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Mapping Research Trends in Central Universities of Uttar Pradesh

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Abstract

The present study examines the research trends in doctoral theses across four disciplines; Sociology, Education, Political Science, and Economics in selected central universities of Uttar Pradesh, including Banaras Hindu University, Aligarh Muslim University, University of Allahabad, and Babasaheb Bhimrao Ambedkar University. The study is based on the analysis of 930 doctoral theses submitted between 2019 and 2023. The findings reveal that research output is uneven, with Banaras Hindu University contributing the highest number of theses. English is the dominant language of academic writing, though Hindi is also used in some disciplines. All universities follow the APA referencing style, showing uniformity in following academic practices. Most of the studies are applied in nature while basic and action research are limited. In terms of methodology, quantitative approaches dominate in Education and Economics, whereas qualitative and mixed methods are more common in Sociology and Political Science. The common methods include descriptive, historical, and case study approaches, while advanced methods are rarely used. The study also reveals that some research areas receive more attention, while others remain under explored. Overall, the study highlights the need for greater methodological diversity and broader research focus to improve the quality of academic research.

Keywords: Multidisciplinary Research, National Education Policy 2020, Central University, Uttar Pradesh

Introduction

The 21st century is characterized by rapid technological advancements, global interdependence, and complex societal challenges that transcend traditional disciplinary boundaries. In response, Education Systems worldwide are undergoing transformative reforms aimed at cultivating multidimensional thinkers capable of addressing multifaceted issues through integrated learning. One such transformation is the promotion of Multidisciplinary approach that involves drawing knowledge from multiple disciplines to foster a more holistic understanding of complex phenomena (Augsburg, 2005). The NEP

2020 underscores the necessity of multidisciplinary institutions and liberal education models that allow for combinations of science, humanities, arts, and vocational subjects. This marks a pivotal departure from India's traditionally rigid and compartmentalized system of education. The policy introduces concepts such as major-minor flexibility, multiple entry-exit options, and the restructuring of undergraduate programmes to align with global standards. The policy underscores the necessity of multidisciplinary institutions and liberal education models that allow for combinations of science, humanities, arts, and vocational subjects.

Multidisciplinary research is an approach where researchers from various disciplines or fields of study collaborate together for investigating complex problems (Singh & Virk, 2023). The researchers often come together to solve complex problems which cannot be solved adequately within a single discipline. By integrating the knowledge and insights from various disciplines, the researchers can discover innovative solutions and more beyond traditional way of thinking (Mishra, 2024). The aim of this type of researches are maintaining the distinct identities of each contributing field of study while encouraging cooperation among members. Multidisciplinary approach has gained importance due to its capability to address complex and real-world problems like climate change, public health crises, artificial intelligence etc. which require insights from multiple fields of study. In the past, research was largely confined to strict disciplinary boundaries, with little exchange of ideas or methods between fields. However, as the complexity and interconnected nature of real-world problems have become more apparent, there is now a greater focus on collaboration and the integration of knowledge from various disciplines. Due to fast paced nature of modern life, the various socio-economic issues have emerged which are often interconnected with disciplines such as Politics, Anthropology and Psychology and which require a comprehensive approach for effective solutions (Choudhary, 2015). As a result, these boundaries are evolving, and researches are increasingly embracing broader, multidimensional approaches that go beyond traditional academic divisions (Singh & Virk, 2023). Amid the rising importance of multidisciplinary research, it is important to analyse how research trends are evolving across various disciplines and how multidisciplinary approaches are shaping the academic inquiry. Moreover, the multidisciplinary research can accelerate the pace of discovery which will lead to more effective and impactful outcomes (Mishra, 2024). This current study also helps in understanding how knowledge evolves in response to global challenges, technological advancements and societal needs by analyzing the research trends, the stakeholders of research will be able to identify emerging fields, the collaboration pattern and the impact of multidisciplinary integration on scientific innovation.

Objectives of the study

The current study aimed at examine the trends of research in multidisciplinary universities of Uttar Pradesh across four disciplines namely- Sociology, Political Science, Education and Economics. Hence the following objective is framed:

- To examine the current trends of researches across various disciplines in central universities of Uttar Pradesh.

Methodology

The researchers for the current study used a mixed-method approach to conduct the present study. The sequential explanatory design of mixed-method research was preferred in the present study. The population of the current study comprised of 06 Central Universities of Uttar Pradesh where the Central Universities “Banaras Hindu University Varanasi, University of Allahabad, Aligarh Muslim University, Babasaheb Bhimrao Ambedkar University, Lucknow”. As far as the research tools of the current study are concerned, Trend Analysis (Checklist) and Trend Analysis (Rubrics) were used. The Trend Analysis (Checklist) was divided into 03 parts. Part A was related to basic demographic information of the participants. Part B of the checklist has items related to Types of Research, Approach of Research, Method of Research, Sampling Technique, Technique of Data Analysis, Referencing Style, Language of Research. Part C of the checklist was related to Thrust Areas of Research. The Trend Analysis (Rubrics) consists of five major dimensions, each reflecting an essential aspect of multidisciplinary research like Problem Framing and Theory Integration, Research Supervision, Research Methodology (Methods and Techniques), Findings and Conclusion (Multidisciplinary Interpretation) and Inter-Departmental Collaborations.

Results / Findings

Objective 1: To Study the Trends of Researches across Various Disciplines in Central Universities of Uttar Pradesh.

