

A Study on Writing skills of Research paper with “Artificial Intelligence” (AI)

Dr. Navneet Kumar¹

¹Associate Professor in Physical Education, C G N P G College, Golagokarnnath, Kheri, U.P.

Received: 20 Jan 2025, Accepted: 25 Jan 2025, Published with Peer Reviewed on line: 31 Jan 2025

Abstract

There is so many ideas struck the mind which research topic should I choose for research work and many of students face problems to write a research article. Professors are also busy with new finding and research theories. This paper explained how research scholar select topic with help of chat gtp, it's also explained how to find out the reviews related with your related topics, it's also explained about free apps those can help in research writing and Plagiarism check to stop the failure in the studies. In this studies scholar know the statistic tool those related with studies and how SPSS help with AI. It's crucial to constantly adhere to the latest Generative AI policies set by journals, ensuring compliance and maintaining the integrity of the publication process.

Keywords: SPSS, Artificial Intelligence, Chat gpt, Research, Plagiarism

Introduction

Many students struggle with selecting a suitable research topic and writing a comprehensive research article, as there are numerous ideas that can be explored. This issue is compounded by the fact that professors are often deeply engaged in developing new theories and findings, which leaves limited guidance for students. However, artificial intelligence has emerged as a valuable research tool, offering significant support to scholars by providing innovative approaches and insights into their research endeavors. However, academic writing can be challenging, with difficulties varying depending on the writer and the field [1]. Writing can be particularly difficult for students learning English as an additional language because English is a globally spoken language. While writing a good paper in languages like Hindi or Sanskrit may be effective within India, today, numerous translation software options are available that can convert text into various languages. Additionally, maintaining academic integrity through accurate referencing and citation of sources is essential; however, this process can be daunting and time-consuming, especially for non-native English speakers. [2]. There is a notable prevalence of academic papers in English, which poses a challenge for Hindi writers who often need extensive references to support their studies by relying on existing research. Fortunately, modern translators offer valuable assistance, enabling researchers to convert paper languages into various formats. The realm of academic writing frequently entails revising drafts with the guidance of feedback from peers and advisors, highlighting the importance of being receptive to criticism and adept at incorporating suggestions. Furthermore, interdisciplinary research introduces complexities as it requires writers to integrate diverse methodologies, terminologies, and concepts from multiple fields. [3].

Interdisciplinary research can be challenging for researchers because it is difficult for one person to be knowledgeable in multiple fields. To address this, researchers must often delve into numerous subjects to effectively solve research problems. In this context, AI plays a crucial role by providing comprehensive guidance across various disciplines. AI tools significantly contribute to this process by enhancing research productivity and efficiency. This review underscores the primary ways in which AI tools support academic writing, illustrating their importance in advancing knowledge, boosting productivity, and enriching academic discourse. With AI's assistance, research becomes a more accessible task, transforming the research landscape

on an international platform. The speed of work can be greatly enhanced with AI technology, allowing tasks to be completed in mere seconds. By simply entering a research topic into a search bar, AI commences its operation, effectively locating relevant information. The evolution of AI from rule-based expert systems to sophisticated applications has revolutionized medical practice. AI is now capable of analyzing medical images such as x-rays, diagnosing diseases, recommending optimal treatment plans and surgeries, and predicting treatment outcomes. This shift marks a transition from traditional medical methods to advanced computational techniques, significantly transforming healthcare processes. [5]. AI has transformed into a valuable ally for students, revolutionizing their approach to research. Previously, students had to spend entire days combing through information on their computers, often missing pertinent topics. Today, AI streamlines this process by directly asking what is needed and efficiently gathering the required information. In the realms of business and manufacturing, AI has evolved significantly, transitioning from basic rule-based systems to sophisticated technologies like predictive analytics, inventory optimization algorithms, and comprehensive automation solutions. [6]. In the realm of business studies, Artificial Intelligence (AI) plays a crucial role, particularly in analyzing and interpreting company data, which significantly impacts business growth. By leveraging AI, businesses can easily assess their growth rates on a quarterly basis, as AI efficiently processes market data and provides a detailed analysis of gains and losses through comprehensive charts. Furthermore, the application of Generative Artificial Intelligence in education serves as a catalyst for evolving technology-enhanced learning models, where digital technologies are employed to nurture personalized, interactive, and cooperative learning experiences from a pedagogical standpoint. [7]. If we talk about the multiplanar research then AI is so much important in this generation. AI give us the helping hand to us its can't be enemy of our progress because every research needs knowledge of match, science and computer without knowledge of these subject a research paper can't be completed Artificial Intelligence (AI) operates as information-driven software, utilizing historical data to perform its functions. Today, AI models exhibit a significantly reduced margin of error, leading to increased trust in AI-generated data sheets among users. Unlike humans, AI does not have personal experience; instead, it harnesses global data, analyzing and comparing this information to identify the most widely accepted options.

