Exploring Students' Perspectives on AI-Based Recruitment Processes: Challenges and Job Readiness

by

Kiruthika Krishnasamy

MBA, The ICFAI University, 2009

A Report Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Business Administration

in the Graduate Academic Unit of Management

Supervisor(s): Dhirendra Shukla, Ph.D., J Herbert Smith Centre for Technology

Management and Entrepreneurship

Sushil S. Chaurasia, Ph.D., J Herbert Smith Centre for Technology

Management and Entrepreneurship

Examining Board: Akhila Chawla, Ph.D., Faculty of Management

Dinesh Gajurel, Ph.D., Faculty of Management, Chair

This report is accepted by the Dean of Graduate Studies

THE UNIVERSITY OF NEW BRUNSWICK

March 2024

© Kiruthika Krishnasamy, 2024

Abstract

In today's job market, the increasing use of artificial intelligence (AI) in recruitment processes poses challenges for students. This project report examines students' concerns and challenges regarding artificial intelligence in recruitment processes. Students fear AI's impact on critical thinking and creativity, uncertainty about selection criteria, and the lack of human interaction. To address these issues, the study systematically collected and analyzed data from STEM and Non-STEM students, aiming to construct a theory grounded in empirical evidence. Findings underscore the importance of addressing students' anxiety, promoting continuous learning, and enhancing transparency in AI systems to foster a more equitable recruitment environment. These insights offer valuable guidance for organizations and educational institutions seeking to adapt to the evolving dynamics of AI-driven recruitment processes.

Dedication

I am highly grateful and extend my heartfelt appreciation to my dedicated supervisor, Dr. Dhirendra Shukla, whose unwavering guidance and support, belief in my capabilities have been instrumental throughout the entirety of this project report. I would also like to thank my Co-supervisor, Dr. Sushil S. Chaurasia whose expertise and encouragement have enriched my research skills, and his insightful comments have significantly contributed to the completion of this report.

A sincere acknowledgment goes out to all the student participants who generously shared their experiences and insights, forming the foundation of this research. Your contributions have been invaluable, and this project would not have been possible without your time and willingness to participate. I also thank Angeline Ng for her continuous support throughout the program.

I am profoundly grateful to my family and friends for their enduring encouragement and unwavering support. A special mention goes to my spouse, Prabhakar, for being my constant cheerleader, motivator, best friend, and pillar of strength. Additionally, a heartfelt thanks to my wonderful kid, Krishna, whose cooperation and exemplary behavior have been my constant source of energy and motivation. Your positive influence and unwavering support have added a special brightness to my journey, and I am grateful for the joy and inspiration you bring to my life.

Acknowledgements

I wish to express my deepest gratitude to the Faculty of Management for their invaluable guidance throughout the MBA program. My sincere thanks to all the individuals who graciously participated in surveys for this report, generously sharing their insights and knowledge. I am also grateful to my classmates for fostering a supportive network of encouragement, and to the dedicated professors whose influence has inspired me to work diligently and succeed in this program. Your collective contributions have enriched my academic journey, and I am truly appreciative of the collaborative environment that has shaped my learning experience.

Table of Contents

Abstract	ii
Dedication	iii
Acknowledgements	iv
Table of Contents	v
List of Tables	vii
List of Figures	viii
List of Abbreviations	ix
1.Introduction	1
1.1 Research Objective	4
1.2 Research Question	4
1.3 Limitations of the study	5
2.Literature Review	6
2.1 Technology and AI Adoption:	6
2.2 Human Resources Management and recruitment process:	8
2.3 AI in Recruitment Process	10
2.4 Student's perspective of AI adoption in recruitment	12
3.Research Methodology	17
3.1 Research Design:	17
3.2 Questionnaire development:	18
3.3 Data Collection:	18
3.4 Data Analysis:	19
4.Findings.	23
4.1 Student's Anxiety: AI driven recruitment process	23
4.2 Students' job readiness	26
4.3 Students' Technology readiness challenge	28
4.4 Ethical Considerations in AI - Student's Perspective	31
5.Discussions	36
6.Implications	40
6.1 Theoretical Implications	40
6.2 Applied Implications	41
7 Conclusion	44

