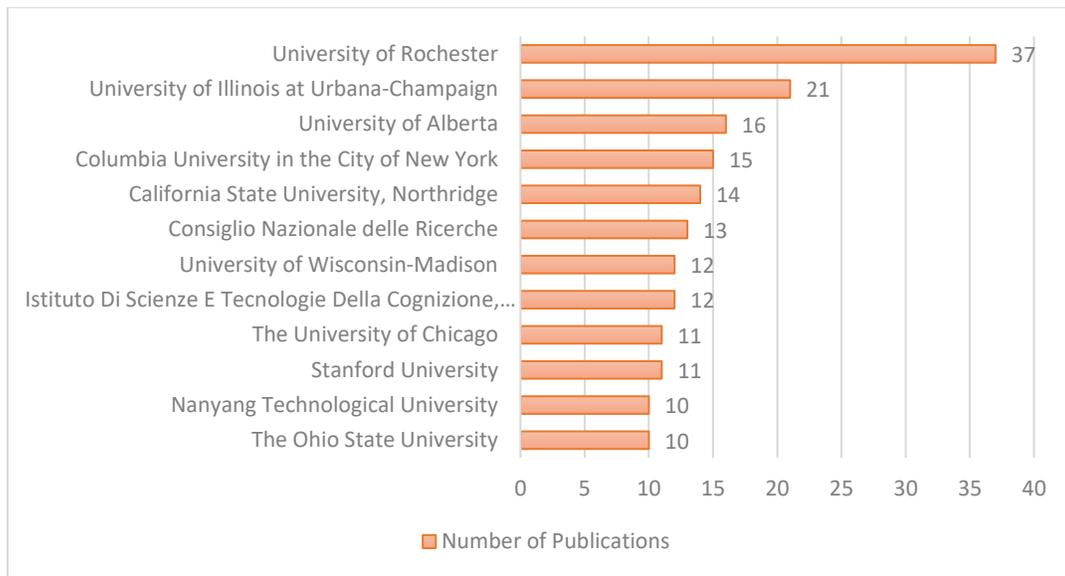


Figure 8: International Institutes Publishing Research on Intrinsic Motivation

This figure analyses the number of publications is done by different universities. Above figure shows that the University of Rochester is involved in more publication as compared to other Universities. The University of Rochester makes students colorful, curious, courageous and try to reach them at their right place. Rochester university acknowledges the efforts of students or authors on regular basis. The other institute the University of Illinois at Urban-Champaign, University of Alberta, Columbia University was also involved in publications to help out the researchers to be a focus on intrinsic motivation. The low number of publications by Nanyang Technological University and Ohio State University shows it needs to publish and research work on intrinsic motivation factors. The universities should focus on the area of intrinsic motivation and motivate the future researcher to upgrade the research work on intrinsic motivation. Table 1 shows the funding agencies supporting research on intrinsic motivation.

Table 1: Major funding sources supporting research on intrinsic motivation

Major Funding Sponsors	Number of Publications
National Natural Science Foundation of China	24
National Science Foundation, USA	17
National Institute of Mental Health, USA	16
Seventh Framework Programme, Europe	11
Japan Society for the Promotion of Science	9
National Research Foundation of Korea	7
Horizon 2020 Framework Programme, Europe	6
Social Sciences and Humanities Research Council of Canada	6
Deutsche Forschungsgemeinschaft, Germany	5
Ministry of Education of the People's Republic of China	5

This figure analyses that National Natural Science Foundation of China provide more fund as compared to other sponsors. National Natural Science Foundation of China gives more importance, value and worth to publications as well as encourage the scholars or researchers to write and publish their work. National Science Foundation, USA also provide an imperative role in providing funds whereas other sponsors which are mention in the above figure, are taking interest to provide the funds for publication. The lower funded universities should come forward to provide the valuable funds and help out the research students to write the research papers on intrinsic motivations to upgrade the research work that could be helpful for the institution as well as the country also. Figure 9 shows the country vide status for article publications on intrinsic motivation.