Despite its growing use and reliability, the cognitive processes through which AI-generated texts affect our understanding of concepts remain insufficiently explored. [8]. In the future, artificial intelligence (AI) technology will be employed to streamline examination processes. Additionally, AI might play a role in military strategies, where nations could utilize this technology to determine the positioning and capabilities of their armies and weaponry during conflicts. While AI can bring both beneficial and detrimental effects to society, the impact largely depends on individual choices regarding its usage. Most academic studies concentrate on the technical expertise and ethical aspects of Generative Artificial Intelligence systems, with comparatively little research exploring their effects on education and cognitive development. [9]. Artificial intelligence should be an integral part of research endeavors, with professors acquiring skills to harness this technology effectively. Globally, countries can be categorized into those advancing with technology and those awaiting technological integration. For example, nations like Iran, Israel, China, Korea, and Japan are considerably more technologically advanced compared to countries such as Nepal, India, Bangladesh, Sri Lanka, and various island nations. It is essential for countries to update their systems in alignment with modern technological demands, as failing to do so may hinder progress and result in dependence on technologically developed nations.

Objectives

What are the common challenging for researcher to learn AI technology?

To find out the accuracy of the AI tools.

How much research based on this technology and what are the future of AI based Data.

To find out the effectiveness between human based work and AI

Review of Study: -

The paper concludes by examining the existing literature, which provides insights into the future development of practical recommendations aimed at improving writing skills, grammar, research topics identifies, and uses associated with generative AI technologies.

There are two kinds of outlines such as topic outline and the sentence outline, for topic outline consists of short phrases than the sentence outline is done in full sentences (Munoz-Luna, 2015). [10]. In the maximum teachers are other languages and felt difficulties to learn English. They can write English to express his thoughts but they are not prompt in Grammar and phrases. This software taught how to write accurately and explain the mistakes. Other than that, outlining ideas which helped to use academic features consciously from a deeper understanding (Munoz-Luna, 2015). AI ideas are based on the so many people knowledge and its always pick up the idea on the basis of new knowledge. AI is aware about the news and incidents that's are happening in the world every second. In this AI age every one need to use this technology and update their knowledge. The composing is a process of discovering and exploring ideas and constructing a framework to best present (Torres et al., 2022) [12]. AI can predict the past events those are written on the google but I we talk about the AI in education, such as bias in AI algorithms and the possibility of teachers losing their jobs. It emphasizes the importance of considering these risks before introducing AI in educational institutions [13]. Now a days so many comments are coming the teachers will lose their jobs due to step in AI in educational field but its not possible teachers left the jobs because the society will not adopt the computer in human life. One important point is clear that who made the computer, the answer is its build by the man so it means the data feed in computer also search of human being. The all researches not completed the computer its all work done by human beings. Ai just collect the information and collect on one place and give the best results. Man is machine but machine never take place of man. Its don't have the emotion, touch and feeling and this earth is the city of love and affection. Teacher build the world and their idea are their mind search and that come from nature. AI is also part of the nature.