8.Future Research	45
Bibliography	47
Appendices	53
Appendix A: Grounded Theory Gioia Methodology	53
Appendix B: Questionnaire	54
Curriculum Vitae	

List of Tables

Table 1: AI tools used in recruitment process (a report by Index.dev Ltd.)	. 12
Table 2: Structure of the data	. 21

List of Figures

Figure 1: The-Gioia-methodology-from-Gioia-et-al-2013	18
Figure 2: Interconnected Dynamics of Students' Perspectives on AI Recruitment	35

List of Abbreviations

AI – Artificial Intelligence

IT – Information technology

ML – Machine Learning

HR – Human Resources

HRM – Human Resources Management

ATS – Applicant Tracking Systems

NLP – Natural Language Processing

SBTC – Skill-Biased Technical Change

STEM – Science, Technology, Engineering, and Mathematics

MBA – Master of Business Administration

UNB – University of New Brunswick

1.Introduction

Artificial intelligence (AI) is becoming more and more popular and is being employed in enterprises all around the world. A significant amount of capital has recently been invested on AI. Businesses are investigating and implementing best practices for leveraging AI to accomplish their objectives. It might therefore completely alter how individuals develop, conduct, and organize business, influencing every sector of the economy (Lee et al., 2022).

Artificial intelligence (AI) has a transformative effect not just on intelligent prediction and decision making, but also on increased automation. While greater automation has played a significant role in the advancement of technology since the industrial revolution (Erik et al., 2014). More automation than ever before is promised by AI and machine learning (ML) approaches. Automation can result in reduced expenses and quicker project completion times. It can also free up human labor for tasks that are not as well suited for automation. The work put into automation can also be used to find project bottlenecks, which lower productivity and create friction (Dasgupta et al., 2022).

According to several researchers (Hmoud, 2021; Boustani, 2021; Aslran et al., 2021), the rapid advancements in Artificial Intelligence (AI) are unfolding daily, significantly influencing, and streamlining the operational routines of organizations. The pervasive impact of AI and algorithmic decision-making extends across critical sectors such as business, government, education, justice, and healthcare, introducing applications with inherent high-risk implications (Kaur et al., 2022). This underscores the imperative to conduct a thorough examination of the benefits and drawbacks associated with the adoption

of AI and to contemplate the far-reaching consequences of these emergent technologies on the future landscape of the labor market.

In the dynamic landscape of business, digital transformations are at the forefront, reshaping economic models and expanding market horizons. The use of technology, like information technology, in recruitment is a great example. It speeds up hiring and helps reach more potential candidates, making recruitment more efficient and competitive (Ahmed et al., 2023).

More and more companies are using artificial intelligence (AI) in recruitment. They use AI for things like posting jobs, screening resumes, assessing candidates, and welcoming new hires (Budhwar et al., 2022). AI brings advantages like making things faster, reducing unfairness, giving candidates better experiences, and getting better results when hiring. But, there are worries, like bias in the algorithms and ethical issues, that need careful thinking. AI is described as "making a machine behave in ways that would be called intelligent if a human were so behaving" (McCarthy et al., 1955). Even though artificial intelligence was first established in 1955, the global technological revolution has recently brought AI more attention.

According to Dwivedi et al. (2019), artificial intelligence (AI) is defined as non-human intelligence created to carry out specific tasks. Artificial intelligence (AI) has become increasingly important for human resource management. Leong (2018) observed AI's potential in the near future, while others have already noticed its impact on recruitment. Understanding the perspective of students on the adoption of AI-based recruitment processes is crucial for several reasons. Students are the future workforce and will be directly impacted by these technological changes when they enter the job market.

By researching their perspective, we can gain insights into their concerns, expectations, and readiness for AI-driven recruitment. This understanding can help organizations and educational institutions tailor their strategies and prepare students effectively for the evolving landscape of recruitment processes.

As a result, ongoing structural transformations are envisaged concerning employment dynamics, the relevance and susceptibility of qualifications to either partial or complete replacement, and within organizational sectors. These transformative shifts are anticipated to permeate through the realm of Human Resources (HR), necessitating agile adaptations in roles and professions to effectively navigate and manage the intricate implications of AI integration (Bondarouk and Brewster, 2016). By considering students' perspectives, we gain insights that help adapt AI integration strategies to better align with their needs and expectations. This student-centered approach ensures that AI adoption enhances rather than hinders the recruitment process, promoting a workforce environment that values inclusivity, transparency, and innovation.