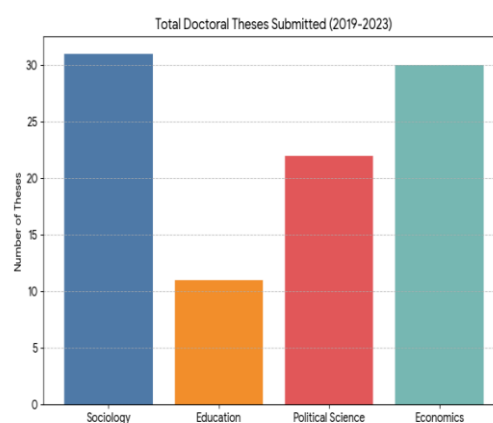
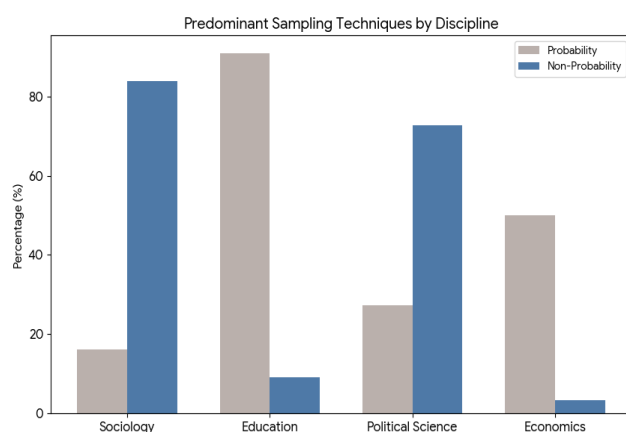
Babasaheb Bhimrao Ambedkar University, Lucknow

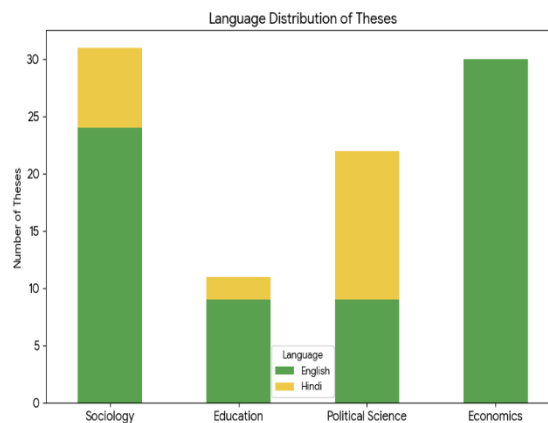
In Babasaheb Bhimrao Ambedkar University, Lucknow a total of 31 doctoral theses has been submitted in the discipline of Sociology during 2019-2023. The peak submission was seen in year 2022 where 41.93% of the theses have been submitted. Regarding language of the theses, it was found that 24 doctoral theses were in English language and rest 07 were in Hindi. In referencing style, all the doctoral theses followed APA style. Regarding nature of research, 83.87% doctoral studies used applied research and 16.12% doctoral theses used fundamental research. In research approach, 83.87% doctoral theses preferred qualitative methods, 16.12% preferred mixed method and no quantitative studies were found. In methods, Case study and ethnography were mostly used. In sampling, non-probability sampling technique was predominantly employed (83.87%) and a small portion (16.13%) of studies employed a mix of probability and non-probability methods. In focus areas of research, Sociology of Education, Social Stratification, and Sociology of Gender were preferred areas while as globalization, urban sociology, environmental sociology, and industrial sociology remained unexplored.

In the discipline of education, 11 doctoral theses have been submitted between 2019 and 2023. The highest number of theses were submitted in 2022 and 2023. Regarding language of theses, English language (81.81%) was dominant medium of academic writing and 18.18% in Hindi. In referencing style, all the doctoral theses followed APA style. Regarding nature of research, 90.90% doctoral studies used applied research and 9.1% doctoral theses used fundamental research. In research approach, 90.90% doctoral theses preferred quantitative

approaches, 9.1% preferred qualitative or mixed approaches. In methods, the descriptive research was the most commonly used design appearing in 72.72% of theses. While as philosophical, experimental, and trend analysis methods followed it and each represented by only one study. In sampling, probability sampling technique was predominantly employed (90.90%) and a small portion (9.1%) of studies employed non-probability methods. In focus areas of research, Psychological Foundations of Education and Teacher Education were preferred area accounting for 27.27%. The other areas like Philosophical Foundations of Education, Economics of Education, and Educational Technology received minimal attention with one theses each (9.1%). However, the areas like Sociological Foundations of Education, Value Education, Educational Research, Curriculum Studies, Educational Administration and Management, Women Education, Guidance and Counseling, Inclusive Education, and Environmental Education remained unexplored

In discipline of Political Science, a total of 22 doctoral theses were submitted between 2019 and 2023. The highest number of theses were submitted in 2022 (40.9%) and lowest in 2020 (4.54%). With regard to language of theses, Hindi language (59.09%) was dominant medium of academic writing and 40.9% preferred Hindi. In referencing style, all the doctoral theses followed APA style. With regard to type of research, all doctoral studies used applied research. In research approach, 72.72% doctoral theses preferred qualitative approaches, while as 27.27% adopted mixed-method approaches combining qualitative and quantitative techniques. In methods, mixed methods was adopted by 27.27% followed by case study and content analysis (18.18% each), historical research and document analysis (13.63% each), and trend analysis (9.09%). In sampling, non-probability sampling technique was predominantly employed (72.72%) and a small portion (27.27%) of studies employed probability methods. In technique of data analysis, qualitative analysis (72.72%) was preferred. While as 27.27% of theses adopted mixed analytical approaches. In focus area, the main areas explored were International Relations (18.18%), Public Policy (13.63%), and Local Self-Government and Panchayati Raj (13.63%). While as the areas like Political Theory, Indian Government, International Law, Geopolitics, Western Political Thought, Political Sociology, Gender Politics, Foreign Policy, and Constitutional Studies were not represented.