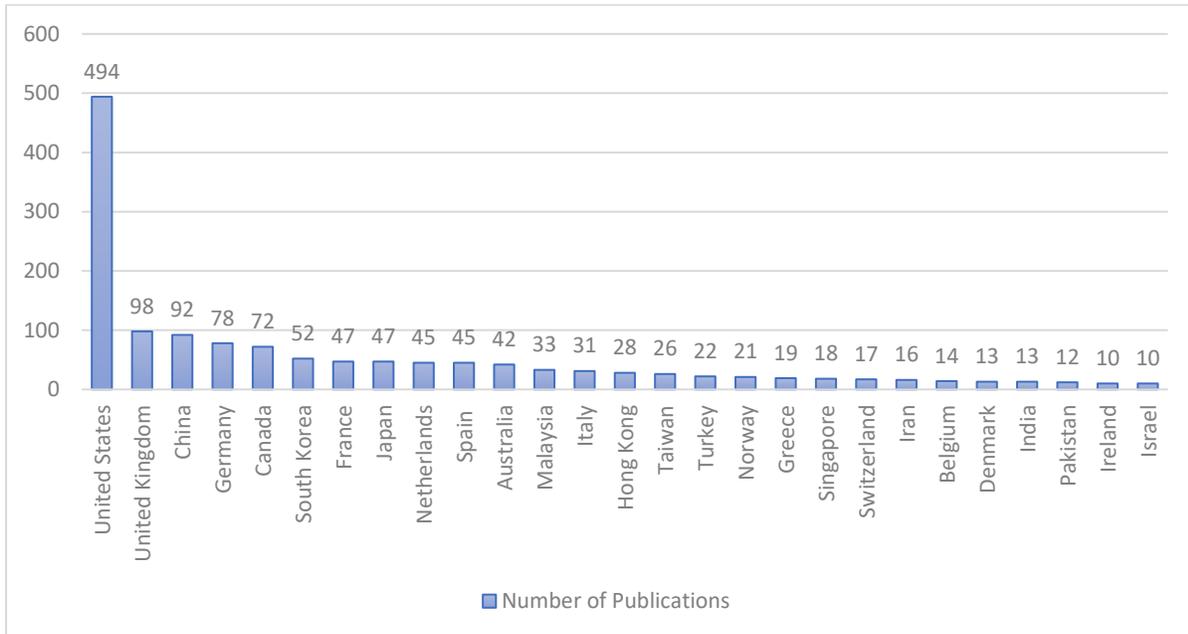


Figure 9: Top Countries Publishing on Intrinsic Motivation Research

This figure analyses the Intrinsic Motivation of Research Publication Countries. From the above figure, it is mentioned that the United States has given more importance to the publication of work as compared to other countries. The United States are a more prolific publisher with high-quality science in-universe because it is bolstered with top academic institutions whereas the United Kingdom, China, Germany and Canada are biggest collaborative partners of United States and they are also playing imperative contribution in publication. While South Korea, France, Japan, Spain, Australia and Netherlands are contributing also a significant role in academic research as well as trying their best to appear in top research approaches. From countries Malaysia to Norway, they are also producing impactful work in terms of research whereas from Greece to Israel, they are also performing good in the field of research and their efforts cannot be denied. Table 2 shows the status of articles on intrinsic motivation research publications in different languages.

Table 2: Most Frequent Language of Publications on Intrinsic Motivation

<b>Language of Publication</b>	<b>Number of Publication</b>
<b>English</b>	<b>1268</b>
<b>Spanish</b>	<b>18</b>
<b>German</b>	<b>9</b>
<b>French</b>	<b>8</b>
<b>Chinese</b>	<b>6</b>
<b>Japanese</b>	<b>4</b>
<b>Dutch</b>	<b>3</b>
<b>Russian</b>	<b>3</b>
<b>Croatian</b>	<b>2</b>
<b>Hebrew</b>	<b>2</b>
<b>Korean</b>	<b>2</b>
<b>Czech</b>	<b>1</b>
<b>Malay</b>	<b>1</b>
<b>Norwegian</b>	<b>1</b>
<b>Portuguese</b>	<b>1</b>
<b>Turkish</b>	<b>1</b>
<b>Ukrainian</b>	<b>1</b>

This figure analyses the language used in research papers so, from this figure, it is mentioned that English is used more in articles as compared to other languages because non-native researchers begin their writing career about their topic in English. If the researcher wants to take material for their paper from other resources, then it required to rephrasing which makes scholars easy to write incorrect English. Research paper related to any discipline if it is written in English then it will be easily acceptable. The English language helps scholars and editors to easily understand the main purpose of the paper and the introduction of the topic.