In this project report, we thoroughly examine how Artificial Intelligence (AI) is used in Human Resources (HR) recruitment processes, focusing especially on students' perspectives. Our focus is to understand how students perceive the role of AI in the recruitment landscape, their awareness of its usage, and the concerns and benefits they associate with this transformative technology. Ultimately, studying the student perspective empowers stakeholders to make informed decisions that benefit both employers and job seekers in the digital age.

1.1 Research Objective

The primary objective of this study is to comprehensively explore and understand the multifaceted aspects of students' experiences and perspectives in the context of AI integration in recruitment processes.

1.2 Research Question

To fulfill the aim of this project report, the following research questions have been examined:

How do students perceive and navigate the integration of Artificial Intelligence (AI)
 in recruitment processes?

The main question is broken down into four smaller, more specific questions to make it clearer and more detailed.

- What emotional and cognitive dimensions contribute to students' anxiety about AI
 adoption in HR, with a specific focus on critical thinking skills and decision-making
 processes?
- To what extent do students believe that AI influences their preparedness as jobready candidates in the evolving job market, and how does a continuous learning mindset play a role in shaping this perception?
- What is the level of confidence among students in utilizing and understanding technology, especially in the application of AI-driven processes within the HR domain?

 How do students weigh ethical considerations in AI adoption for recruitment processes, specifically addressing bias and inclusion, transparency in AI systems and algorithms, and the importance of AI systems being reliable and accurate?

1.3 Limitations of the study

Limitations of this study include the potential for response bias as participants might provide socially desirable responses. The generalizability of findings may be constrained, given the focus on a specific demographic, such as students. Additionally, the rapidly evolving nature of technology introduces the possibility of changes in perceptions between data collection and analysis. The reliance on self-reported data may introduce recall bias. Ethical considerations, including the sensitivity of topics related to AI, may affect participant openness. Despite these limitations, the study aims to offer valuable insights into students' perspectives on AI in recruitment processes.

2.Literature Review

In this section, the literature review serves a dual purpose, functioning both as a means to grasp essential background knowledge and as a framework of the data collection. The primary aim is to comprehensively comprehend the research subject and extract insights from prior research findings. The literature was systematically identified through keyword searches on the University of New Brunswick library Scopus search and Google Scholar, utilizing terms such as "Technology adoption," "human resource," "human resource management," "recruitment," "recruitment process," "artificial intelligence," and "artificial intelligence in recruitment." The literature encompassed peer-reviewed articles, studies authored by field experts and researchers, and select popular science articles. It forms a robust basis for synthesizing existing knowledge and guiding the empirical investigation.

The presentation of the literature is separated into four parts: Technology and AI adoption, Human Resources Management and recruitment process, AI adoption in recruitment, student's perspective of AI adoption in recruitment.

2.1 Technology and AI Adoption:

In contemporary times, information technology (IT) is universally acknowledged as a pivotal instrument for augmenting a country's economic competitiveness. The prevailing consensus recognizes the substantial impact of IT on the operational efficiency of firms. The full realization of these effects hinges upon the widespread and effective utilization of IT. Consequently, it becomes imperative to comprehend the factors

influencing IT adoption and delve into the theoretical models that have emerged to address the intricate dynamics of IT adoption.

Bresnahan (2002) view information technology (IT) as a vital part of a network of connected innovations, which also involves changes within organizations and the creation of new products. This amalgamation collectively represents the Skill-Biased Technical Change (SBTC), necessitating a workforce with enhanced skills. By analyzing data from various companies, their study demonstrates how skilled labor is supported by three key changes within firms: the adoption of information technology, the restructuring of work processes, introduction of services. and the new products and Brynjolfsson et al. (2002) find strong connections between different organizational methods and information technology (IT), showing that their combination produces positive outcomes. Similarly, Bartel et al. (2007), in their study of the valve manufacturing sector, discover that adopting new manufacturing technology leads to increased skill demands and changes in human resources approaches.

