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AI-Driven Transformation in India's Education and Employment Sectors: Evidence from a Quantitative Study

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ABSTRACT

Artificial Intelligence (AI), particularly Generative Pre-trained Transformer (GPT) models such as ChatGPT, is increasingly reshaping education and employment worldwide. This study examines the impact of AI on learning experiences, skill development, administrative efficiency, and employment readiness in India. Using a quantitative design, data were collected through an online survey of 150 participants, including teachers, students, and government employees. Analysis using IBM SPSS revealed excellent reliability (Cronbach's Alpha = 0.913). Regression results showed a moderate to strong positive relationship between AI integration and learning and employment outcomes ($R = 0.651$, $R^2 = 0.423$, $p < .001$). Descriptive findings showed strong agreement that AI improves administrative efficiency and instructional support (Mean = 4.17) and enhances career guidance and skill development (Mean = 4.07). AI-enabled personalization received a comparatively lower mean score (Mean = 3.81), reflecting concerns related to access and digital literacy. Overall, the findings confirm AI's transformative role in India's education and employment sectors, while emphasizing the need for ethical governance, digital equity, and human-centered implementation.

KEYWORDS
Artificial Intelligence; ChatGPT; Data Privacy; Digital Equity; Employment; India; Learning Experiences

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1. Introduction

ChatGPT and Artificial Intelligence (AI) are increasingly transforming educational systems and labor markets across the globe, and India is no exception. These technologies offer significant opportunities to enhance personalized learning, improve instructional efficiency, and streamline administrative processes. One of the most notable educational contributions of ChatGPT lies in its capacity to facilitate interactive and adaptive communication, enabling learners to engage in meaningful, customized dialogue and access learning resources tailored to their individual needs (Sharma &Yadav, 2022). Such AI-supported systems enhance learner engagement, conceptual understanding, and overall academic performance. At the same time, the rapid advancement of AI technologies is reshaping employment trends by creating new career pathways for individuals equipped with digital and AI-related competencies. The

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increasing adoption of automation, data analytics, and intelligent systems across industries has intensified demand for graduates with AI literacy and adaptive skill sets. Consequently, learners are now required to develop not only technical expertise but also transferable skills that support employability and career readiness in an increasingly technology-driven job market.

AI also enables hyper-personalized learning environments, allowing learners to customize curricula according to their learning styles through adaptive content, multimedia resources, and automated assessments. This individualized approach contributes to learner motivation, deeper knowledge acquisition, and sustained engagement. Moreover, AI-driven learning analytics assist learners in identifying suitable educational pathways and employment opportunities by linking academic performance with evolving labor market trends, thereby supporting informed decision-making (Gedrimiene et al., 2024). Beyond academic outcomes, AI has the potential to foster higher-order skills such as creativity, critical thinking, and problem-solving, competencies essential for navigating complex and dynamic work environments.

Despite these advantages, the growing integration of AI in education and employment raises important concerns related to ethical use, data privacy, digital equity, and potential labor displacement. These challenges underscore the need for responsible AI adoption supported by transparent regulatory frameworks and inclusive digital policies, particularly in a diverse and socio-economically stratified context such as India.

Against this backdrop, the present study examines the overall impact of ChatGPT and Artificial Intelligence on India's learning system and employment sector. It focuses on how AI influences educational practices, skill development, administrative efficiency, and career-oriented decision-making. By adopting a quantitative approach, the study seeks to provide empirical evidence that informs ongoing academic and policy debates on sustainable and human-centered AI integration in India. The main objectives of this study are:

1. To examine the applications, functionalities, and limitations of GPT models within the education sector.
2. To analyze the disruptions and opportunities created by Artificial Intelligence as a factor influencing the selection of job-oriented courses.
3. To assess the impact of Artificial Intelligence and ChatGPT on administrative activities within education and employment sectors.

2. Literature Review

2.1 Applications, Functionality, and Limitations of GPT Models in the Education Sector

The rapid advancement of Artificial Intelligence (AI), particularly Generative Pre-trained Transformer (GPT) models such as ChatGPT, has significantly influenced contemporary educational

practices. Since its public release in 2022, ChatGPT has been widely adopted as an academic support tool for content generation, instant feedback, and one-to-one learning assistance, contributing to increased learner engagement and instructional efficiency (Yu, 2024; Montenegro-Rueda et al., 2023). AI-based systems enable the customization of learning content according to learners' needs, pace, and prior knowledge, thereby supporting differentiated and personalized instruction.