### **Conclusion**

It is concluded that most of the articles are others and only 14% of articles are open access meanwhile 99% of articles are successfully published. It is observed that the research trend on

intrinsic factors is increasing after 2007. It is also analyzed that there is a significant contribution made by researchers in this research area as in 2019. Deci E.L has contributed a more imperative and significant role in intrinsic motivation. Harackiewicz and Ryan, both were also playing a noteworthy role in the inscription the articles on intrinsic motivation followed by others mentioned in the results section. Social Science and psychology is playing a major role in the contribution of intrinsic research trend followed by psychology, Business, Management and accounting, Computer science, Medicine, Arts and Humanities and others. It is also concluded that most of the preferable publication types are journal articles followed by conference papers, book chapter and reviews. Journal of Personality and Social Psychology, Motivation and emotion journal and Frontiers in Psychology are the most preferable journals the authors are publishing on intrinsic factor research. It is also observed that the National Natural Science Foundation of China, National Science Foundation, USA, National Institute of Mental Health, USA and Seventh Framework Programme, Europe are the major funding sources. Most of the articles are published in the English language due to its global acceptance. This paper will assist the beginner researchers in this research area to observe these trends and design their future research accordingly.

### **Conflict of Interest**

The authors report no conflict of interest.

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### **References**

- Adnan, A. M. (2003). an Empirical Study of Employee Satisfaction in Textile Industries, (June).
- Ahmad, D. I., Danish, D. R. Q., Ali, S. A., Ali, H. F., & Humayon, D. A. A. (2019). A Comparative Study of Banking Industry Based on Appraisal System, Rewards and Employee Performance. *SEISENSE Journal of Management*, 2(1), 1–11. <https://doi.org/10.33215/sjom.v2i1.64>
- Akanbi, P. A. (2008). Influence of Extrinsic and Intrinsic Motivation on Employees' Performance. *Vasa*, 1–14. <https://doi.org/10.1017/CBO9781107415324.004>
- Ali, R & Ahmed, S.M (2008). The Impact of Reward and Recognition Programs on Employee's Motivation and Satisfaction. A Co-Relational Study. Available at:<http://www.academia.edu/309095> [Retrieved: 2013-11-05]
- Amabile, T.M (1993) Motivational Synergy: Towards new conceptualizations of intrinsic and extrinsic motivation in the workplace. *Human Resource Management Review*, 3(3), pp.185-201
- Anr, B. K. (2010). Employee motivation and performance, 1–31.
- Attock, D., Tahir, A. J., Yusoff, R. Bin, Khan, A., Ahmed, M. S., & Sahoo, M. Z. (2011). A Comparison of Intrinsic and Extrinsic Compensation Instruments : The Case of National Bank of Pakistan ( NBP ),. *World Journal of Social Sciences*, 1(4), 195–206.
- Aziri, B. (2011). Job satisfaction: A literature review. *Management Research and Practice*, 3, 77–86.

- Bear, G. G., Slaughter, J. C., Mantz, L. S., & Farley-Ripple, E. (2017). Rewards, praise, and punitive consequences: Relations with intrinsic and extrinsic motivation. *Teaching and Teacher Education*, 65, 10–20. <https://doi.org/10.1016/j.date.2017.03.001>
- Bhadoriya, S., & Chauhan, S. S. (2009). A Critical Analysis on Intrinsic & Extrinsic Factors of Motivation. *IJMBS International Journal of Management & Business Studies*, 3(15), 2230–9519.
- Bloisi W., Cook, C.W., Hunsaker, P. L. (2003). Management and Organizational Behavior. *McGraw-Hill*, 169-208
- Brehma, M., Imberman, S. A., & Lovenheim, M. F. (2017). Achievement effects of individual performance incentives in a teacher merit pay tournament. *Labour Economics*, 44, 133–150. <https://doi.org/10.1016/j.labeco.2016.12.008>
- Chandrasekar, K. (2011). Workplace environment and its impact organizational performance in public sector organizations. *International Journal of Enterprise Computing and Business Systems*, 1(1), 1–19
- Chang, J. H., & Teng, C. C. (2017). Intrinsic or extrinsic motivations for hospitality employees' creativity: The moderating role of organization-level regulatory focus. *International Journal of Hospitality Management*, 60, 133–141. <https://doi.org/10.1016/j.ijhm.2016.10.003>
- Dahlqvist, A., & Matsson, A. (2013). The impact of extrinsic and intrinsic rewards on employees' motivation: A case study of an insurance company.
- Dartey-Baah, K., & Amoako, G. K. (2011). Application of Frederick Herzberg's Two-Factor theory in assessing and understanding employee motivation at work: a Ghanaian Perspective. *European Journal of Business and Management*, 3(9), 1–8. Retrieved from <http://iiste.org/Journals/index.php/EJBM/article/view/642>
- Deci, E. L., & Ryan, R. M. (1987). The support of autonomy and the control of behavior. *Journal of Personality and Social Psychology*, 53(6), 1024-1037.
- Delaney, M. L., & Royal, M. A. (2017). Breaking engagement apart: The role of intrinsic and extrinsic motivation in engagement strategies. *Industrial and Organizational Psychology*, 10(1). <https://doi.org/10.1017/iop.2017.2S1754942617000025>
- Fatima, M., Shafique, M., Qadeer, F., & Ahmad, R. (2015). HR practices and employee performance relationship in higher education: Mediating role of job embeddedness, perceived organizational support and trust. *Pakistan Journal of Statistics and Operation Research*, 11(3), 421–439. <https://doi.org/10.18187/pjsor.v11i3.882>
- George, D., & Mallery, P. (2003). SPSS for Windows Step by Step: A Sample Guide & Reference.
- Greener, I. (2019). Performance management that works? Improving public services by making use of intrinsic motivation. *Social Policy and Administration*, 53(1), 99–112. <https://doi.org/10.1111/spol.12387>
- Hair, J. F., Money, A. H., Samouel, P. and Mike Page, M. )2007(. Research Methods for Business
- Härtel, C. E. J. (2008). How to build a healthy emotional culture and avoid a toxic culture. In C.