In the discipline of Economics, a total of 30 doctoral theses were submitted between 2019 and 2023. The highest number of theses were submitted in 2019 (30%) followed by 2022 (23.33%), 2020 (20%) and 2021 (13.33%). Regarding language of theses, all the theses have been written in English language. In referencing style, all the doctoral theses followed APA style. Regarding type of research, 90% of doctoral studies used applied research and 10% used fundamental research. In research approach, 50% of doctoral theses employed quantitative methods, 46.66% adopted mixed-method approaches and 3.33% relying purely on qualitative methods. In methodology, mixed methods were used commonly (46.66%) followed by descriptive methods (23.33%), experimental research (13.33%), correlational methods and trend analysis (6.66%) and case study (3.33%). In sampling technique, a strong use of probability sampling was used. Probability sampling was adopted by 50%, 46.67% used combination of probability and non-probability sampling technique. The focus areas of the studies included International Economics and Trade, Mathematical Economics, Growth and Development Economics, and Labour Economics. However, the areas such as Economics of Environment and Sustainable Development, Developmental Economics, and Demographical Economics received moderate attention. Furthermore, several important classical areas including Public Finance, Monetary Economics, Econometrics, Educational Economics, and International Economics remained unexplored.

University of Allahabad, Prayagraj

In University of Allahabad, Prayagraj, a total of 12 doctoral theses were submitted in the discipline of Sociology between 2020 and 2023. The highest number of theses was submitted in the year 2023 (33.33%) followed by 25% in the year 2021 and 2022. Regarding language of theses, all the theses have been written in English language. In referencing style, all the doctoral theses followed APA style. With regard to type of research, all doctoral studies used applied research. In research approach, 58.33% of theses adopted mixed method followed by 41.67% theses who adopted qualitative approaches. With regard to methodology, mixed methods were the most used (58.33%) followed by case study (25%) and ethnography and phenomenology (8.33%). In sampling, 41.67% of studies adopted non-probability sampling techniques while 58.33% of studies adopted qualitative and quantitative strategies. In focus areas of the study, Agrarian Studies and Indian Society emerging as the most prominent

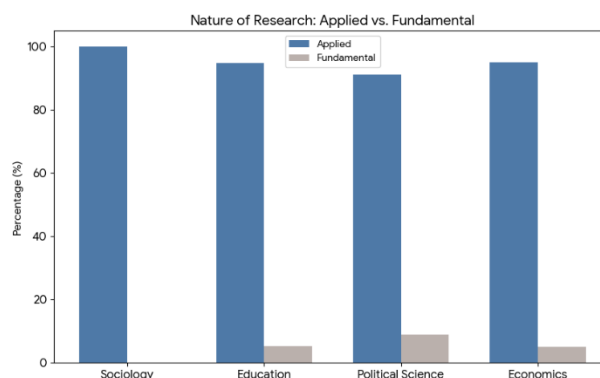
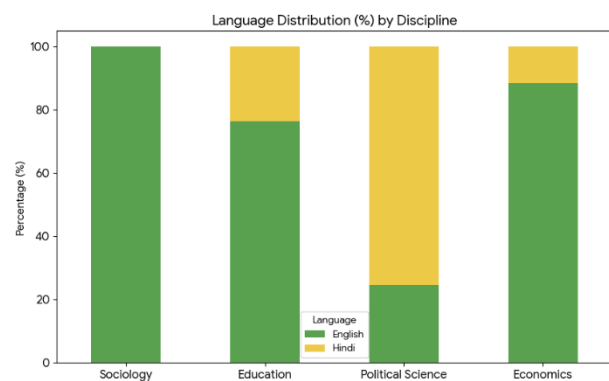
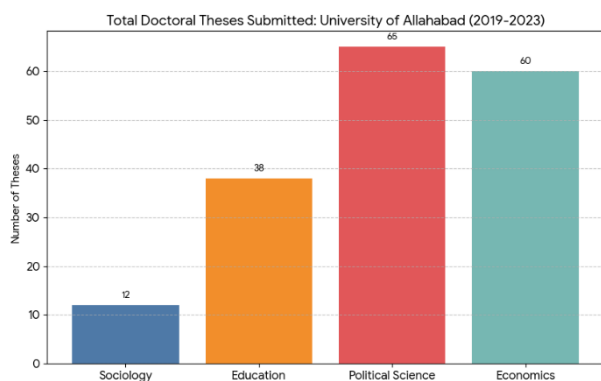
areas. However, several important areas including gender studies, globalization, culture and communication, social movements, urban society, and classical or Western sociological thought remained unexplored

In the discipline of education, a total of 38 doctoral theses were submitted during the year 2019-2023. The highest number of theses were submitted in the year 2021 (31.57%) followed by 23.68% in 2020, 21.05% in 2019, 18.42% in 2022 and 5.23% in 2023. With regard to language of theses, 76.31% of theses adopted English language and 23.68% adopted Hindi. In referencing style, APA was widely used. With regard to type of research, 94.73% adopted applied research followed by fundamental research (5.26%). With regard to approach of research, 57.9% adopted quantitative method followed by mixed method (26.31%) and qualitative approaches (15.78%). In methodology, 26.31% of theses adopted correlational and mixed methods followed by descriptive (21.05%) and experimental methods (10.52%). In sampling, 57.9% adopted probability sampling followed by combined sampling techniques (26.31%) and non-probability sampling (15.78%). In focus areas of studies, the majority of studies focused on Psychological Foundations of Education (50%), followed by Teacher Education and other emerging areas (10.52%), Educational Administration and Management (7.9%), while areas such as philosophical and sociological foundations, curriculum studies, educational technology, and value education received limited attention. Moreover, several important areas including economics of education, inclusive education, guidance and counselling, women's education, and environmental education remained largely unexplored.