In the Indian education context, these affordances are especially relevant due to learner diversity, large class sizes, and uneven access to instructional support. AI tools have shown potential in facilitating exam preparation, conceptual understanding, and self-directed learning, including success in Indian competitive examinations (Bhardwaj &Bedi, 2025). However, the adoption of GPT models also raises important pedagogical and ethical concerns. Overreliance on AI may encourage academic dishonesty, reduce learner autonomy, and weaken critical thinking skills (Memarian&Doleck, 2023). From an Indian pedagogical perspective, effective learning continues to require structured guidance, motivation, and teacher mediation, as AI cannot substitute the instructional, affective, and ethical roles of educators (Sharma, 2024). Moreover, psychological factors such as stress, study habits, and self-regulation remain central to academic performance, indicating that AI must be integrated thoughtfully rather than used as a standalone solution (Sharma et al., 2025).

2.2 AI-Caused disruptions and opportunities in Job-Oriented and Knowledge-Driven Courses

Artificial Intelligence is increasingly reshaping career preparation by influencing how learners select, pursue, and prepare for job-oriented and knowledge-driven courses. Technologies associated with the Fourth Industrial Revolution, including ChatGPT, are transforming learning environments and workplace practices by altering how knowledge is created and applied (Chaka, 2023). AI-powered career guidance systems analyze academic performance and labor market trends to recommend suitable career pathways, thereby supporting informed decision-making (Gedrimiene et al., 2024). Institutional initiatives such as Career Connection Centres (C3) further demonstrate how AI-supported counseling, internships, and experiential learning can align academic curricula with industry expectations (Southworth et al., 2023).

AI literacy has also been linked to the development of essential workplace competencies such as creativity, adaptability, and critical thinking, which are increasingly valued in knowledge-driven economies (Bankins et al., 2024). However, in the Indian context, career preparedness is shaped not only by technological exposure but also by motivational support, institutional guidance, and socio-economic conditions. Sharma (2024) emphasizes that structured direction and sustained motivation are crucial for effective professional development. At the same time, unequal access to digital infrastructure and AI resources exacerbates rural–urban and socio-economic disparities. Gendered caregiving responsibilities and work–life pressures further affect career planning and skill development, particularly among women (Pareek, 2024). These realities suggest that while AI offers substantial opportunities for employability

and career alignment, its benefits depend on equitable access, institutional support, and inclusive policy frameworks.

2.3 AI and ChatGPT Impact on the Administration of Education and Employment

AI technologies such as Machine Learning, Deep Learning, and Natural Language Processing are increasingly transforming administrative processes in both education and employment sectors. ChatGPT and related NLP-based applications automate communication, documentation, recruitment screening, and decision-support systems, thereby enhancing operational efficiency (George et al., 2023). In educational institutions, AI supports curriculum planning, student services, and administrative communication through timely and personalized responses. In employment contexts, AI streamlines hiring, performance evaluation, and organizational workflows, reducing human error and improving productivity (Bogoslov et al., 2024). However, these efficiencies raise concerns related to job displacement, algorithmic bias, lack of transparency, and accountability in automated decision-making (Challoumis, 2024). Indian workplaces face additional challenges associated with data privacy, surveillance, and uneven AI implementation across sectors. While emerging evidence suggests that AI reshapes skill requirements rather than simply cutting jobs, heightening demand for digital literacy, adaptability, and higher-order cognitive skills (Babashahi et al., 2024), AI-driven monitoring systems may increase psychological stress if implemented without ethical safeguards and human oversight (Sharma et al., 2025). These concerns highlight the need for transparent governance, ethical regulation, and human-centered organizational cultures.

2.4 Constructivist Learning Theory and AI Integration

Constructivist Learning Theory, rooted in the work of Piaget and Vygotsky, emphasizes active knowledge construction through experience, interaction, and reflection. This theoretical perspective aligns closely with AI-supported learning environments, where learners engage in inquiry-based exploration, receive immediate feedback, and progress at individualized paces (McLeod, 2024). AI tools such as chatbots and adaptive platforms support constructivist principles by facilitating self-directed and collaborative learning. However, self-regulated learning in digital environments is cognitively demanding, and learners often struggle with planning, monitoring, and reflection without adequate scaffolding (Banihashem et al., 2022).

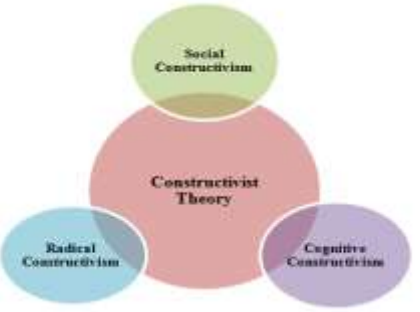

Figure 1: Constructivist learning theory (Source: Self-developed)

Indian scholarship further highlights the importance of motivation, structured support, and psychosocial environments in achieving meaningful learning outcomes. Sharma (2024) emphasizes organized instructional support, while Abbas and Iftikhar (2025) demonstrate that supportive psychosocial conditions significantly influence learner engagement. From a workforce perspective, constructivist principles also inform skill development, as reflective and experiential learning enhances employability-related competencies. Almulla (2023) underscores the value of 21st-century skills: critical thinking, collaboration, and adaptability, which can be strengthened through AI-supported platforms when integrated with reflective pedagogical practices. Overall, the literature suggests that AI aligns with constructivist principles only when deployed as a facilitative tool rather than a substitute for human instruction, providing a theoretical lens for interpreting the findings of the present study.