L. Cooper and N. M. Ashkanasy (Eds.), *Research companion to emotion in organizations* (pp. 575-588). Cheltenham, UK: Edwin Elgar.

Hasibuan, M. (2009). *Organisasi dan Motivasi*. Jakarta: Bumi Aksara.

Herzberg, F. H., Mausner, B., & Snyderman, B. S. (1959). The motivation to work. *John Wiley and Sons*

Houkes, I., Janssen, P. P. M., Jonge, J. & Nijhuis, F. J. N. (2001). Specific relationships between work characteristics and intrinsic work motivation, burnout and turnover intention: A multi-sample analysis. *European Journal of Work and Organizational Psychology*, 10, 1-23

Hur, Y. (2017). Testing Herzberg's Two-Factor Theory of Motivation in the Public Sector: Is it Applicable to Public Managers? *Public Organization Review*, 1-15. <https://doi.org/10.1007/s11115-017-0379-1>

Hyun, S. (2009). Reexamination of Herzberg's two factor theory of motivation in the Korean AR current foodservice operation.

Jones, R.J & Sloane, P.J (2007). Low Pay, Higher Pay and Satisfaction in Wales. *Wales, Routledge Taylor & Francis Group Jenica, P.*

Khan, I., Dongping, H., & Ghauri, T. A. (2014). Impact of attitude on employees performance: A study of textile industry in Punjab, Pakistan. *World Applied Sciences Journal*, 30(30 A), 191-197. <https://doi.org/10.5829/idosi.wasj.2014.30.icmrp.25>

Kuvaas, B., Buch, R., Weibel, A., Dysvik, A., & Nerstad, C. G. L. (2017). Do intrinsic and extrinsic motivation relate differently to employee outcomes? *Journal of Economic Psychology*, 61, 244-258. <https://doi.org/10.1016/j.joep.2017.05.004>

Liu, Y., Hau, K. T., & Zheng, X. (2019). Do Both Intrinsic and Identified Motivations Have Long-Term Effects? *Journal of Psychology: Interdisciplinary and Applied*. <https://doi.org/10.1080/00223980.2018.1516611>

Locke, E. (1976). The nature and causes of job satisfaction. *Handbook of Industrial and Organisational Psychology*, Chapter 30.

Mahfood. W.V, Pollock. W & Longmire.D. (2012). leave it at the gate: job stress and satisfaction on correctional staff. *A journal of criminal studies*. 26(3), 308-325.

Maksuc, F. (2016). Employee motivation and satisfaction: The case of Clinical Centre University of Sarajevo

Matei, M.-C., & Abrudan, M.-M. (2016). Adapting Herzberg's Two Factor Theory to the Cultural Context of Romania. *Procedia - Social and Behavioral Sciences*, 221, 95-104. <https://doi.org/10.1016/j.sbspro.2016.05.094>

May, B. R. (1978). A Study of Herzberg's Motivation-Hygiene Theory of Job Satisfaction as It Relates to Academic Personnel in Selected Small Liberal Arts Colleges

McCormick and Tiffin. J. (1979). *Industrial Psychology*; New York

Mitchell, T. R and Daniels, D. (2003). Motivation. In W. C. Borman, D. R. Ilgen & R. J. Klimoski (Eds.), *Handbook of psychology, Vol. 12: 225 – 254*

Nguyen, A., Taylor, J., & Bradley, S. (2003). Relative pay and job satisfaction: Some new evidence. *MPRA*, 1382. Retrieved from [https://mpra.ub.uni-muenchen.de/1382/1/MPRA\\_paper\\_1382](https://mpra.ub.uni-muenchen.de/1382/1/MPRA_paper_1382)

Palaniammal, G (2013) “Motivating Factors of Employees Are Instigated To Improve Organization Productivity”. *Indian Stream Research Journal*, 3 (7), 1-4.

