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**INTERDISCIPLINARY TRENDS IN INDIAN
HUMANITIES**

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Abstract

The Department of Higher Education undertakes the policy and planning matters on Indian Higher Education in India. In 2015-16, the Ministry of Human Resource Development (MHRD) reported 49,295 research scholars (MPhil and PhDs) enrolled in the session, a notable figure in research output¹. The type of research carried out in disciplines including linguistics is unified with other disciplines as interdisciplinary and multidisciplinary studies today. Jacob notes that scholars are breaking bounds from a 'singular disciplinary' study towards an interdisciplinary approach in higher education [2]. As per experts, India stands as the world's third-largest academic system in line with the expansion of higher education, with 35% of Indian academics as doctoral holders and producing more qualified scholars to meet the future demands [3].

The present study identifies the trends in research in scholarly works in Indian Humanities, especially in interdisciplinary research in the past decade, which can also be helpful for linguists across India. Linguistics as a field has broken the barrier of being tagged under a pure discipline. Today several scholars are working across disciplines in linguistics, especially interdisciplinary, and this journal is a perfect example of the drift. Out of the three broad disciplines, the study looks at interdisciplinary topics chosen by research scholars in Humanities. Elsevier's SCOPUS, which maintains a rich, up-to-date database of the current research, was used to gain an insight to study the nature and choice of research topics by Indian scholars. The study looks for transitions like topics chosen in research and observes individual patterns in specific subjects. The data in this study suggests that most of the research carried out in the field of Humanities focuses on studies related to speech and language.

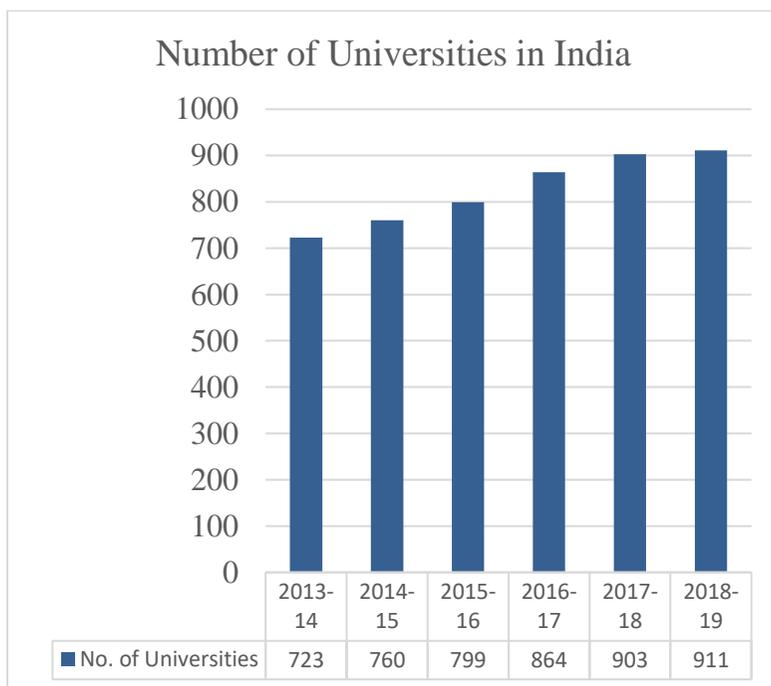
Keywords: Higher education, linguistics, interdisciplinary, research, humanities, Indian education

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Introduction

The Indian Higher education system is regulated by the University Grants Commission (UGC), a statutory body under the Ministry of Human Resource Development (MHRD), Government of India. With only 2.1 lakh students enrolled for higher education at the time of independence, the figures soared 100 times by 2012-13 and 174.49 times by 2017-18.^{4,5} From 20 universities and 500 colleges during independence, the UGC Annual Report 2017-18 claims an increase in the number of universities and colleges by 47.9 and 82.02 times respectively⁶. AISHE encapsulates a database of activities of all higher education institutions of India for the UGC. Its 2017-18 report states that 903 Universities (911 in 2019), 39,050 Colleges and 10,011 Stand Alone institutions are listed under it. Out of these only, 3.6% of colleges are running doctoral programmes⁷.