3. Methodology

3.1 Research Design and Approach

This study adopted a quantitative, explanatory research design guided by a positivist research philosophy and an inductive approach. Positivism was employed to ensure objective measurement and systematic analysis of observable phenomena related to the impact of Artificial Intelligence (AI) on India's education and employment sectors (Al-Ababneh, 2020). The explanatory design was selected to examine relationships between AI usage, learning experiences, administrative efficiency, and employment outcomes. An inductive approach was used to derive conclusions from empirical data collected through a structured survey. This methodological combination enabled the study to generate evidence-based insights into how ChatGPT and AI technologies influence learning systems, skill development, and workforce preparedness in the Indian context. The quantitative framework ensured rigor, reliability, and replicability of findings.

3.2 Sample and Sampling Technique

The study surveyed 150 participants drawn from India's education and employment sectors, including schoolteachers, professors, students, parents, and government employees. Online voluntary (convenience) sampling was employed, as participants were recruited through digital platforms rather than from a predefined sampling frame. The survey link was disseminated via professional networks, institutional contacts, and social media platforms commonly used by educators and public-sector employees. Although probability sampling was initially considered, the absence of a comprehensive national sampling frame and the geographically dispersed population necessitated the use of a non-probability approach. The limitations associated with convenience sampling, particularly the potential for self-selection bias and restricted generalizability—are acknowledged. Nevertheless, the diverse professional composition of the sample enabled a balanced assessment of AI's perceived impact across multiple stakeholder groups in India's education and employment systems.

3.3 Data Collection Method

Primary data were collected through an online survey administered using Google Forms. Primary data were chosen to obtain original, context-specific insights directly aligned with the research objectives (Karunarathna et al., 2024). The survey was administered over a four-week period (January, 2025). Participants were invited through email invitations, institutional WhatsApp groups, and professional social media networks. Before accessing the questionnaire, respondents were provided with an informed consent statement outlining the purpose of the study, voluntary participation, confidentiality, and data usage. Only respondents who consented were able to proceed. A total of 150 complete responses were received and included in the analysis.

3.4 Research Instrument

A structured questionnaire was used as the research instrument. Questionnaires are effective tools for systematically collecting standardized information from large and diverse populations (Sharma, 2022). The instrument consisted of three demographic items (gender, age, and occupational status) and seventeen closed-ended statements aligned with the study objectives. All statements were measured using a five-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5).

The questionnaire covered five key dimensions: AI-enabled learning experiences; Skill development and career readiness; Administrative efficiency; Ethical and regulatory concerns; and Digital equity and job displacement. To ensure content validity, the instrument was reviewed by subject experts in education and educational technology for clarity, relevance, and alignment with the research objectives. A pilot test was conducted with a small group of respondents ($n \approx 20$), leading to minor wording refinements for improved clarity.

3.5 Data Analysis Procedure

Quantitative data analysis was conducted using IBM SPSS software. Quantitative analysis involves the statistical examination of numerical data to identify patterns, relationships, and trends (Rahman &Muktadir, 2021). The following statistical techniques were applied: Descriptive statistics (mean and standard deviation); Reliability analysis (Cronbach's Alpha); Regression analysis to assess predictive relationships; One-sample t-tests (with a neutral test value); and Frequency analysis. These techniques enabled the study to evaluate respondents' perceptions of AI's impact on education and employment and to assess the strength and significance of relationships among key variables.

3.6 Reliability of the Instrument

The internal consistency of the questionnaire was assessed using Cronbach's Alpha. The reliability analysis yielded a coefficient of 0.913 across the 17 items, indicating excellent internal consistency. This confirms that the instrument reliably measured perceptions related to AI's influence on learning systems and employment outcomes.

3.7 Ethical Considerations

Ethical principles were strictly followed throughout the research process. Participation was voluntary, and respondents could withdraw at any stage without penalty. No personal identifiers were collected, and confidentiality was maintained. All data were used solely for academic purposes, and respondents were informed about the study's objectives and data usage prior to participation.

4. Results

4.1 Reliability of the Instrument

Table 1: Reliability Statistics

Cronbach's Alpha	N of Items
.913	17

The reliability analysis yielded a Cronbach's Alpha value of 0.913, indicating excellent internal consistency among the 17 questionnaire items. This confirms that the instrument reliably measured participants' perceptions of AI's impact on education and employment. The high reliability strengthens the credibility of the subsequent statistical analyses and supports the use of the collected data for empirical interpretation.