In the discipline of Political Science, a total of 65 doctoral theses were submitted between 2019 and 2023. The highest number of theses were submitted in the year 2019 (27.86%) followed by 23.09 in 2021, 20% in 2020, 18.4% in 2022 and 10.76% in 2023. As far as the language of the theses is concerned, 75.56% of theses were written in Hindi followed by English (24.45%). In referencing style, all the doctoral theses followed APA style. Regarding type of research, 91.11% of studies adopted applied research and 8.88% of studies adopted fundamental research. In approach of research, a dominant reliance on qualitative methods was observed with 68.9% adopting it. While 31.11% of studies adopted mixed methods. In methodology, mixed method was preferred the most (31.12%) followed by historical research (24.45%), case study approaches (22.23%), document analysis (13.34%), content analysis (4.45%), and trend analysis (4.45%). In sampling, non-probability sampling was the most frequently used method (68.9%). In focus area of study, Comparative Politics, Constitutional Studies, Public Policy, Indian Political Thought, Local Self-Government and Panchayati Raj, Gender Politics, Foreign Policy, Human Rights, and Political Parties were explored. However, some important areas such as International Organizations received no research attention

In the discipline of Economics, a total number of 60 doctoral theses have been submitted between 2019 and 2023. The highest number of theses have been submitted in the year 2021 & 2022, 23.33% each. Regarding language of theses, 88.33% of theses adopted English language and 11.67% adopted Hindi. In referencing style, APA was adopted by all the studies. Regarding type of research, 95% of theses adopted applied research and 5% of theses adopted fundamental research. Regarding research approach, 51.67% of theses employed mixed method approaches and 48.34% of theses employed quantitative methods. Regarding methodology, descriptive research was the most widely used (42 theses) followed by trend analysis (07 theses). In sampling, 51.67% of theses adopted a combination of probability and non-probability sampling techniques.

In focus area of studies, the largest concentration in International Economics and Trade, followed by Agricultural Economics, Developmental Economics, and themes related to planning, development, demography, and gender economics. Several additional areas such as experimental economics, growth and development economics, banking and finance economics, and educational economics received moderate attention, while traditional areas such as public finance, industrial economics, and mathematical economics had limited or no representation.



Aligarh Muslim University, Aligarh

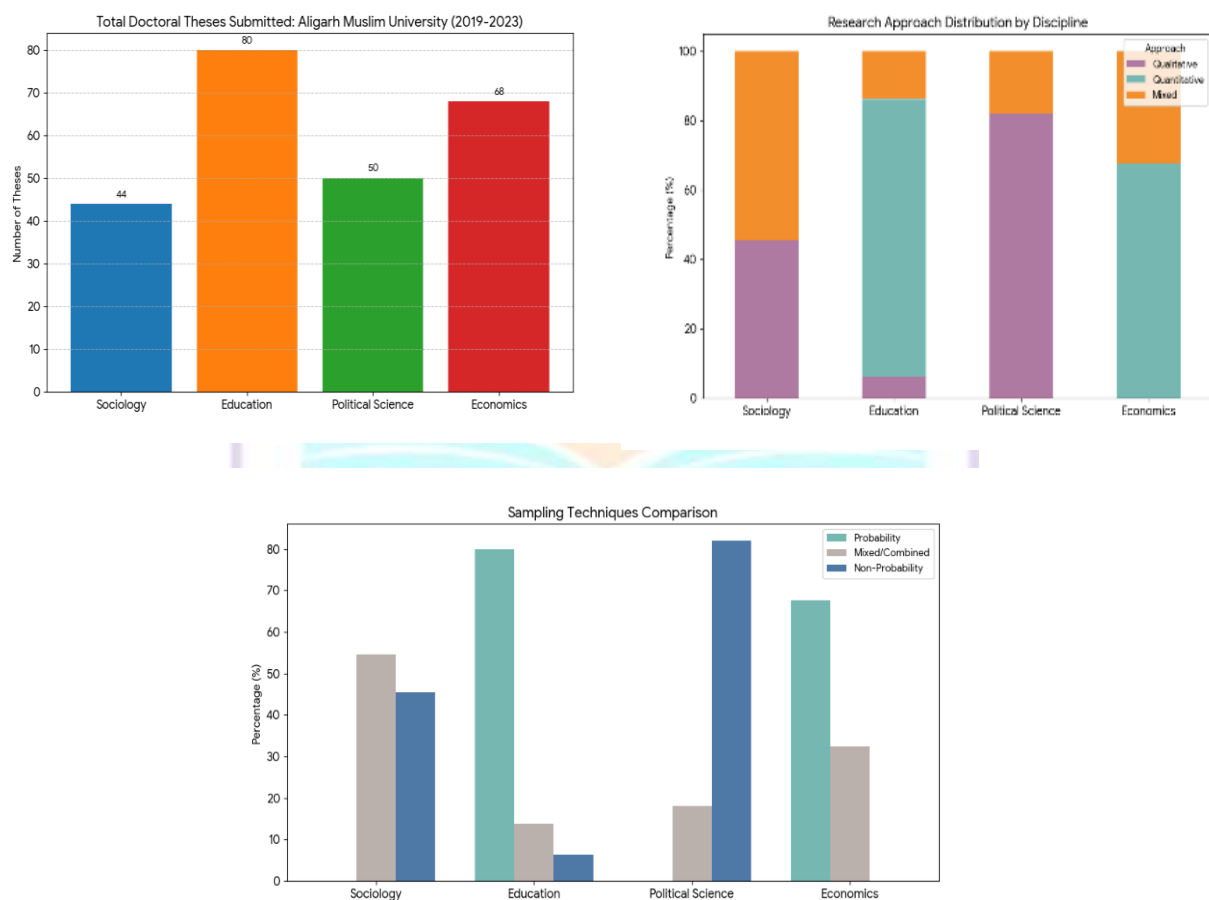
At Aligarh Muslim University, Aligarh, in the discipline of Sociology, a total of 44 doctoral theses were submitted during the year 2019-2023. The highest number of theses were