Graph 1: Number of Universities in India



(Data from AISHE 2017-18 Annual Report (p.30) and UGC Report as on 05.07.2019)

Michaelis had a visionary solution to several problems that no ‘single group of experts’ would not offer until they looked at ‘multiple facets’ from pure science. Today, we have come a long

way trying to put the same into practice globally (Michaelis, 1978). Traditionally, research on a core or single discipline can be called disciplinary research. In comparison, the three terms under discussion involve 'discipline' at the core but with slight deviations. Research involving more than one discipline where any one of the disciplines plays a prominent role is integrated with another discipline comes under multi- or inter-disciplinary research. However, suppose the research, especially interdisciplinary one, goes beyond the domain of academics and involves some societal stakeholders like policymakers, etc. In that case, it is called the *potential of trans-disciplinary* research⁸. Usually used to look for ways to transform society; or address themes or pressing issues related to a broader range of solutions, trans-disciplinary is central in sustainability research. The terms interdisciplinary, multidisciplinary, and trans-disciplinary are new in the Indian education system and still building roots in the existing system. Although this study focuses on interdisciplinary research, the author feels that it is still essential to address and demarcate the difference between the terms. It is worth noting the commonality of the term 'discipline' in interdisciplinary, multidisciplinary, trans-disciplinary.

Interdisciplinary research integrates the strength of two or more disciplines. Such research effectively addresses gaps that are otherwise overlooked or not even acknowledged and often taken for granted. Interdisciplinary research integrates theories, concepts, models, approaches or methods from two or more disciplines. Also, the collective outcome of such investigation is usually co-authored jointly and published to share their knowledge base in two or more disciplines. On the other hand, multidisciplinary research involves disciplines working parallel to a common problem from the individual perspective of each discipline. They thus tend to look at the same problem together from their core disciplines' perspective, and their findings find their way separately or individually in literature specific to their discipline.

A study on *Arts and Humanities Research Mapping*, India, highlights the overview of Arts and Humanities research landscape in India, provides the mapping centre of excellence, potential funders, emergent themes, strengths and weakness. Conducted by the India Foundation for the Arts, Bangalore, in 2010, the study categorically defines two complementary forces at work in India relating to the expansion of traditional disciplines and emergence in institutional structures with interdisciplinary research, especially in Arts and Humanities.

The report stated that the research domain is not sufficiently attended within the scope of mapping research in Arts and Humanities as one of its limitation⁹. Currently, the trend in research shows that in the year 2017-18, there were 34,400 PhD degrees and 28,059 M.Phil. degrees awarded. Thus, the number of scholars in higher education has been growing and actively publishing their research over the years. Interdisciplinary research is now gaining momentum with the support from educational bodies of the country, and more stress is laid on it.

Under the *Establishment of new Centers/Institutes of excellence* scheme of 2001, the UGC introduced research in interdisciplinary areas in the university system for Humanities and Sciences. Recently, the Centre with Potential for Excellence in a Particular Area (CPEPA) in 2017-18, focusing on an interdisciplinary approach in teaching and research, was supported by 29 Centers from different Indian universities. This scheme encouraged subject areas to cross, overlook and amalgamate any barriers or obstructions between different disciplines. UGC also gave priority to interdisciplinary research in the allocation of Major Research Projects for teachers under UGC scheme 2017-18, where 388 beneficiaries in Humanities benefitted as per UGC Annual Report 2017-18.⁵

In the Indian education system, the base for all disciplines is set for the student during the initial ten years of formal education; however, it is after the student has appeared for the All India Senior School Certificate Examination (AISSCE) under the Central Board of Secondary Education (CBSE) in Grade 10 (completing the lower secondary education) that the option to choose a specific stream or discipline is given or available to the student. At this stage, students entering senior secondary education get to choose between the three broad domains depending on their desired academic path, namely, Humanities, Commerce and Science, which are studied from Grade 11 to Grade 12. Once decided, the stream or discipline chosen by the student cannot be changed in between the two years of education at the higher secondary level; this further determines the fate of the student in years that follow as “concerns about streaming remain, especially the issue of students being pressured to take specific subjects based on their academic achievement, rather than personal choice”¹⁰. The second AISSCE exam taken at the end of Grade 12 is the deciding ground to pursue undergraduate programs in colleges for the specific core stream the student enrolls in. Thus, it is only at the college level that students enter core streams without a choice to shift between streams, as most

admissions to these courses are merit-based or require the student to appear in an entrance exam. Overall, until this stage of their academic career, once the choice to a specific discipline is made, it cannot be changed. If the student wishes to pursue his/her education in the chosen stream, s/he moves to postgraduate and higher studies in the same discipline. Thus, the initial schooling years of a student helps to build a base and broaden their world view of different aspects of society.

The discipline of Humanities for Grade 11 and 12 come under academic electives in the course curriculum designed under National Curriculum Framework-2005 and includes various subjects ranging from History, Political Science, History Economics, Sociology, Fine Arts, Fashion Studies, and many other related subjects. According to CBSE, these subjects "promote the learning of history and culture, geographical environment, global institutions, constitutional values and norms, politics, economy, interpersonal and societal interactions, [and] civic responsibilities..."¹¹. The same subjects can be later pursued at undergraduate, postgraduate or research level.