4.2 Demographic statistics (Frequency Analysis)

Table 2: Gender Demographics

	Frequency	Percent	Valid Percent	Cumulative Percent
Female	54	36.0	36.0	36.0
Male	96	64.0	64.0	100.0
Total	150	100.0	100.0	

The sample was male dominated (64%), with females representing 36% of respondents. This reflects existing trends in digital and technological engagement in India, where males often have greater access to and involvement with emerging technologies. However, the inclusion of both genders ensures a reasonably balanced representation of perspectives on AI adoption in education and employment.

Table 3 Age Demographics

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Below 18 years old	5	3.3	3.3	3.3
18-25 years old	33	22.0	22.0	25.3
26-35 years old	75	50.0	50.0	75.3
36-50 years old	31	20.7	20.7	96.0
50 years above	6	4.0	4.0	100.0
Total	150	100.0	100.0	

The majority of respondents (50%) were aged 26-35 years, followed by the 18-25 age group (22%). This indicates that AI usage is most prevalent among younger and middle-aged individuals. The low representation of respondents above 50 years (4%) suggests that older populations may face greater technological adaptation barriers, limiting their engagement with AI-driven learning and employment tools.

Table 4 Current Status Demographics

	Frequency	Percent	Valid Percent	Cumulative Percent
Student	15	10.0	10.0	10.0
School teacher	72	48.0	48.0	58.0
Government Employee	46	30.7	30.7	88.7
Employee	17	11.3	11.3	100.0
Total	150	100.0	100.0	

Most respondents were schoolteachers (48%) and government employees (30.7%), indicating that AI's impact is particularly visible in formal education and public administration. The smaller proportion of students (10%) suggests that AI-driven learning tools may still be in the early stages of adoption among learners, or that institutional implementation remains uneven.

4.3 Descriptive Statistics

The descriptive statistics reveal strong agreement with most AI-related statements, with mean scores ranging from 3.81 to 4.17 on a five-point Likert scale. This shows a generally positive perception of AI's influence on education and employment in India. The highest mean score (4.17) was recorded for:

"The use of AI-powered tools in education reduces the need for human instructors"
"Administrative activities are becoming more streamlined using AI technology in education and employment."

These findings suggest that respondents strongly perceive AI as enhancing instructional automation and administrative efficiency. However, the moderate standard deviations (1.149 and 1.186) indicate some disagreement, reflecting concerns about overreliance on AI and the possible replacement of human roles. The lowest mean score (3.81) was for:

> *"AI-enabled tools are capable of boosting a personalised and automated learning and employment experience for Indians."*

This relatively lower score suggests skepticism about AI's ability to deliver fully personalized experiences, possibly due to unequal access, digital literacy gaps, or limited exposure to advanced AI tools. Therefore, the results prove that AI is widely viewed as beneficial for improving productivity, teaching efficiency, career guidance, and administrative processes, while concerns about personalization and human replacement remain.

Table 5 Descriptive Statistics

Descriptive Statistics		
	Mean	**Std. Deviation**
"AI-enabled tools are capable of boosting a personalised and automated learning and employment experience for Indians".	3.81	1.115
"AI tools like ChatGPT are capable of driving more focused and personalised means for driving education and learning experiences".	4.05	1.252
"ChatGPT can improve productivity and efficiency so that teachers can develop better course content and track student progress more efficiently".	3.99	1.308
"AI tools can automate certain employment and job placement functions against traditional employment opportunities and activities".	4.11	1.232
"AI-powered tools provide better career guidance and skill development opportunities compared to traditional methods".	4.07	1.246
"AI-powered learning tools enhance students' understanding and engagement in academic subjects".	4.11	1.213
"The use of AI-powered tools in education reduces the need for human instructors".	4.17	1.149
"AI tools are being used for shortening employment procedures for a faster lower bias and error in decision-making".	4.01	1.282
"Chatbots and AI algorithms give the opportunity for immersive education, skill development and employment opportunities in India".	3.96	1.295
"Personalisation and automation are some of the things that are influenced by AI integration in the learning and employment systems in India".	4.10	1.225
"AI integration in educational institutions has improved the effectiveness of teaching methodologies".	4.04	1.269
"AI integration in the workplace has increased efficiency but it also led to job displacement".	4.07	1.188
"Streamlining tedious and thorough processes such as curriculum development, employment and training development is a productive impact of AI".	4.14	1.204
"AI integration in the education system should be regulated to balance human and machine-led learning".	4.14	1.165
"Administrative activities are becoming more streamlined using AI technology in education and employment".	4.17	1.186

"The growing use of AI in various industries requires employees to constantly upgrade their skills".	4.11	1.232
"AI technology holds a revolutionising impact on both fronts of education and employment".	3.97	1.250
Valid N (listwise)	150	

4.4 Regression

Table 6 Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.651	.423	.354	.896
a. Predictors: (Constant), AI technology holds a revolutionising impact on both fronts of education and employment.				