AI Technology used in Research: -

Note: - In the realm of academic publishing, it is imperative to adhere strictly to the latest "Generative AI policies" implemented by journals to maintain compliance and uphold the integrity of the publication process. Authors are required to disclose any use of AI tools during the preparation of their manuscript. While researchers are prohibited from employing Generative AI to create or manipulate research data, it is essential to respect the originality of the hypothesis, interpretation, results, conclusion, limitations, and discussion. However, AI tools can be used for assistance with spelling and grammar corrections and are also applicable in peer-review processes. To facilitate a clear understanding among readers, we will offer a comprehensive, step-by-step guide on utilizing essential AI tools in the research process, which will ensure that researchers and authors are well-versed in integrating AI technology effectively and ethically.

Find out a Topic for Research.

Chat GPT provides a feature for users to upload academic papers and receive explanations of the topics, enhancing their understanding of the material. This service functions as an educational tool, facilitating a deeper appreciation of the research methodologies specific to the subject being explored. Users can inquire

about the research's limitations and delimitations, which helps clarify the scope and boundaries of the study. Additionally, the app includes a live chat feature, similar to Gemini, allowing individuals to discuss their research questions in real-time and receive immediate assistance. Chat GPT also retains a history of conversations, enabling users to revisit past discussions. Importantly, users have the option to delete their chat history after examining a topic, maintaining privacy and control over their saved data. ChatGPT functions as a conversational agent tailored for dialogue and problem-solving, rather than operating as a search engine. In contrast, Google remains the preferred tool for many due to its superior accuracy in delivering results and its impressive speed of search, which surpasses that of other available tools. Additionally, Google is addressing the longstanding issue of the vast number of low-quality articles published on the web, which often lack credibility and make it difficult to discern factual information from the overwhelming amount of data. To tackle this problem, Google is now taking steps to filter and clean up the surfed data to improve the quality of information available online.

Perplexity AI :- This tool is highly effective in performing rapid and precise searches, surpassing other search applications in its accuracy. It is especially skilled at providing detailed information on niche topics, ensuring quicker response times. Nonetheless, some users experience difficulties when utilizing it for broader, more general searches.

Google AI Search : Modern algorithms designed for interpreting structured data effectively integrate with Google's ecosystem, enhancing their versatility and ensuring fast, reliable outcomes. The system's personalization features are continually advancing, although there is an ongoing concern among some users that search results may be excessively shaped by SEO strategies.

(a) **Microsoft Bing Ai :-** Natural language processing (NLP) involves the development of algorithms and systems that enable computers to understand and interpret human language, making interactions more intuitive and efficient. When integrated within Microsoft's expansive ecosystem, NLP can enhance user experiences by offering personalized recommendations tailored to individual preferences and behaviors, ultimately boosting productivity and engagement across various applications and platforms.

(b) **Algolia :** Algolia is renowned for its powerful search functionalities, making it particularly effective for e-commerce platforms. Utilizing AI technology, it provides swift and pertinent search outcomes and integrates effortlessly into websites, enhancing the overall user experience. People love to buy the all goods from e-commerce platform. Its was the old days thought any one can cheat you if you buy the product online because now a days everyone watches the reviews of new products and think so many time then compare all the product and choose best one. This app helps researcher to calculate the stats between markets products those price and quality up and down so many times in the years. So many surfing websites inform you the rate of product was so cheap in this month and then you can take decision to buy or not buy that product. Every researcher need data for the research and these types of apps help us to find the accurate data of the market.

(c) **Klevu :-** Klevu is highly regarded for its capacity to deliver dynamic and real-time search results, which is especially beneficial in the e-commerce industry. It enhances the shopping experience by helping businesses tailor product recommendations to individual customer preferences. When we buy a shoes then we need know so many things about the shoes like his price, quality, power and durability's then we choose it for his foot and this the time of compression between two product.

(d) **ElasticSearch :-** Elastic Search serves as an essential tool for enterprises dealing with substantial amounts of data, providing robust search functionalities that enhance data retrieval. Additionally, it seamlessly integrates with various big data tools, optimizing its performance in processing large datasets.

1. Story Structure for Peer Reviewed Paper: -

Researchers aiming to enhance their research papers with graphs and images can utilize ChatGPT for comprehensive explanations. By providing the graph and images to ChatGPT, they receive clear and insightful content tailored for straightforward integration into their research documents. This process not only facilitates reader comprehension but also enriches the overall presentation of the paper.