In 1994-95 in India, various interdisciplinary skill-oriented and value-added courses were introduced by the UGC as add-on courses that ran parallel to the regular courses for students. Offered in 30 universities and 2172 colleges, these courses were introduced for undergraduate students to facilitate them in self-employment. The UGC *Carrier Oriented courses in Universities and Colleges Report* claims that 3,15,821 students were enrolled under this programme under its XI plan, and 50,109 students were successful in getting placements^{12, 13}. At the policy level, India is relatively new in trying to incorporate interdisciplinarity, to begin with at the undergraduate level; however, at the tertiary or higher education level, individual institutions like Jawaharlal Nehru University (JNU) have facilitated interdisciplinarity in research (the details are available as *JNU a unique case of interdisciplinarity* in Appendix). As pointed out at the beginning of this study, policymakers are now making efforts in this direction.

The Study

The objective of this study was:

- Highlight current trends in research publications in Humanities in India from 2009 to 2019
- Assess the specific domains recurrent in titles published in the last decade

- View the growth of interdisciplinary research in Humanities
- Nature and choice of research topics covered during 2009 - 2019
- Overall patterns in research in the domain of Humanities

Methodology

The current study is based on data collected from SCOPUS, a website for researchers and institutions supported by Elsevier, covering global information analytics. SCOPUS covers the largest database of literature. The leading database gives an overview of research publications in all streams, including Arts and Humanities. Using SCOPUS, Indian publications by Indian scholars were searched for a period spanning a decade that is from 2009 to 2019. The search generated 13,38,836 documents (as on 20th August 2019) which included literature published in the form of documents. This search was further narrowed to the domain of 'Arts and Humanities', and the subjects classified under this category, Arts and Humanities(all/miscellaneous), History, Archaeology (Arts and Humanities), Language & Linguistics, Classics, Conservation, History & Philosophy of Science, Literature & Literary Theory. The search was also classified to Visual Arts and Performing Arts, including Museology, Music, Philosophy, and Religious studies.

The following parameters were set while collecting the data: the title of the research paper, author keywords, index keywords, document type, affiliation institution, funding agencies and affiliation nationality. The detailed records were downloaded year-wise in detail as excel files in August 2019. Since SCOPUS allows data to be downloaded in a batch of 500, the data was collected and saved as Microsoft Excel files and then collated. NVivo for OS and Microsoft Excel were used to analyse the data for qualitative analysis.

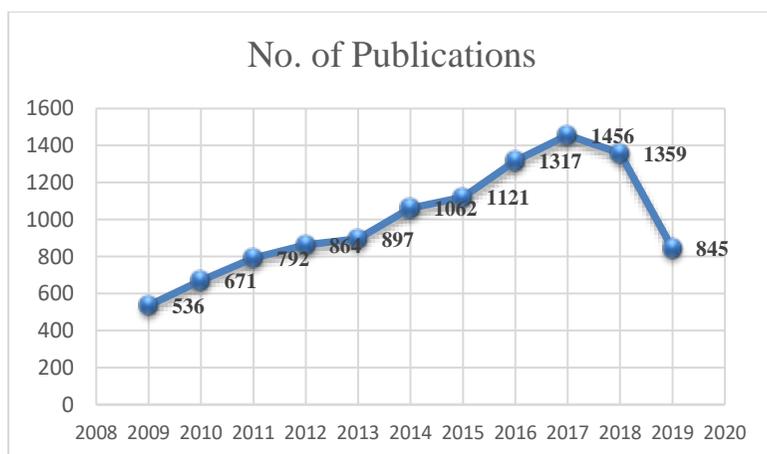
Data Analysis and Discussion

Number of Publications

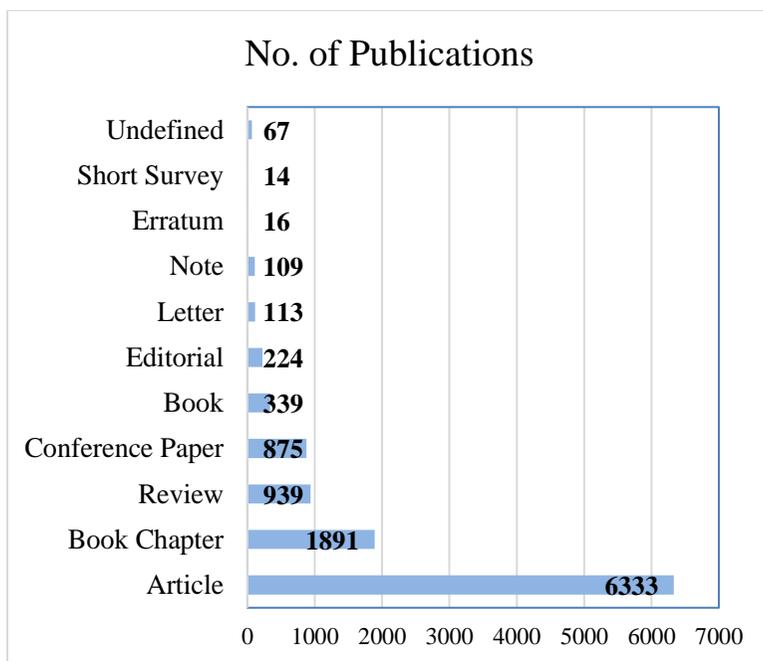
The total number of documents by Indian scholars published between the years 2009 and 2019 was 10,920 in Arts and Humanities. A visual illustration of the number of publications between 2009 and 2019 is represented in Graph 2. A steady rise in the numbers can be seen from 2009 to 2017 with an increase of 73%; however, the figures marginally dipped in the following year.