The regression results indicate a moderate to strong positive relationship between AI integration and perceived effectiveness in learning and employment systems (R = 0.651). The R^2 value of 0.423 shows that 42.3% of the variance in perceived AI effectiveness is explained by the set of AI-related predictors, while the remaining 57.7% may be influenced by factors such as infrastructure, policy frameworks, and digital literacy levels. This suggests that AI plays a significant role in shaping learning and employment outcomes, but its impact is not isolated from broader systemic conditions.

Table 7 ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	78.511	16	4.907	6.106	.000b
Residual	106.882	133	.804		
Total	185.393	149			
a. Dependent Variable: AI-enabled tools are capable of boosting a personalised and automated learning and employment experience for Indians. b. Predictors: (Constant), AI technology holds a revolutionising impact on both fronts of education and employment.					

The ANOVA results confirm that the regression model is statistically significant ($F = 6.106$, $p < .001$). This shows that the predictor variables meaningfully explain variations in the dependent variable. All predictor variables contributed significantly to the model, with no multicollinearity issues detected (VIF < 5). These findings confirm that AI's impact on education and employment is multidimensional rather than driven by a single factor.

4.5 One-Sample T-Test

To ensure statistical appropriateness for Likert-scale data, the one-sample t-tests were reinterpreted using a neutral test value of 3, representing a “Neither Agree nor Disagree” position, instead of zero.

One-Sample Test
Test Value = 0

	t	df	Sig. (2-tailed	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
AI-enabled tools are capable of boosting a personalised and automated learning and employment experience for Indians	41.796	149	.000	3.807	3.63	3.99
AI tools like ChatGPT are capable of driving more focused and personalised means for driving education and learning experiences	39.650	149	.000	4.053	3.85	4.26
ChatGPT can improve productivity and efficiency so that teachers can develop better course content and track student progress more efficiently	37.386	149	.000	3.993	3.78	4.20
AI tools can automate certain employment and job placement functions against traditional employment opportunities and activities	40.812	149	.000	4.107	3.91	4.31
AI-powered tools provide better career guidance and skill development opportunities compared to traditional methods	39.972	149	.000	4.067	3.87	4.27
AI-powered learning tools enhance students' understanding and engagement in academic subjects	41.547	149	.000	4.113	3.92	4.31
The use of AI-powered tools in education reduces the need for human instructors	44.400	149	.000	4.167	3.98	4.35
AI tools are being used for shortening employment procedures for a faster lower bias and error in decision-making	38.269	149	.000	4.007	3.80	4.21
Chatbots and AI algorithms give the opportunity for immersive education, skill development and employment opportunities in India	37.460	149	.000	3.960	3.75	4.17
Personalisation and automation are some of the things that are influenced by AI integration in the learning and employment systems in India	41.000	149	.000	4.100	3.90	4.30
AI integration in educational institutions has improved the effectiveness of teaching methodologies	39.006	149	.000	4.040	3.84	4.24
AI integration in the workplace has increased efficiency but it also led to job displacement	42.003	149	.000	4.073	3.88	4.26
Streamlining tedious and thorough processes such as curriculum development, employment and training development is a productive impact of AI	42.107	149	.000	4.140	3.95	4.33
AI integration in the education system should be regulated to balance human and machine-led learning	43.541	149	.000	4.140	3.95	4.33
Administrative activities are becoming more streamlined using AI technology in education and employment	43.106	149	.000	4.173	3.98	4.36
The growing use of AI in various industries requires employees to constantly upgrade their skills	40.812	149	.000	4.107	3.91	4.31

AI technology holds a revolutionising impact on both fronts of education and employment	38.863	149	.000	3.967	3.76	4.17

The one-sample t-test was conducted to examine whether respondents' perceptions of AI's impact on education and employment significantly differed from the neutral midpoint (test value = 3) on a five-point Likert scale. All seventeen items showed statistically significant positive deviations from the neutral midpoint ($p < .001$), indicating that respondents' perceptions significantly exceeded neutral expectations regarding AI's impact. High t-values were observed for key dimensions, including personalized learning and employment experiences ($M = 3.81$, $t = 41.796$), teacher productivity and course design ($M = 3.99$, $t = 37.386$), career guidance and skill development ($M = 4.07$, $t = 39.972$), administrative efficiency ($M = 4.17$, $t = 43.106$), and job displacement concerns ($M = 4.07$, $t = 42.003$). These results confirm that respondents strongly recognize AI's role in enhancing instructional efficiency, improving administrative processes, and supporting career readiness.