Use Or not Use Tools List:

A – Gravity Write: - This tool converts AI Generated Article in AI Humanized Article and it's also failed to catch by Air Detection. In the race of truth and false some people love to work in seconds without hard-work so these types of app really help him to cooked for them. They have to just share the idea of the topics and the field in which they want to work than all the other work completed by this app. If you have the ai written article and you want to convert this article like a written by a great writer the you are on the write place this software do this for you.

B. Aithor.com is proving the research paper in minutes, here an author needs to select the topics and design then he will provide you all data related to research paper, but if a research used this tool in the fair means then he can take idea from this app. This apps work superbly for research ideas. Turnitin is the software used to check the originality of your article. If a student in masterclass then so many idea comes in his mind and he want to research on so many new topics but he don't know how to choose the best topics and what are the test he has to apply in this research or may be he can be on wrong research path but this tool guide him from start to last.

C. Researchrabbitapp.com It is a great 2025 website, is connect your similar with other researches. It's also explained the new studies going on your topics. Its best use help you select the topics for research. The most unsolved problem for a researcher to know if he selects a topic that is accurate for the work or not. He has a good chance to search the problem regarding their topic on this app. Its help the researcher to inform how researcher work on the related topics and what test they apply and what results they got after the research. I think research become so interesting after the used of these types of AI tools.

D. Paperpal:- It is the best tool for asking questions related to the research work. It will suggest different ideas for research-related problems. It also works as a language model, it offers a variety of features, including AI writing, research and citation, chat GPT, chat PDF, plagiarism detection, and rewriting tools. a proofreading and it's with MS Word software. Every tool has some limitations in the free version, so researchers have to buy the tool for advanced searches.

E. Jenni.ai is the best research topic search tool because it provides detailed headings. This explains the main features of your research. Jenni will answer any related questions. Jenni finds the data to the points and helps researchers regarding all old research that has been conducted on the same topics. If a researcher clicks on the lower tab "@Cite" it shows many research papers and helps to find the related topics.

F. Avidnote.com Its help in research-based interview question which can be asked during the thesis final submission and it's also help in qualitative and quotative data. New research scholar always scared what types of question will be asked in research interview so this app find out the different types of question and inform the researcher about the interview question. Its positive part is a researcher will be well prepared in advance for the interview but I he writes the research paper himself then he should not worry about the question because all the question will be related to topics and sometime software can misguided.

G. Scispace.com It is the best user-friendly tool for research. It also helps to find out the AI-generated content. It provides you with different ideas relevant to topics. This tool is the best choice for so many researchers, as its helping criteria are much better than other tools. The quality of this tools is question asked by the apps help

to understand the problem deepness. Just like, we ask about the Sci-space then it will ask in which area and region you want to do research. Second question regarding my topics is, on which area this paper is focusing is example is text detection, images, audio, and multiple modals. In the next question it will ask which types of website will best serve your research goal.

Table 4. Comparison of AI tools for academic writing and research.

Feature/tool	Literature management	Writing assistance	Plagiarism detection	Data analysis	Specialized AI features
Zotero/Mendeley	Yes	No	No	No	No
EndNote	Yes	No	No	No	No
Grammarly	No	Yes	Yes	No	No
ChatGPT (OpenAI)	No	Yes	No	No	Yes
Turnitin	No	No	Yes	No	No
Copyscape	No	No	Yes	No	No
Tableau	No	No	No	Yes	No

Discussions:-

The research paper highlights the scholar's approach to identifying the research problem by examining various forms of knowledge. By engaging with diverse studies and reviews, the scholar gains valuable insights and poses relevant questions that address research challenges effectively. Moreover, the influence of AI in research planning is emphasized, as it provides crucial guidance in designing studies and suggesting methodologies that best suit specific research questions. [10]. Now so many facts have to discover how the researcher take benefits of AI in writing research a paper and how to avoid the misuses of AI. So may companies build the apps that will work on the place of human and write a research a paper in seconds. Now it become a tough job for Owner of the journal to find out the real paper in this new AI age. So many companies working on the AI apps because it became the world biggest to earn the money and nobody knows the boundaries of AI software what will come new feature in this software. Every should know technology is made to help us but you can't stop the people those love to achieve success in the shortcut ways.