Artificial Intelligence (AI) can be understood as a system capable of analyzing and learning from extensive datasets to achieve specific objectives by adjusting to its situations (Kaplan and Haenlein, 2019). It finds applicability in any scenario where intellectual tasks are to be carried out, establishing it as a universally applicable field (Russel and Norvig, 2010). Cross-enterprise AI, a relevant technology paradigm for organizational adoption, connects different departments within a company and enhances processes that span across functions to gain valuable insights (Dasgupta et al., 2022). Industries such as Consumer Packaged Goods (CPG), retail, and media are facing significant challenges due to the influence of major technology companies and primary adopters. On the other hand, in

industries with unique dynamics, it can be beneficial to adopt a strategy of observation and patience. However, the competition, particularly in the implementation of Artificial Intelligence (AI), can be costly for those who delay.

Surveys by McKinsey & Co. (2022) suggest a rising competitive intensity in AI adoption. Businesses in retail, transportation, financial services, and manufacturing who embrace AI early foresee a 20 percent increase in profit growth, with half of the gains coming from outperforming competitors. McKinsey stresses that postponing AI adoption may lead to reduced revenue and profit advantages, highlighting the importance of taking proactive steps. They recommend rejecting a wait-and-see strategy and instead advocate for swift and comprehensive implementation to seize the potential \$1 trillion shift in profits from companies slower to embrace these changes.

Machine Learning:

Machine Learning (ML) is a subset of artificial intelligence that involves algorithms improving themselves based on past experiences and data. A practical application of machine learning is Natural Language Processing (NLP), which involves AI systems comprehending and analyzing human language. Machine learning is divided into three main types depending on the kind of feedback utilized: supervised learning, unsupervised learning, and reinforcement learning (Russel and Norvig, 2010).

2.2 Human Resources Management and recruitment process:

Human Resource Management (HRM) is a managerial function concentrated on the recruitment, motivation, and retention of an organization's workforce. It's described as a distinct method of workforce management focused on leveraging a highly dedicated and skilled workforce using cultural, structural, and personnel strategies to achieve a competitive advantage (Crawshaw et al., 2014, pp. 7).

The recruitment process pertains to the strategies employed by an organization in the hiring and selection of individuals for various positions (Lindmark and Önnevik, 2011). It is described as a process of creating a pool of qualified candidates for the vacancies within the organization" (Stoilkovska et al., 2015). The different stages of recruitment process as mentioned below:

Job Analysis

The recruitment process typically starts with job analysis, influenced by internal and external factors that affect workforce planning (Bratton and Gold, 2012). Internal factors may include a high rate of employee absenteeism, product development, and the introduction of new services. External factors encompass increased demand for products and services, changes in laws or regulations, and advancements in technology.

Workforce Planning

Through employing diverse research methodologies, the organization identifies the necessary knowledge, skills, abilities, and other characteristics and competences needed to fulfill those requirements (Bratton and Gold, 2012).

Recruitment

If the organization determines that recruitment is necessary, the initial phase involves establishing selection criteria. These criteria are derived from defining the responsibilities of a job role and identifying the qualities that would contribute to an effective worker in that role (Bratton and Gold, 2012).

Applicant pool

Information about individuals applying for the job vacancy is gathered using chosen tools, forming what is referred to as an applicant pool comprising potential candidates (Bratton and Gold, 2012).

Selection

Once the applicant pool is established, the selection phase of the process commences. This typically initiates with a screening of the applications, utilizing the chosen criteria and assessment techniques determined in the earlier stages of the recruitment process (Bratton and Gold, 2012).

Job Performance

The recruitment process doesn't conclude with the selection of a candidate for hiring. The final step is "Job Performance," involving performance monitoring and career development. Evaluating the success of the recruitment requires ongoing follow-up with the candidate in the future. It's essential to note that this aspect of the recruitment process is beyond the scope of this thesis (Bratton and Gold, 2012).