The findings further indicate that the research instrument demonstrated excellent reliability (Cronbach's Alpha = 0.913), ensuring consistency in measuring perceptions of AI's impact. AI adoption was most prominent among younger professionals, schoolteachers, and government employees, suggesting higher engagement within formal education and administrative sectors. While respondents strongly agreed that AI improves learning efficiency, administrative processes, and career guidance, comparatively lower, but still positive, mean scores for personalization reflect ongoing challenges related to unequal access, digital literacy, and contextual implementation in India. Overall, both regression and one-sample t-test results confirm the statistically significant influence of AI on learning and employment outcomes, while persistent concerns about job displacement, regulation, and equity underscore the importance of balanced, ethical, and human-centered AI implementation.

5. Discussion

The findings of this study provide robust empirical evidence that ChatGPT and Artificial Intelligence (AI) are reshaping India's education and employment systems, in line with the study's title and stated objectives. The high internal consistency of the instrument (Cronbach's Alpha = 0.913) confirms the reliability of respondents' perceptions, strengthening confidence in the reported results (Bogoslov et al., 2024). The respondents perceived AI as enhancing instructional efficiency, administrative effectiveness, skill development, and employability readiness, while simultaneously expressing concerns related to ethical use, job displacement, and digital inequality.

With respect to *Objective 1*, the results indicate strong agreement that AI tools such as ChatGPT improve teaching efficiency through automation, content support, and real-time feedback. This finding is consistent with Montenegro-Rueda et al. (2023), who report that AI-enabled feedback and adaptive support enhance instructional effectiveness. Although respondents reported a high mean score for reduced

dependence on human instructors, this should not be interpreted as teacher replacement. Rather, as argued by Memarian and Doleck (2023), AI primarily automates routine tasks, which may reduce instructional workload without eliminating the pedagogical role of teachers. Interpreted through Constructivist Learning Theory, meaningful learning continues to depend on interaction, reflection, and guided scaffolding—processes that require human facilitation (McLeod, 2024). Thus, the findings support a complementary model of AI integration, where technology augments rather than substitutes human instruction (Sharma, 2024).

Addressing *Objective 2*, respondents strongly agreed that AI supports skill development and career-oriented decision-making. This aligns with Bankins et al. (2024), who emphasize that AI literacy contributes to the development of creativity, adaptability, and critical thinking—skills essential in knowledge-driven economies. AI-supported career guidance systems were perceived as effective in linking academic performance with labor market trends, facilitating informed career choices (Gedrimiene et al., 2024). However, the comparatively lower mean score for AI-enabled personalization reflects persistent structural constraints. Uneven digital infrastructure, English-centric AI tools, and disparities in AI literacy limit the full realization of personalized learning in India, particularly in rural and disadvantaged contexts (Yu, 2024; Licsandru et al., 2024). Moreover, motivation and psychological readiness remain central to sustained skill development, as emphasized by Sharma (2024) and Sharma et al. (2025).

In relation to *Objective 3*, respondents perceived AI as significantly improving administrative efficiency in education and employment sectors. Automation of recruitment, documentation, and decision-making processes is widely recognized as enhancing institutional productivity and reducing human error (George et al., 2023; Bogoslov et al., 2024). The strong participation of government employees in the sample further suggests that AI is increasingly embedded within India's public administration, supporting institutional transformation (Jaiswal&Arun, 2021). At the same time, high agreement regarding job displacement and regulatory concerns highlights awareness of AI's disruptive potential. These concerns are consistent with Challoumis (2024), who argues that AI simultaneously enhances efficiency and destabilizes traditional employment structures, necessitating reskilling and adaptive workforce strategies (Behera& Nigam, 2025).

From a theoretical standpoint, the findings are strongly aligned with Constructivist Learning Theory, which emphasizes active knowledge construction through experience, interaction, and reflection (McLeod, 2024). AI tools such as ChatGPT facilitate inquiry-based and self-paced learning, supporting learner autonomy. However, empirical research cautions that self-regulated digital learning is cognitively demanding and requires structured guidance (Banihashem et al., 2022). The present findings reinforce this view by demonstrating that AI effectiveness is highest when embedded within supportive pedagogical and psychosocial environments (Abbas &Iftikhar, 2025).

Finally, the moderate standard deviations observed across several items suggest heterogeneous experiences with AI, shaped by access, professional role, and socio-economic context. Gendered

caregiving responsibilities and work–life pressures further influence adaptability to AI-driven environments, particularly for women (Pareek, 2024). These variations highlight the importance of inclusive policies, ethical governance, and continuous upskilling to ensure that AI adoption does not exacerbate existing inequalities (Yu, 2024; Licsandru et al., 2024). In sum, the study confirms that AI is a powerful yet complex driver of change in India's education and employment landscape. When aligned with constructivist pedagogy, ethical safeguards, and inclusive digital policies, AI can enhance human capital development. However, without equitable access, transparent regulation, and sustained capacity-building, its transformative potential risks remaining unevenly distributed.