submitted in the year 2022 (27.27%) followed by 2023 (20.45%). Regarding the language of the theses, a complete preference for English was observed. In referencing style, APA was adopted by all the studies. Regarding type of research, 90.90% of theses employed applied research followed by fundamental research (9.09%). Regarding research approach, mixed methods were most used (54.54%), followed by qualitative approaches (45.45%). Regarding methodology, mixed methods dominated (54.54%), followed by case study (22.72%), ethnography (6.81%), grounded theory (4.54%), phenomenology (2.27%), philosophical (2.27%), and historical research (2.27%). In terms of sampling, most studies used a combination of probability and non-probability sampling (54.54%), followed by non-probability sampling (45.45%). In data analysis, mixed analytical approach (54.54%) was largely reflected. In focus areas of studies, Sociology of Health and Illness, Sociology of Education, Sociology of Economics and Sociology of Culture and Population were explored. Additional areas such as Sociology of Religion, Gender Studies, and Social Problems in India received moderate attention, while several important sociological fields including social stratification, urban society, social movements, environmental sociology, and advanced sociological theory received no research attention, indicating potential gaps and future research opportunities.

In the discipline of Education, a total of 80 doctoral theses were submitted during 2019-2023. The highest number of theses were submitted in the year 2022. Regarding the language of the theses, a complete preference for English was observed. In referencing style, APA was adopted by all the studies. Regarding type of research, 95% of theses employed applied research followed by fundamental research (5%). Regarding research approach, the quantitative research approach (80%) was most prevalent followed by mixed methods (13.75%). Regarding methodology, descriptive research dominated (61.25%), followed by mixed methods (13.75%), correlational studies (11.25%) and experimental research (6.25%). In terms of sampling techniques, probability sampling was most commonly used (80%), followed by combined probability and non-probability sampling (13.75%) and non-probability sampling (6.25%). Similarly, quantitative data analysis dominated (80%) while mixed analytical techniques were used in 13.75% of theses and qualitative analysis in 6.25% of theses. In focus areas of studies, the areas like Psychological Foundations of Education, Teacher Education, Philosophical foundations and educational administration, value education. Areas such as educational technology, inclusive education, curriculum studies, environmental education, educational research, and economics of education received minimal attention, while sociological foundations, women's education, and guidance and counselling remained unexplored, indicating potential gaps for future research.

In the discipline of Political Science, a total of 50 doctoral theses were submitted during 2019-2023. The year-wise distribution shows that 12 theses (24%) were awarded in 2019, 12 (24%) in 2020, 6 (12%) in 2021, 11 (22%) in 2022, and 9 (18%) in 2023. Regarding language of theses, all the theses adopted English language, and all the studies adopted APA style in referencing. Regarding type of research, Applied research dominated with 43 theses (86%), while only 7 theses (14%) were fundamental. In research approach, qualitative research was preferred, appearing in 41 theses (82%), while mixed methods were used in 9 theses (18%). Regarding methodology, historical research (28%) and case study (22%) were the most

frequently used, followed by mixed methods (18%), document analysis (14%), trend analysis (8%), and a few other approaches (10%). In sampling, non-probability sampling dominated (82%), while 18% used a combination of probability and non-probability sampling. In terms of focus area of research, the areas like Political Theory, Western Political Thought, Local Self-Government and Panchayati Raj, Electoral Politics, Police Administration, and Public Policy were explored. The areas such as Comparative Politics, Indian Political Thought, Gender Politics, Foreign Policy, Constitutional Studies, and Political Parties received moderate attention, while human rights, political participation and behavior, and other emerging topics had limited representation, and areas such as International Organization remained unexplored



In the discipline of Economics, a total of 68 doctoral theses were submitted during 2019-2023. The highest number of theses were submitted in 2019 (29.41%) followed by 2020 (26.47%), 2021 (14.7%), 2022 (13.23%) and 2023 (16.17%). Regarding language of theses, all the theses adopted English language, and all the studies adopted APA style in referencing. Regarding type of research, applied research dominated with 67 theses (98.52%) while only 1 theses (1.47%) was fundamental. Regarding research approach, quantitative methods were most prevalent (67.64%), followed by mixed-method approaches (32.35%). In methodology, descriptive research dominated (55.88%), followed by mixed methods (32.35%), correlational studies (8.82%), and trend analysis (2.94%). In sampling technique, probability

sampling was most used (67.64%), while 32.35% studies followed combination of probability and non-probability sampling.

In terms of thrust areas, research was distributed across several applied and policy-oriented fields, with major focus on Agricultural Economics and International Economics and Trade followed by Demographic Economics, Mathematical Economics and Labour Economics, Monetary and Financial Economics, and Growth and Development Economics. Additional areas such as Environmental and Sustainable Development Economics, Statistical Economics, and International Economics received moderate attention, while macroeconomics, microeconomics, and developmental economics had relatively fewer studies.