Further, a significant number of these publications were published in the form of research articles by the authors, which amounts to 57.9 % of the total data, followed by 17.3 % of publications as chapters in books, 8.5% as review articles, 8.01% as conference papers and only 3.1% in the form of books, as represented in Graph 3. In 2019, a growing trend is seen in the number of publications (some of which are still under publication and many in press). Further, Table 8 (See Appendix) indicates that the UGC was the top funding agency for arts and humanities publications, followed by MHRD and several other Ministries of different disciplines.

Graph 2: Year-wise trend in the number of documents published by scholars affiliated with India



Graph 3: The type of documents published from 2009 to 2019



Interdisciplinarity in Research Publications

As researchers cross ‘discipline boundaries’ to address the gaps in core disciplines globally, Indian researchers follow similar trends as seen in Indian publications. Table 1 provides a list of Indian publications with subject areas that overlap in the domain of Arts and Humanities in these publications. The most prominent discipline was Social Sciences which shared 61.4% with Arts and Humanities publications. A detailed analysis of the titles reveals that these publications are not restricted to pure discipline; many cover broader domains. For example, the title ‘*A Journey of Indian Languages over Sentiment Analysis: A Systematic Review*’ listed under Humanities covers the social aspects, listed under Social Sciences as a sub-discipline. The data also depicts that 10% of Humanities titles are covered under the Computer Sciences domain, with an example from SCOPUS titled ‘*Understanding Emotions in Text Using Deep Learning and Big Data*’. Similarly, studies were found collaborating with streams based on Humanities such as Linguistics, Education, Psychology, making their way in publications with studies using features to classify dialects in linguistics or understanding human sentiments in literature (in titles like ‘*Empirical Analysis of Linguistic and Paralinguistic Information for Automatic Dialect Classification*’; ‘*Reconsidering Buber, Educational Technology, and the Expansion of Dialogic Space*’; and ‘*Supervised Heterogeneous Feature Transfer via Random Forests*’).

Further, publication titles such as '*Undermining the Restorative Potential of Compensatory Consumption: A Product's Explicit Identity Connection Impedes Self-Repair*', '*An Orchestrated Negotiated Exchange: Trading Home-Based Telework for Intensified Work*', '*Towards Generating Scalable Personalised Recommendations: Integrating Social Trust, Social Bias, and Geo-Spatial Clustering*' which appeared in Journal of Consumer Research, Journal of Business Ethics and Decision Support Systems respectively are primarily Economic, and Business oriented themes, but due to their interdisciplinary approach they are strongly related to Humanities as its core subject. An example entitled '*What if Discipline Is Not Interdisciplinary? The Case of Social Psychology in India*' featured in Integrative Psychological and Behavioral Science Journal, explores psychology's social aspect and discusses how different disciplines, including Humanities, are related to Social Psychology. Other titles like '*Smartphone Addiction and Associated Consequences: Role of Loneliness and Self-Regulation*'; and '*Language Learnability Analysis of Hindi: A Comparison with Ideal and Constrained Learning Approaches*'; from the fields of Psychology and Linguistics are technical but carry a core value base of Humanities as a domain. Moreover, Arts and Philosophy with Mathematics present a unique combination of areas with studies approaching the Indian classical music from a mathematical algorithmic approach or determining the status of temporal passages from a philosophical perspective. Overall, Humanities stands at the core of several other publications made in the field of Engineering, Agricultural and Biological Sciences, Medicine, Environmental Science, Physics and Astronomy, Earth and Planetary Sciences, Neuroscience, Health Professions, Materials Science, Nursing, Biochemistry, Genetics and Molecular Biology, Decision Sciences, Pharmacology, Toxicology and Pharmaceutics, Chemistry, Energy, etc.