Conclusion

This paper has discussed the role of ChatGPT and Artificial Intelligence in the learning system and employment situation in India through a quantitative survey method. The results show that AI technologies are generally viewed to improve the efficiency of the teaching process, contribute to the development of such skills, and facilitate the work of the administration. Career guidance and workplace productivity were also seen as the other uses of AI by the respondents, especially among younger professionals, teachers, and government workers. Nevertheless, the findings also indicate significant issues, such as the fear of job loss, ethical management, digital disparity, and the danger of AI-based overdependence. These problems indicate that although AI has the potential of large-scale benefits, the usage of AI should be moderated to make it a responsible and inclusive person. The paper also confirms that AI-based learning is consistent with constructivist principles because it favours self-directed, interactive, and individualized learning processes. However, the results support the idea that AI will be used not instead of human teaching, cooperation, and critical thinking. In general, the findings can be used to advocate a moderated adoption of AI in the education system and the job market in India. To take advantage of AI benefits, policymakers, institutions and employers must focus on digital literacy, ethical management and lifelong upskilling in order to reduce the social and labor risks. Further longitudinal and mixed-method studies are advised because they will help to comprehend the effects of AI on learning and employability, as well as on institutional performance, in the long term.

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Declaration

This manuscript is original work and has not been submitted or published elsewhere in full or in part. The research, analysis, and arguments presented in this article are the author's own. AI tools, if used, were solely for language refinement, grammatical clarity, and formatting assistance. No AI tool was used for generating the core ideas, analysis, interpretations, or findings of the research.

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References

Abbas, M., &Iftikhar, S. (2025). English language teachers' perceptions regarding psychosocial environment: A case study at BS level. *S3R Journal of English Language and Education, 1*(1), 7–13. https://s3rjournal.com/index.php/files/article/view/4/2

Al-Ababneh, M. M. (2020). Linking ontology, epistemology and research methodology. *Science & Philosophy*, *8*(1), 75–91. https://eiris.it/ojs/index.php/scienceandphilosophy/article/viewFile/500/732

Almulla, M. A. (2023). Constructivism learning theory: A paradigm for students' critical thinking, creativity, and problem solving to affect academic performance in higher education. *Cogent Education, 10*(1), 2172929. https://doi.org/10.1080/2331186X.2023.2172929

Babashahi, L., Barbosa, C. E., Lima, Y., Lyra, A., Salazar, H., Argôlo, M., Almeida, M. A. d., & Souza, J. M. d. (2024). AI in the workplace: A systematic review of skill transformation in the industry. *Administrative Sciences, 14*(6), 127. https://doi.org/10.3390/admsci14060127

Banihashem, S. K., Farrokhnia, M., Badali, M., &Noroozi, O. (2022). The impacts of constructivist learning design and learning analytics on students' engagement and self-regulation. *Innovations in Education and Teaching International, 59*(4), 442–452. https://doi.org/10.1080/14703297.2021.1890634

Bankins, S., Jooss, S., Restubog, S. L. D., Marrone, M., Ocampo, A. C., &Shoss, M. (2024). Navigating career stages in the age of artificial intelligence: A systematic interdisciplinary review and agenda for future research. *Journal of Vocational Behavior*, 104011. https://doi.org/10.1016/j.jvb.2024.104011

Behera, M., & Nigam, S. (2025). Automation, artificial intelligence (AI) and labour market in India: Challenges and road ahead. *Indian Journal of Human Development*. https://doi.org/10.1177/09737030251346765

Bhardwaj, R. G., &Bedi, H. S. (2025). ChatGPT as an education and learning tool for engineering, technology and general studies: Performance analysis of ChatGPT 3.0 on CSE, GATE and JEE examinations of India. *Interactive Learning Environments*, *33*(1), 321–334. https://doi.org/10.1080/10494820.2024.2344054

Bogoslov, I. A., Corman, S., &Lungu, A. E. (2024). Perspectives on artificial intelligence adoption for European Union elderly in the context of digital skills development. *Sustainability*, *16*(11), 4579. https://doi.org/10.3390/su16114579

Chaka, C. (2023). Stylised-facts view of fourth industrial revolution technologies impacting digital learning and workplace environments: ChatGPT and critical reflections. *Frontiers in Education*, *8*, 1150499. https://doi.org/10.3389/feduc.2023.1150499

Challoumis, C. (2024). Harnessing AI for economic growth: Strategies for job creation in a tech-driven world. In *XIX International Scientific Conference* (pp. 96–131). London, United Kingdom.