Banaras Hindu University

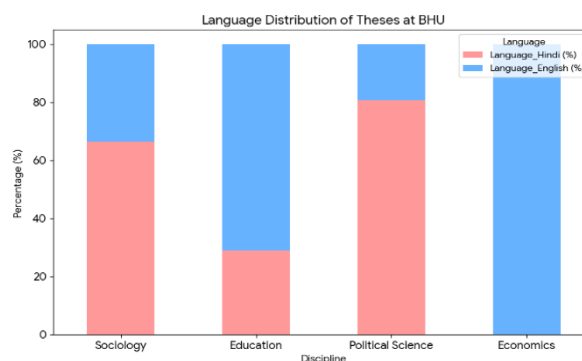
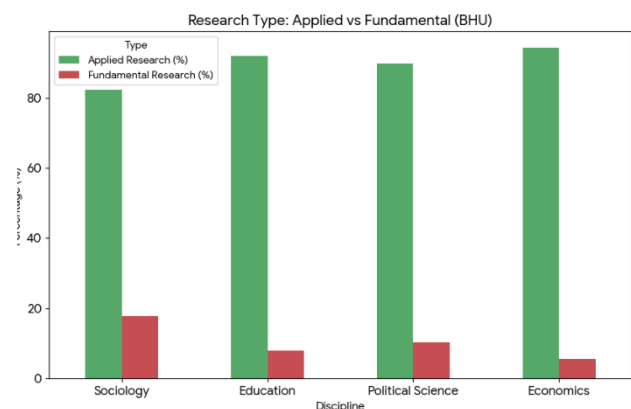
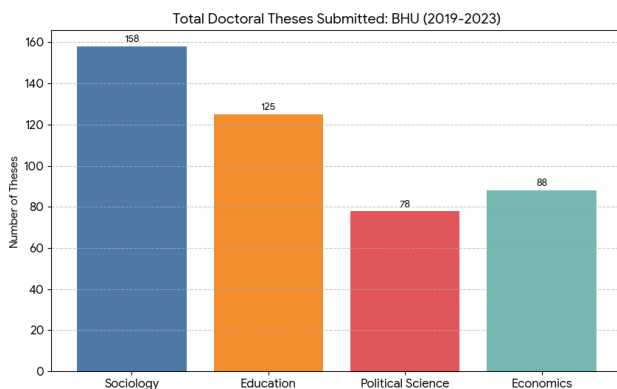
At Banaras Hindu University, Varanasi, in the discipline of Sociology, a total of 158 doctoral theses were submitted during 2019-2023. The highest number of theses were submitted in the year 2022 (23.41%) followed by 20.25% in 2019, 19.62% each in the year 2021 and 2023. Regarding the language of the theses, majority of theses were written in Hindi (66.45%), while 33.54% were written in English. Regarding referencing style, all theses followed the APA referencing style. In type of research, applied research dominated with 130 theses (82.27%), whereas 28 theses (17.72%) were fundamental research. Regarding research approach, mixed methods were most commonly used (50.63%), followed by qualitative approaches (49.36%). In methodology, mixed methods dominated (50.63%), followed by case study (27.84%), grounded theory (4.43%), ethnography (3.79%), document analysis (3.79%), phenomenology (2.53%), philosophical studies (2.53%), historical research (2.53%), and content analysis (1.89%). In sampling technique, mixed sampling was used in 50.63%, while non-probability sampling appeared in 49.36% of theses. In data analysis technique, mixed data was used in 50.63% of theses, while qualitative analysis was applied in 49.36% of theses. Regarding thrust areas, research was concentrated mainly on Indian Society, Sociology of Gender, Sociology of Economics and Social Problems in India followed by Sociology of Education, Rural Society in India, Sociology of Religion, and Industrial Sociology. Several other areas such as culture, population, sanitation, and health received moderate attention, while fields including globalization, social anthropology, agrarian studies, social stratification, sociological theory, social movements, and environmental sociology received little or no research attention, indicating potential gaps for future studies.

In the discipline of Education, a total of 125 theses were submitted during 2019-2023. The highest number of theses were submitted in the year 2023 (30.4%) followed by 28% in 2022, 16.8% in 2019, 14.4% in 2020, 10.4% in 2021. Regarding language of theses, 71.2% were written in English and 28.8% were in Hindi. All theses adopted the APA referencing style. In type of research, applied research dominated the discipline with 92%, while only 8% were fundamental. In terms of research approach, quantitative methods were most prevalent

(66.4%), followed by mixed methods (19.2%) and qualitative approaches (18; 14.4%). In methodology, descriptive research was most widely used (72; 57.6%), followed by mixed methods (24; 19.2%) and experimental studies (8; 6.4%). Regarding sampling technique, probability sampling dominated (66.4%), followed by mixed sampling (19.2%) and non-probability sampling (18; 14.4%). In technique of data analysis, quantitative data analysis was most common (66.4%), while mixed analytical techniques were used in 24 theses (19.2%) and qualitative analysis in 18 theses (14.4%). With regard to thrust areas, the majority of studies focused on Psychological Foundations of Education followed by Teacher Education, Educational Technology, and Philosophical Foundations of Education. Other areas such as inclusive education, women's education, environmental education, educational administration, sociological foundations, and value education received moderate attention, while curriculum studies, economics of education, and educational research had minimal representation, and guidance and counselling remained unexplored, indicating potential gaps for future research.