Some of the publications such as '*The Origin of Species by Means of Mathematical Modelling*' are multi- and interdisciplinary as they cover several sub-disciplines like Agricultural and Biological Sciences; Biochemistry, Genetics and Molecular Biology; and Environmental Science with the stream of Humanities as its base. Further, eight publications listed in Multidisciplinary publications shared with Arts and Humanities mostly included studies published in the Foundations of Science. Still, a closer look at the titles reveal that the articles were heterogeneous and inculcate sub-disciplines of Humanities with several other disciplines like Theology, Engineering,

Quantum Mechanics, Geopolitics, Computer Sciences, Classical Indian Mythology, and Religion Studies. Some examples of these publication titles include 'A Similarity Function for Feature Pattern Clustering and High Dimensional Text Document Classification', 'Krishna Sudarsana—A Z-Space Interest Measure for Mining Similarity Profiled Temporal Association Patterns', 'Ultimate: Unearthing Latent Time Profiled Temporal Associations', 'Quantum Mechanics in a New Light', 'Crystallography and geopolitics' and 'Is Religion Compatible with Modern Science? An Appraisal of Iqbal's Modernist Compatibility Thesis.' The inter- and multi-disciplinarity of such publications is also reflected in their 'Citation Benchmarking', which compares documents by computing its sources' disciplines separately in a minimum set of 500 similar documents.

Table 1: Publication Subject Areas between 2009-2019

Subject Area	No. of Publications
<i>Arts and Humanities</i>	10920
Social Sciences	6706
Computer Science	1156
Economics, Econometrics and Finance	734
Business, Management and Accounting	583
Psychology	573
Mathematics	402
Engineering	381
Agricultural and Biological Sciences	320
Medicine	292
Environmental Science	288
Physics and Astronomy	232
Earth and Planetary Sciences	137
Neuroscience	122
Health Professions	92
Materials Science	83
Nursing	81
Biochemistry, Genetics and Molecular Biology	77
Decision Sciences	59
Pharmacology, Toxicology and Pharmaceutics	50
Chemistry	14
Multidisciplinary	8
Energy	4

International and National Contributions to Humanities

Much of the work carried out for publication in the Humanities by Indian scholars was presented with various countries' experts. Graph 4 provides information about the nationality of the co-authors in these publications. The top five countries which contributed with Indian authors reflect that nearly one-third of the works were published in collaboration with experts from the USA and UK, followed by Australia, Germany and Canada. Other foreign authors who contributed to 48% with Indian authors were from 107 countries like Netherlands, France, China, Italy, Spain, Switzerland, Sweden, Japan, Singapore, South Africa, Norway, South Korea, Brazil and Hong Kong, to name a few.

In case of the number of contributors from Indian Institutions contributing to Art and Humanities; JNU ranks at the top in publishing their research work in Arts and Humanities, followed by the University of Delhi, as depicted in Table 2. It is noteworthy that out of the 15 institutions as top contributors to Arts and Humanities, 9 Institutions from the stream of Science and Technology contribute to Humanities, which is not their core stream. This further reflects on the rising interest in interdisciplinary work across disciplines.

Graph 4: Nationality of co-authors (Top 5 countries)

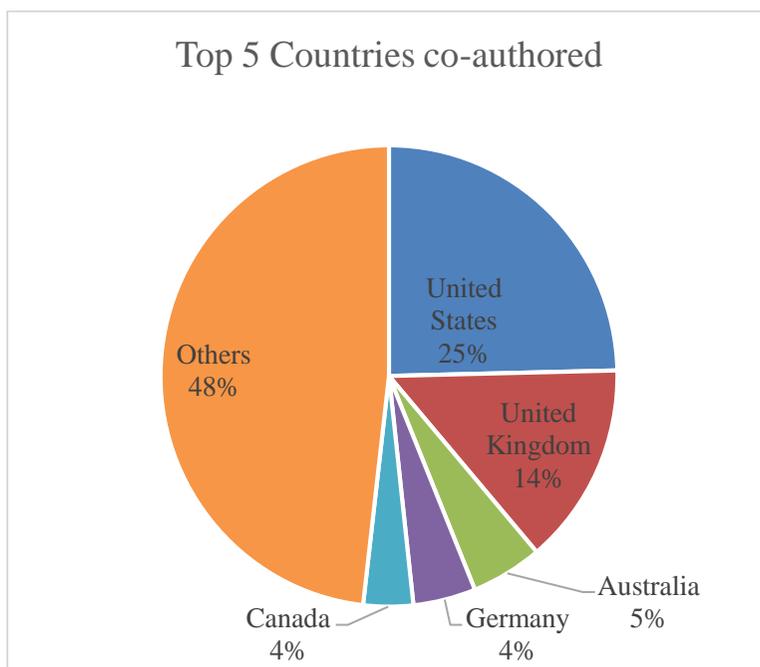


Table 2: Top 15 institutions contributing to Arts & Humanities

University Affiliation	No. of Publications
Jawaharlal Nehru University	515
University of Delhi	456
Jadavpur University	277
University of Hyderabad	200
Indian Institute of Technology, Bombay	196
Vellore Institute of Technology	177
Indian Institute of Science, Bengaluru	171
IIT, Madras	163
IIT, Kharagpur	160
International Institute of Information Technology, Hyderabad	153
IIT, Guwahati	151
University of Calcutta	109
Indian Institute of Technology Delhi	107
Jamia Millia Islamia	102
Indian Institute of Technology Kanpur	96