2.3 AI in Recruitment Process

As the use of AI tools becomes increasingly common, organizations face growing pressure to incorporate AI into their recruitment strategies. HRM managers and organizations not leveraging AI risk becoming outdated (Hmoud & Laszlo, 2019). According to Okolie and Irabor (2017), HRM specialists in organizations that use AI in recruitment report benefits such as reduced costs, increased applicant numbers, improved candidate matching, simplified application processes, and a broader range of job

opportunities for candidates, resulting in a higher response rate and better feedback. In the long term, AI has the potential not only to reshape organizations internally but also to influence the entire recruitment industry, impacting revenue, profitability, and talent acquisition (Savola and Troque, 2019).

AI tools used in recruitment:

One prevalent AI application in recruitment is pre-screening CVs through Applicant Tracking Systems (ATS), which assess keywords to match candidates with suitable job openings. Additionally, AI-powered chatbots, utilizing natural language processing (NLP), are gaining popularity. These chatbots engage with candidates in real-time through various communication channels like text messages, email, and social media (Upadhyay & Khandelwal, 2018). Video chat analysis is another emerging AI tool in recruitment, capable of analyzing candidates' features such as age, tone of voice, mood, and more (Fernández & Fernández, 2019). With the abundance of social media data, AI is also used to scan social platforms for candidate information, aiding in finding suitable candidates and assessing their social values and attitudes (Upadhyay and Khandelwal, 2018).

Table 1: AI tools used in recruitment process (a report by Index.dev Ltd.)

Category	AI Tools
Recruitment	agora pulse, ZOHO, freshworks, GoHire, breezy,
Marketing	CAREERBUILDER, TalentLyft
Sourcing	CAREERBUILDER, Hiring Solved, MONSTER, LinkedIn,
	hiretual, pipl, ZOHO, indeed
Screening	HackerRank, CRITERIA, berke, interview mocha, pymetrics,
	ClassMarker, verveo
Interviewing	HireVue, SONRU, SPARK HIRE, shine, convey by cazar, Jazz
	HR, GoHire, yello
Onboarding	freshworks, Namely, webonboarding, eloomi, bamboohr, ZOHO

2.4 Student's perspective of AI adoption in recruitment

Students' Anxiety - AI in Recruitment:

Artificial intelligence (AI) has become an increasingly popular tool for recruitment and selection processes. However, students have expressed worries about the utilization of AI in recruitment processes. Van Esch et al. (2019) demonstrated that job applicants' perspectives on artificial intelligence affect the hiring process. The study also discovered that an applicant's anxiety levels regarding the use of AI and their sentiments toward the

company have an impact on their willingness to apply for a position. It's unclear, though, if businesses should reveal every detail of their AI-powered hiring practices. Should the job advertisement, for example, mention the utilization of AI?

Baraniuk (2015) suggests that systems such as Application Tracking Systems (ATSs), which utilize AI to assess resumes, may disadvantage individuals with unconventional resume formats. The challenge lies in crafting resumes that appeal to both the ATS and human readers. When an Applicant Tracking System (ATS) is in use, it relies on specific keywords related to a recruiter's skills, education, or past work experiences (B. Ryan, 2018). If an applicant fails to include these keywords in their resume, it might not progress past the initial screening stage and may not be seen by a human (Baraniuk, 2015).

Student's job readiness:

Today's online job seekers encounter distinctive challenges, notably the presence of artificial intelligence (AI) gatekeepers. Hsu (2023) found that a vast majority of employers (83%) and Fortune 500 companies (99%) use AI for screening job applicants. Additionally, many colleges and universities now provide AI tools to help students with online applications (Moules, 2017).

There is a concern among some individuals that AI in recruitment may give too much control to technology and encourage standardized learning approaches. Additionally, there are worries about the effectiveness of the tools, as they are occasionally adopted without a full comprehension of their limitations (McMurtrie, 2018)

As job seekers encounter automated screening systems, it's vital for schools to prepare students for this reality, especially with the increasing integration of AI into the application process. Some large companies now require candidates to submit video responses to designated questions. AI technologies are then used to "interpret" gestures and eye movements, even predicting the sincerity of applicants' answers (Vardarlier & Zafer, 2020).