In the discipline of Political Science, a total of 78 doctoral theses were submitted during 2019-2023. The highest number of theses were submitted in the year 2023 (26.92%) followed by 23.07% in 2021, 17.94% in 2022, 16.66% in 2019 and 15.4% in 2020. Regarding language of the theses, majority of these (80.76%) were written in Hindi language and rest 19.23% of theses adopted English language. All the theses adopted APA referencing style. In type of research, Applied research dominated the discipline with 70 theses (89.74%), whereas only 8 theses (10.25%) were fundamental in nature. Regarding research approach, qualitative methods were most prevalent (74.35%), followed by mixed-method approaches (25.64%). Regarding methodology, historical research was most frequently used (29.48%), followed by mixed methods (25.64%) and case studies (14.10%). In sampling technique, non-probability sampling was dominant (74.35%), followed by mixed sampling (25.64%). In data analysis, qualitative data analysis was most common (74.35%), while mixed analytical techniques were used in 25.64% of theses. In focus area of study, the most prominent focus was on Indian Political Thought followed by Political Theory, Electoral Politics, Local Self-Government and Panchayati Raj and Constitutional Studies. Other areas such as comparative politics, police administration, international organizations, gender politics, and foreign policy received moderate attention, while topics like human rights, defence studies, political parties, and public policy were less explored.

In the discipline of Economics, a total of 88 doctoral theses were submitted during the year 2019–2023. The highest number of theses were submitted in the year 2021 (28.40%) followed by 23.86% in 2022, 22.72% in 2023, 15.9% in 2019 and 9.09% in 2020. All the theses were written in English language and all the theses followed APA referencing style. Regarding type of research, Applied research dominated with 83 theses (94.31%), while only 5 theses (5.68%) were fundamental in nature. Regarding research approach, quantitative methods were most prevalent (51.13%), followed by mixed methods (45.45%), while purely qualitative studies were rare (3.40%). In methodology, mixed methods (45.45%) and descriptive research (44.31%) were the most frequently used. In terms of sampling technique, probability sampling was most commonly employed (51.13%) followed by mixed sampling techniques (45.45%), while non-probability sampling was rarely used (3; 3.40%). In technique of data analysis, quantitative data analysis was dominant (51.13%), followed by mixed analytical techniques (45.45%), while qualitative analysis appeared in only a few studies (3.40%). In focus areas of research, International Economics and Trade, Agricultural Economics, Development Economics and Statistical Economics. Other areas such as macroeconomics, microeconomics, mathematical economics, economic thought, environmental and sustainable development economics, and public finance received moderate attention, while topics like planning and development economics and mathematics for economic analysis were minimally explored.



Discussion

In India, the multidisciplinary research is growing day by day due to various policy initiatives undertaken by Govt. of India like the National Education Policy 2020. The policy encourages the universities in India to combine different disciplines to promote collaborative research. The current study compared research trends across four disciplines; Sociology, Education, Political Science, and Economics in Central Universities of Uttar Pradesh like Babasaheb Bhimrao Ambedkar University, Aligarh Muslim University, Banaras Hindu University and University of Allahabad. The findings reveal both similarities and differences among universities.

The analysis of 245 Sociology theses reveals that BHU produced the highest research output (Gaurav & Kumar, 2022; Balasubramani & Parameswaran, 2014) followed by AMU, BBAU and UoA. Regarding the language of theses, BHU and BBAU used both English and Hindi while UoA and AMU used English language. Most number of theses were applied in nature although UoA showed balance with basic research. In terms of methods, BBAU used qualitative method while as BHU, UoA and AMU preferred mixed method. In terms of data analysis, BBAU relied more on qualitative analysis whereas others used mixed analysis. In terms of sampling, non- probability sampling was common but BHU, UoA and AMU used more probability and mixed sampling. In terms of research area, BBAU focused on education, gender, and social problems; BHU on Indian society and rural issues; UoA on agrarian studies; and AMU on health and education. Overall, sociology research was applied and issue-based but varies in methods and focus areas.

The analysis of 244 Education theses reveals that BHU produced the highest research output followed by AMU, UoA and BBAU. This research output confirms that a few institutions dominate the output of research and certain universities and countries contribute disproportionately (Singh, 2020; Moozegar et al., 2018). Regarding the language of theses, English was the main language in all universities especially in AMU which only used English. APA style was followed almost everywhere (Valverde-Berrocso, 2020; Ajibola & Issa, 2022). Most number of theses were applied in nature with very little basic research and no action research (Avtar, 2019). In terms of methodology, Quantitative methods were most common, while mixed methods were used moderately and qualitative methods were least used (Galiani & Galvez, 2023; Singhal, 2023). Descriptive research was the most common method, while advanced methods like ethnography were rarely used (Baydas et al., 2015; Goktas et al., 2012). In term of sampling technique, Probability sampling and quantitative analysis were widely used, especially in AMU and BBAU (Li et al., 2020). The institutions like BHU and UoA showed slightly more diversity by using mixed methods. Most studies focused on psychological foundations and teacher education, while areas like guidance, women's education, and sociological foundations were largely ignored (Panigrahi & Naaz, 2021).

The analysis of 195 Political Science theses reveals that BHU produced the highest research output followed by AMU, UoA and BBAU (Avtar, 2019). Regarding language of the theses, BHU and UoA used Hindi while as AMU preferred English and BBAU using both English and Hindi. APA style was followed in all universities (Valverde-Berrocso, 2020). The most

number of theses were applied in nature with very little basic research. In terms of methodology, Qualitative methods dominated, while mixed methods were used to some extent and quantitative studies were almost absent (Singhal, 2023). Common methods included historical and case study approaches, while advanced methods were rarely used (Goktas et al., 2012). In terms of sampling technique, non-probability sampling and qualitative analysis were widely used (Li et al., 2020). The research topics varied across universities but mainly focused on political theory, governance, and public policy. However, important areas like geopolitics, international law, and political sociology were largely ignored, showing clear research gaps.