Keywords in Indian Publications

Authors use keywords to make their work searchable on more extensive databases. Usually, these keywords are provided by the authors and are based on the basic theme of their study. On the other hand, index keywords are provided by the subject specialists and publishers to specify the nature of the study, which makes it easy for users to search for specific information. For this study, author and index keywords were extracted for 10,920 publications by Indian contributors in Arts and Humanities. The cloud cluster of 100 most frequent words in titles of Indian publications featured in Arts and Humanities from 2009 to 2019 is shown in Figure 1, followed by the details of the top 10 words discussed further.

Table 3 provides the top 10 words in the title of the Indian publications featured in Arts and Humanities from 2009 to 2019. The leading ten author and index keywords for the same are reflected in Tables 4 and 5.

Table 3: Top 10 frequent words in titles of Indian publication between 2009-2019

S.No.	Word	Count	Weighted Percentage*
1	India	3374	2.03%
2	Speech	746	0.45%
3	Women	732	0.44%
4	Language	700	0.42%
5	Cultures	678	0.41%
6	Case	672	0.40%
7	Politics	658	0.40%
8	Developments	606	0.37%
9	Socially	570	0.34%
10	Informed	526	0.32%

*Weighted percentage of the total number of entries

Table 4: Top 10 frequent author keywords in Indian publication between 2009-2019

S.No.	Author Keywords	2009-19*
1	India	1.38%
2	Social	0.64%
3	Speech	0.59%
4	Indian	0.58%
5	Culture	0.53%
6	Language	0.48%
7	Analysis	0.45%
8	Women	0.41%
9	Education	0.40%
10	Model	0.40%

*Percentage of the total number of entries

Table 5: Top 10 frequent index keywords in Indian publication between 2009-2019

S.No.	Index Keywords	2009-19*
1	Speech	1.86%
2	India	1.19%
3	Humans	1.17%
4	Health	0.79%
5	Analysis	0.74%
6	Recognition	0.74%
7	Systems	0.72%
8	Model	0.66%
9	Language	0.63%
10	Processing	0.59%

* Percentage of the total number of entries

Detailed data are provided in Tables 6 and 7, including year-wise information of the weighted percentage of the top 10 keywords, which was individually extracted for this study.

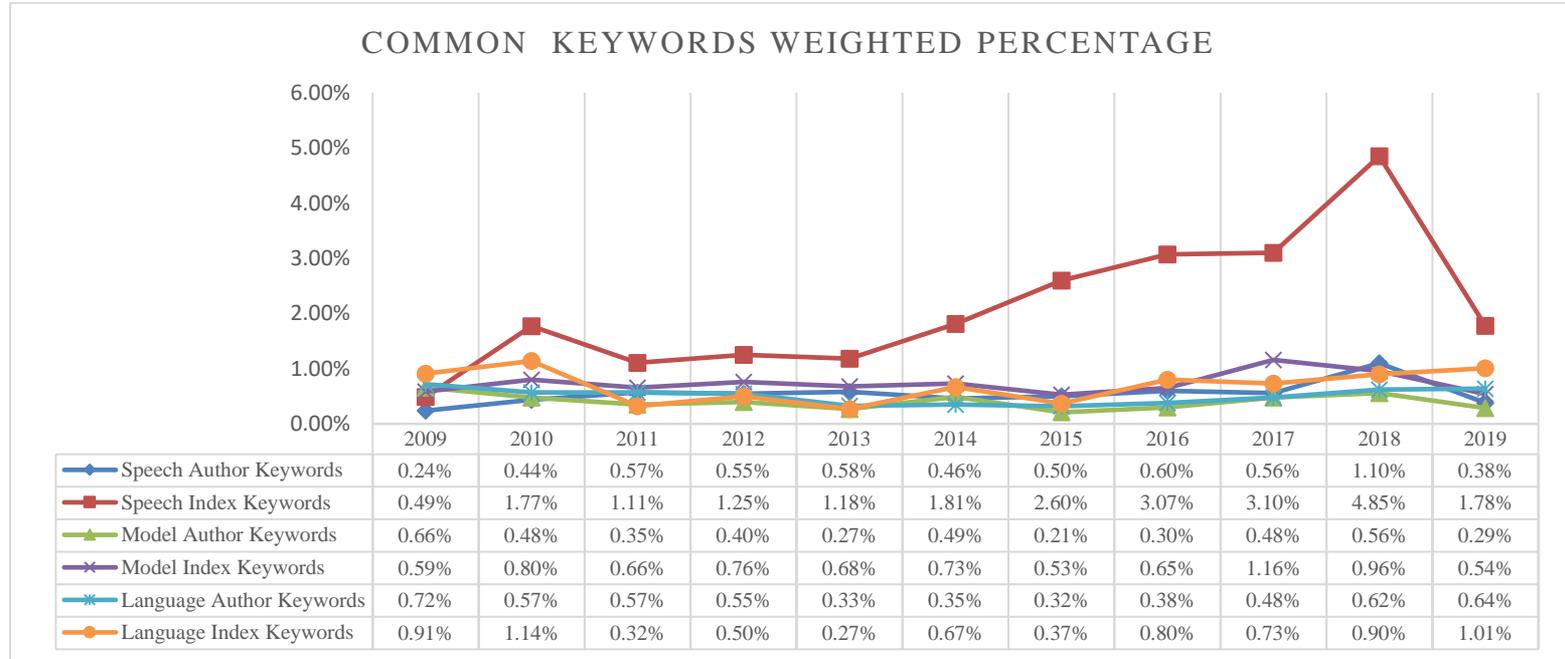
Table 6: Weighted percentage of top 10 Author Keywords