Dhakal, S. P. (2025). Fifth industrial revolution and the future of education and employment. *Qualitative & Quantitative*. https://doi.org/10.1007/s11135-025-02345-x

Gedrimiene, E., Celik, I., Kaasila, A., Mäkitalo, K., &Muukkonen, H. (2024). Artificial intelligence (AI)-enhanced learning analytics for supporting career decisions: Advantages and challenges from user perspective. *Education and Information Technologies*, *29*(1), 297–322. https://doi.org/10.1007/s10639-023-12277-4

George, A. S., George, A. H., & Martin, A. G. (2023). ChatGPT and the future of work: A comprehensive analysis of AI's impact on jobs and employment. *Partners Universal International Innovation Journal*, *1*(3), 154–186. https://doi.org/10.5281/zenodo.8076921

Jaiswal, A., &Arun, C. J. (2021). Potential of artificial intelligence for transformation of the education system in India. *International Journal of Education and Development Using Information and Communication Technology*, *17*(1), 142–158. https://files.eric.ed.gov/fulltext/EJ1285526.pdf

Karunarathna, I., Gunasena, P., Hapuarachchi, T., &Gunathilake, S. (2024). The crucial role of data collection in research: Techniques, challenges, and best practices. *Uva Clinical Research*, *10*, 95–111. https://www.scribd.com/document/803783341

Licsandru, T., Meliou, E., Steccolini, I., & Chang, S. (2024). Citizens' inclusion in public services: A systematic review of the public administration literature and reflection on future research avenues. *Public Administration*. https://doi.org/10.1111/padm.13049

McLeod, S. (2024). *Constructivism learning theory & philosophy of education*. Simply Psychology. https://www.simplypsychology.org/constructivism.html

Memarian, B., &Doleck, T. (2023). ChatGPT in education: Methods, potentials, and limitations. *Computers in Human Behavior: Artificial Humans*, *1*(2), 100022. https://doi.org/10.1016/j.chbah.2023.100022

Montenegro-Rueda, M., Fernández-Cerero, J., Fernández-Batanero, J. M., &López-Meneses, E. (2023).

Impact of the implementation of ChatGPT in education: A systematic review. *Computers, 12*(8), 153. https://doi.org/10.3390/computers12080153

Noor, S., Tajik, O., &Golzar, J. (2022). Simple random sampling. *International Journal of Education & Language Studies, 1*(2), 78–82. https://www.researchgate.net/publication/366390022

Pandey, A., &Dhand, S. (2024). The future consequences of artificial intelligence in context to employability in resilient industry. In N. Kumar, K. Sood, E. Özen, & S. Grima (Eds.), *The framework for resilient industry: A holistic approach for developing economies* (Chap. 12). Emerald Publishing. https://doi.org/10.1108/978-1-83753-734-120241012

Pareek, R. (2024). Work-life balance in India: Perspectives and challenges for women. *S3R Academia, 1*(1), 41–50. https://doi.org/10.70682/s3r.2024.05

Rahman, A., &Muktadir, M. G. (2021). SPSS: An imperative quantitative data analysis tool for social science research. *International Journal of Research and Innovation in Social Science, 5*(10), 300–302. https://www.rsisinternational.org

Shahzad, T., Mazhar, T., Tariq, M. U., Ahmad, W., Ouahada, K., &Hamam, H. (2025). A comprehensive review of large language models: Issues and solutions in learning environments. *Discover Sustainability, 6*(1), 27. https://doi.org/10.1007/s43621-025-00815-8

Sharma, D. N. K. (2022). Instruments used in the collection of data in research. *SSRN*. https://ssrn.com/abstract=4138751

Sharma, S., &Yadav, R. (2022). ChatGPT–A technological remedy or challenge for education system. *Global Journal of Enterprise Information System, 14*(4), 46–51. https://www.gjeis.com

Sharma, V. (2024). Understanding the dynamics of motivation: Exploring key influencers. *S3R Academia, 1*(1), 13–24. https://doi.org/10.70682/s3r.2024.02

Sharma, V. K., Holbah, W. A., &Hamdi, S. (2025). The linguistic and psychological dimensions of study habits and test anxiety in EFL/ESL education. *Forum for Linguistic Studies, 7*(5), 1–15. https://doi.org/10.30564/fls.v7i5.9096

Southworth, J., Migliaccio, K., Glover, J., Glover, J. N., Reed, D., McCarty, C., Brendemuhl, J., & Thomas, A. (2023). Developing a model for AI across the curriculum: Transforming the higher education landscape via innovation in AI literacy. *Computers and Education: Artificial Intelligence, 4*, 100127. https://doi.org/10.1016/j.caeai.2023.100127

Topno, P., & Sarkar, P. (2024). Impact of home environment and school climate on academic performance. *S3R Academia, 1*(1), 1–12. https://doi.org/10.70682/s3r.2024.01

Xiao, Y., &Zheng, L. (2025). Can ChatGPT boost students' employment confidence? A pioneering booster for career readiness. *Behavioral Sciences, 15*(3). https://doi.org/10.3390/bs15030362

Yu, H. (2024). The application and challenges of ChatGPT in educational transformation: New demands for teachers' roles. *Heliyon*, *10*(2), e24790. https://www.researchgate.net/publication/377249383