AI tools can play a significant role in shaping research ideas and designs, but there is also a risk that they might lead researchers astray, moving them away from their primary goals. Therefore, it is essential to engage in thorough deliberations on the benefits, potential risks, and constraints associated with AI before depending on these tools to assist in the innovative development or design of research projects. [11] The author ring to teach the goal of the research is not write a paper or published it in a world class journal. The main aim of research is to find out the facts and new ideas to help the societies. AI is not a bad tool its work like a google search engine and very useful for the leaner of different fields. It can create a beautiful slide in seconds on different topics but its limitation is fixed. Ai can't cross the boundaries. I will try to teach you, if you have the one vegetable then you have to prepared that one because you don't have option for other. The same things

happened in case of research, the research topics cover the vast and different area which has still need finding so AI can't help us for a long time.

Conclusion: -

This study provides the information about AI, how to researcher used AI tools in research papers. This study explains about o many apps that can help in grammar and words correction. With the help of this paper researcher choose a good topic for research and they will also aware about the reviews and past work which one conducted in their field. This study guides the researcher how to write the thesis with help of AI tools. This paper also explain cheating with AI will not be more considered in so many journals and all the paper will be checked by help o software to find out the use of AI. They can use the AI for information and knowledge but they should avoid the copy and paste with the help of AI.

References: -

1. M. Birjali, M. Kasri, A. Beni-Hssane. A comprehensive survey on sentiment analysis: approaches, challenges and trends, Knowl. Base. Syst., 226 (2021), Article 107134
2. E.J. Morris, Academic integrity matters: five considerations for addressing contract cheating
Int. J. Educ. Integr., 14 (1) (2018), p. 15
3. B. Huisman, *et al.*, Peer feedback on academic writing: undergraduate students' peer feedback role, peer feedback perceptions and essay performance, Assessm. Evaluat. High. Educ., 43 (6) (2018), pp. 955-968
4. Y.K. Dwivedi, *et al.*, So what if Chat GPT wrote it?" Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy, Int. J. Inf. Manage, 71 (2023), Article 102642.
5. Jiang, F., Jiang, Y., Zhi, H., Dong, Y., Li, H., Ma, S., ... & Wang, Y. (2017). Artificial intelligence in healthcare: past, present and future. Stroke and vascular neurology, 2(4), 230-243.
6. Kaplan, A., & Haenlein, M. (2019). Siri, Siri, in my hand: Who's the fairest in the land? On the interpretations, illustrations, and implications of artificial intelligence. Business Horizons, 62(1), 15-25.
7. Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education—where are the educators? International journal of educational technology in higher education, 16(1)
8. Luckin, R., & Holmes, W. (2016). Intelligence unleashed: An argument for AI in education
9. Fedorets, V., Klochko, O., Tverdokhlib, I., & Sharyhin, O. (2024). Cognitive aspects of interaction in the "Human—Artificial Intelligence" system. Journal of Physics:
- 10 Munoz-Luna, R. (2015). Main Ingredients for Success in L2 Academic Writing: Outlining, Drafting and Proofreading. PLOS ONE, 10(6), e0128309.
- 11 Torres, J., Ravago, J., & Reyes, M. (2022). The Composing Process of Melancholic and Sanguine Junior High School Students in the Philippines. International Journal of Language and Literary Studies
13. Tanya, Milberg. (April 28, 2024). The future of learning: How AI is revolutionizing education 4.0. Retrieved from: <https://www.weforum.org/agenda/2024/04/future-learning-ai-revolutionizing-education-4-0/> [in English].

14. P. Schneider, *et al.* Rethinking drug design in the artificial intelligence era Nat. Rev. Drug Discov., 19 (5) (2020), pp. 353-364.

15 I. Dergaa, *et al.* From human writing to artificial intelligence generated text: examining the prospects and potential threats of ChatGPT in academic writing Biol. Sport., 40 (2) (2023), pp. 615-622.