S.No.	Author Keywords	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2009-19
1	India	1.44%	1.57%	1.40%	1.45%	1.67%	1.35%	1.74%	1.32%	1.21%	1.15%	1.31%	1.38%
2	Social	0.30%	0.61%	0.57%	0.74%	0.97%	0.49%	0.46%	0.63%	0.86%	0.48%	0.72%	0.64%
3	Speech	0.24%	0.44%	0.57%	0.55%	0.58%	0.46%	0.50%	0.60%	0.56%	1.10%	0.38%	0.59%
4	Indian	0.66%	0.61%	0.47%	1.00%	0.64%	0.52%	0.56%	0.60%	0.49%	0.60%	0.43%	0.58%
5	Culture	0.72%	0.70%	0.47%	0.57%	0.41%	0.41%	0.70%	0.59%	0.61%	0.43%	0.42%	0.53%
6	Language	0.72%	0.57%	0.57%	0.55%	0.33%	0.35%	0.32%	0.38%	0.48%	0.62%	0.64%	0.48%
7	Analysis	0.30%	0.44%	0.37%	0.40%	0.29%	0.55%	0.31%	0.43%	0.58%	0.47%	0.57%	0.45%
8	Women	0.24%	0.52%	0.72%	0.62%	0.60%	0.30%	0.27%	0.46%	0.29%	0.41%	0.31%	0.41%
9	Education	0.78%	0.31%	0.15%	0.24%	0.56%	0.28%	0.46%	0.42%	0.37%	0.50%	0.44%	0.40%
10	Model	0.66%	0.48%	0.35%	0.40%	0.27%	0.49%	0.21%	0.30%	0.48%	0.56%	0.29%	0.40%

Table 7: Weighted percentage of top 10 Index Keywords

S.No.	Index Keywords	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2009-19
1	Speech	0.49%	1.77%	1.11%	1.25%	1.18%	1.81%	2.60%	3.07%	3.10%	4.85%	1.78%	1.86%
2	India	1.29%	1.33%	0.99%	1.40%	1.22%	1.29%	1.27%	0.92%	1.18%	0.78%	0.79%	1.19%
3	Humans	1.55%	1.37%	1.37%	1.57%	1.42%	1.48%	1.78%	1.55%	1.46%	1.34%	1.61%	1.17%
4	Health	0.72%	0.48%	0.76%	1.34%	1.06%	1.94%	1.62%	0.61%	0.85%	0.36%	0.56%	0.79%
5	Analysis	0.85%	0.81%	0.70%	0.83%	0.73%	0.79%	0.81%	0.91%	0.96%	0.91%	1.05%	0.74%
6	Recognition	0.38%	0.67%	0.66%	0.64%	0.48%	0.64%	1.18%	0.93%	0.94%	1.77%	1.20%	0.74%
7	Systems	1.02%	1.25%	0.93%	0.80%	0.53%	0.69%	0.72%	0.91%	0.84%	0.87%	1.41%	0.72%
8	Model	0.59%	0.80%	0.66%	0.76%	0.68%	0.73%	0.53%	0.65%	1.16%	0.96%	0.54%	0.66%
9	Language	0.91%	1.14%	0.32%	0.50%	0.27%	0.67%	0.37%	0.80%	0.73%	0.90%	1.01%	0.63%
10	Processing	0.57%	0.78%	0.40%	0.53%	0.75%	0.68%	0.57%	1.14%	0.94%	0.75%	0.77%	0.59%