The analysis of 246 Economics theses reveals that BHU produced the highest research output followed by AMU, UoA and BBAU again showing unequal research output (Avtar, 2019). In terms of language of theses, English was the main language across all universities with very little use of Hindi (Li et al., 2020). APA style was followed everywhere (Valverde-Berrocso, 2020). The most number of theses were applied in nature with very little basic research (Galiani & Galvez, 2023). Quantitative and mixed methods were widely used, with UoA and AMU relying more on quantitative approaches, while BHU and BBAU used more mixed methods. Advanced qualitative methods were mostly absent. In terms of sampling, probability sampling and statistical analysis were common, showing strong use of data-based methods. Research mainly focused on applied areas like agriculture, trade, development, labour, and environment. However, traditional areas like public finance and econometrics received less attention, showing limited diversity.

Conclusion

The current study reveals that the research across all four disciplines Sociology, Education, Political Science, and Economics was applied in nature, focusing on real-life and policy-related issues rather than theoretical work. The APA referencing style was followed by all the institutions which reveals a strong uniformity in academic writing. In terms of research output, methods, and focus areas, there were clear differences among universities. The BHU contributed the highest number of studies in most disciplines. In terms of Methodology, quantitative and mixed approaches dominate in Education and Economics, while qualitative and mixed methods are more common in Sociology and Political Science. The current study also reveals limitations like advanced research methods are rarely used, and many important areas remain under-researched across disciplines. Overall, the findings suggest that while research is growing and becoming more practical, there is a need for greater methodological diversity and wider coverage of topics in future research.

References

- Ajibola, T., & Issa, A. (2020). Assessment of In-Text Citations and Referencing Styles Adopted in Theses Submitted to University of Ilorin Postgraduate School between 2010 and 2016. *International Journal of Research*, 6(1), 117.

- Amoozegar, A., Khodabandelou, R., & Ale Ebrahim, N. (2018). Major trends in distance education research: a combination of bibliometric and thematic analyze. *International Journal of Information Research and Review*, 5(2), 5352-5359.
- Augsburg, T. (2005). *Becoming interdisciplinary: An introduction to interdisciplinary studies*. Kendall/Hunt Publishing.
- Balasubramani, R., & Parameswaran, R. (2014). Mapping the research productivity of Banaras Hindu University: A Scientometric study. *Journal of Theoretical and Applied Information Technology*, 59(2), 367-371.
- Baydas, O., Kucuk, S., Yilmaz, R.M., Aydemir, M. & Goktas, Y. (2015). Educational technology research trends from 2002 to 2014. *Scientometrics*, 105, 709–725. <https://doi.org/10.1007/s11192-015-1693-4>.
- Choudhary, A. (2015). Multidisciplinary Research. *Academike*. Retrieved from <https://www.lawctopus.com/academike/multidisciplinary-research/>.
- Galiani, S. & Galvez, R. (2023). Unveiling specialisation trends in economics research: A large-scale study using natural language processing and citation analysis. Centre for Economic Policy Research. Retrieved from <https://cepr.org/voxeu/columns/unveiling-specialisation-trends-economicsresearch-large-scale-study-using-natural>
- Gaurav, K. & Kumar, G. (2022). Research Productivity and Collaboration Pattern Of Banaras Hindu University (2001-2020): A Scientometric Analysis. *Kelpro Bulletin*, 26(1), 14-28.
- Goktas, Y., Kucuk, S., Aydemir, M., Telli, E., Arpacik, O., Yildirim, G., & Reisoglu, I. (2012). Educational technology research trends in Turkey: A content analysis of the 2000–2009 decade. *Educational Sciences: Theory & Practice*, 12(1), 177–199.
- Li, Y., Wang, K., Xiao, Y. et al. Research and trends in STEM education: a systematic review of journal publications. *International Journal of STEM Education*, 7(11), 1-16. <https://doi.org/10.1186/s40594-020-00207-6>.
- Mishra, A. S. (2024). Embracing the future: the role of multidisciplinary research. *IIM Ranchi Journal of Management Studies*, 3(1). Retrieved from <https://doi.org/10.1108/IRJMS-01-2024-185>.
- Panigrahi, S. P. & Naaz, I. (2021). Emerging Research Trends in Teacher Education. *Journal of Indian Research*, 9(3&4), 78-85.
- Singh, A. (2020). Trend analysis of the educational research at the school of education devi ahilya vishwavidhyalaya indore. Department of Education-CASE, Maharaja Sayajirao University of Baroda. <http://hdl.handle.net/10603/289203>.
- Singh, M. & Virk, H. K. (2023). Breaking Down Disciplinary Barriers: The Power of Multidisciplinary Research in the Globalised World. *Gyankosh: An Annual Double Blind Peer Reviewed Interdisciplinary Journal*, VI, 56-66
- Singhal, M. (2023). A Study on Research methods and Modern trends in Sociology. *International Journal of All Research Education and Scientific Methods*, 11(4), 144-1149.
- Valverde-Berrocso, J., Garrido-Arroyo, M. D. C., Burgos-Videla, C. & MoralesCevallos, M. B. (2020). Trends in Educational Research about e-Learning: A Systematic Literature Review (2009–2018). *Sustainability*, 12, 5153. <http://dx.doi.org/10.3390/su12125153>.