Pallant, J. (2007). SPSS survival manual. *Journal of Advanced Nursing*, 36(3), 478–478. <https://doi.org/10.1046/j.1365-2648.2001.2027c.x>

Rias, A. L., Bouchard, C., Segonds, F., Vayre, B., & Abed, S. (2017). Design for additive manufacturing: Supporting intrinsic-motivated creativity. *Emotional Engineering, Vol.5*, 99–115. [https://doi.org/10.1007/978-3-319-53195-3\\_8](https://doi.org/10.1007/978-3-319-53195-3_8)

Robbins, S. P., & Judge, T. (2003). Essentials of organizational behavior. *Upper Saddle River, NJ: Prentice Hall*,7

Rockmann, K. W., & Ballinger, G. A. (2017). Intrinsic motivation and organizational identification among on-demand workers. *Journal of Applied Psychology*, 102(9), 1305–1316. <https://doi.org/10.1037/apl0000224>

Sanjeev, M. A., & Surya, A. V. (2016). Two-factor theory of motivation and satisfaction: an empirical verification. *Annals of Data Science*, 3(2), 155–173.

Saunders, M.N.K, Thornhill, A. and Lewis, P. (2012). Research Methods for Business Students, 4, 728.

Shaikh, S. H., Pathan, S. K., & Khoso, I. (2018). The Impact of Intrinsic Motivation Factors on Employees’ Performance: A Comparative Analysis of Food and Textile Industries in Sindh, Pakistan. *Grassroots*, 52(1).

Shikdar, A. A., & Das, B. (2003). The relationship between worker satisfaction and productivity in a repetitive industrial task. *Applied Ergonomics*, 34, 603–610

Spector, P. E. (1997), Job satisfaction. Thousand Oaks, Sage Publications, California, 11 - 230  
Stello, C. M. (2014). Herzberg’s Two-Factor Theory of Job Satisfaction: An Integrative Literature Review. *Herzberg’s Two-Factor Theory of Job Satisfaction*, 32. <https://doi.org/10.7537/marslsj140517.03>

Steers, R. M., & Mowday, R. T. (2011). The Motivational Properties of Tasks. *Academy of Management Review*, 2(4), 645–658. <https://doi.org/10.5465/amr.1977.4406744>

Sumra Shaikh, Haseeb Shaikh, Sumair Shaikh (2019). The Impact of Job Satisfaction with Intrinsic Factors and Employee Performance. A Case Study of Food Industry. *European Journal of Business and Management*, 11(13).

Suprianto P.U., Djoko P. and Zarah P. (2018). The performance of the employee in the perspektif leadership, career development and job satisfaction. *International Journal of Recent Scientific*

*Research*, 9(7), pp. 28214-28216

Swinton. (2006). How to Increase Your Work and Life Satisfaction: Put Abraham Maslow Theory into Practice - Management for the Rest of Us. Retrieved from <http://mftrou.com/abraham-maslow-theory/>

Turner, A. (2017). How does intrinsic and extrinsic motivation drive performance culture in organizations? *Cogent Education*, 4(1). <https://doi.org/10.1080/2331186X.2017.1337543>

Verspagen, B. (2000), Growth and structural change: Trends, patterns and policy options. *Paper prepared for the conference on "Wachstums- und Innovationspolitik in Deutschland und Europa. Probleme, Reformoptionen und Strategien zu Beginn des 21. Jahrhunderts"*,

Wright, T. A., & Cropanzano, R. (1997). Well-being, satisfaction and job performance: another look at the happy/productive worker thesis. *In Academy of Management Proceedings*. 1, 364–368

Yim, BCK, Zou, LW, Chan, KW (2018). Service-Sales Ambidexterity: A Multi-Level Analysis on the Underlying Processes of Its Influences on Satisfaction and Performance Outcomes for Employees and Customers. *Frontiers in Service Conference, Austin*

Young, P. T. (1961) *Motivation and emotion*. New York: Wiley.