Graph 5: Weighted percentage of top 3 words in Humanities



Thus, multidimensional exposure promotes the growth of unexplored areas of discipline; therefore, for core fields to progress and new areas to emerge, crossing the boundaries of a discipline is the only way to move ahead. Earlier, cross-discipline boundaries were enforced in higher education, which restricted the growth of the discipline, but interdisciplinarity makes a discipline challenging beyond the pre-defined limits, thereby opening new areas for research. Initially initiated by the USA, interdisciplinarity has now found its way in many countries, including India. Currently, research projects are collectively seeking answers and addressing existing gaps in research, like exploring traditional methods of healing. Interdisciplinary research is worth investigating further.

Conclusion

India's contribution in the stream of Arts and Humanities has increased with a multi-varied combination of subjects in the last decade. The findings indicate that Indian Humanities is not working in isolation. Arts and Humanities trends in Indian academia are growing multi-fold. The current research results indicate the inclusion of various disciplines and subjects being closely interlinked with Humanities. It is pertinent to say that Humanities would limit its expansion to other disciplines without the interdisciplinary approach.

The results also signify an upward trend from 2009 to 2019 for the percentage increase in peer-reviewed publications and articles indexed in SCOPUS. Indian humanists have adopted many subjects and areas which are interdisciplinary like Computer Science, Economics, Business, Engineering, Medicine etc. This is giving way to avoid redundancy, exploding disciplinary silos, and ambitious, larger-scale outputs in the field of Indian Humanities. As Raflos & Meyer state, "Interdisciplinary research has been long regarded as a catalyst for breakthroughs and innovations, as well as an effective tool to address increasingly complex socio/economic problems and foster competitiveness"¹⁴ and this has been proved in Indian Humanities with its publications being creative, progressive and innovative and making an intellectual breakthrough. The *word analysis* of title, author and index keywords also show that words like Social, Human, Health, Recognition, System etc. are trending in the last ten years.

The publications in Humanities in India indicate that most work in the discipline has been focussed on in the past decade. Speech, language and various models have been the most recurrent terms

in the titles assessed from 2009 to 2019. Other themes followed by the three most predominant themes have been women, culture, politics, development, social aspects and education. In terms of research methods, case studies show a prominent presence in the period as one of the most frequent and emergent methods for research. Various aspects of speech have been trending in the research titles in Indian Humanities. Lastly, publishers are also becoming aware of the growing need for an inclusive environment for expanding disciplines. As noted, many journals are now encouraging interdisciplinary studies to make their presence in discipline-specific journals.

Appendix

JNU is a unique case of interdisciplinarity

JNU is a unique university with a strong background of founding members who initiated the promotion of free thinkers, one without limiting disciplines. In 2019, JNU completed its 50 years of imparting knowledge. With 12 Schools for different disciplines, six special centers and numerous centers within each of them, it is a knowledge house to those who want to learn. Based on the American grading system, students are encouraged to explore areas beyond the core disciplines and take up courses of interest from different centres, within a specific school or elsewhere in different centers. This setup helps build the connection to move between different disciplines and opens the arena to broader perspectives, thereby promoting growth to look beyond the defined areas of their respective disciplines.

Further, the university runs Faculty development programmes under the Human Resource Development Centre ((HRDC), formerly Academic Staff College) which are interdisciplinary. Also, one of the initiatives of the university includes the Creation of the Transdisciplinary Research Cluster (TRC) under XIIth Plan document modelled to include essential features of interdisciplinary research, beyond the fixed boundaries of schools and discipline; and introduced centres that are transdisciplinary like Centre for Disaster Research, Molecular Medicine, Nanoscience, National Security Studies and Studies for North East India; and are now actively doing research exploring areas in the discipline which are often overlooked. Faculty members from different disciplines take up collective research projects and enrich centers of different disciplines with their lectures, for example, a faculty from Anthropology teaching in the Center of Social Medicine and Community Health.

Table 8: Top 10 funding agencies and the number of publications

S.No.	Funding Agency	No.
1	University Grants Commission	33
2	European Research Council	31
3	Ministry of Human Resource Development	30
4	National Science Foundation	27
5	Department of Electronics and Information Technology, Ministry of Communications and Information Technology	24
6	Indian Council of Social Science Research	24
7	National Institutes of Health	24
8	Department of Information Technology, Ministry of Communications and Information Technology	23
9	Department of Science and Technology, Ministry of Science and Technology	22
10	Department of Science and Technology, Government of Kerala	17

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