Students' Technology readiness challenge

In the modern academic landscape, students encounter a significant challenge related to their readiness for technology. This challenge revolves around the expectation that students not only possess digital literacy but also cultivate skills in collaboration and communication. Higher education institutions are now tasked with providing courses and platforms that facilitate the development of multifaceted capabilities. Thus, students are compelled to acquire digital competences to ensure they are adequately prepared to navigate and excel in the various technological dimensions of their education (Andeani et al., 2021). A key aspect of this readiness challenge is the confidence required in utilizing and understanding technology. Students are expected not only to be familiar with digital tools but also to feel assured in their ability to engage with technology effectively. This confidence encompasses a broad spectrum, from basic digital literacy to more advanced skills, ensuring that students can navigate the technological landscape of their academic pursuits with a sense of proficiency and self-assurance. Kerrin and Kettley (2003) assert that to make these technologies effective, individuals operating them must possess the ability to comprehend and facilitate the systems. According to Kerrin and Kettley's (2003) survey on e-recruitment, the foremost challenge in ensuring the effectiveness of new technology lies in cultural and behavioral change.

Ethical Considerations in AI - Student's Perspective

As the use of AI becomes more common, there's a rising worry that the decisions made by these systems might inherit biases from individuals within the organization or the developers who created the models. While some worry about AI possibly discriminating against qualified candidates (Dastin, 2018), colleges implementing these tools aim to assist students in navigating the current environment and serving more students (Moules, 2017).

In 2017, Amazon discontinued its AI-driven candidate evaluation tool after evidence revealed that it exhibited bias against female candidates. The tool assigned lower scores to resumes of women when ranking applicants (D. Meyer, 2019). This bias in the model occurred because there were fewer female applicants in the training dataset used to develop the model. Companies utilizing AI-based methods in recruitment anticipate a more consistent and ethical decision-making approach, with the ability to mitigate biases compared to human decision-makers (A.Johnson, 2019).

In light of these insights, exploring students' perspectives on AI-based recruitment processes becomes imperative. The research gaps identified in the literature suggest a need to delve deeper into students' emotional and cognitive dimensions regarding AI adoption, their preparedness as job-ready candidates in an evolving market, their confidence in utilizing technology, and their ethical considerations surrounding AI adoption.

By addressing these gaps, the study aims to shed light on the nuanced experiences and perceptions of students in the context of AI integration in HR processes. Understanding these perspectives not only enriches our comprehension of AI adoption but also informs strategies for creating inclusive, transparent, and ethically sound recruitment practices.

Thus, the research title, "Exploring Students' Perspectives on AI-Based Recruitment Processes and their Challenges and Job Readiness," encapsulates the essence of the study, reflecting its focus on understanding students' experiences and addressing critical gaps in the literature.

3. Research Methodology

3.1 Research Design:

To understand the complex workings of AI-driven recruitment processes, we embraced a qualitative research approach known as "Grounded Theory" seeks to produce theories based on information that is rooted in the empirical reality of the study setting. The methodology entails a systematic process for gathering data, coding it, categorizing it, and analyzing it to find trends and connections. This methodology served as an invaluable tool for exploring the nuanced landscape of AI's influence on recruitment, diverging from conventional deductive approaches. Our focus was on unraveling the distinctive facets of AI adoption in recruitment, with a particular emphasis on understanding the perspectives of students. This grounded theory approach allowed us to derive insights organically, free from predetermined hypotheses, fostering a deeper comprehension of the evolving nature of AI in recruitment processes.

Following the principles of the Gioia (2021) methodology, a well-established qualitative research approach (refer Appendix A), we systematically collected, coded, categorized, and analyzed data to identify emergent patterns and relationships within the AI-infused recruitment landscape. Our objective is to construct a theory grounded in empirical evidence, shedding light on the perceptions, concerns, and benefits associated with AI in recruitment from the lens of students. This methodological journey ensures that our exploration is rooted in the observed realities of AI's impact on the recruitment domain, providing a rich and contextually relevant understanding.

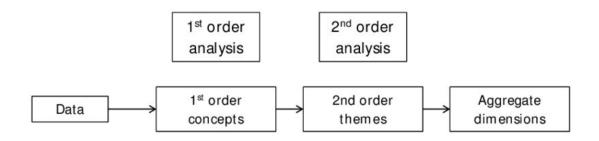


Figure 1: The-Gioia-methodology-from-Gioia-et-al-2013

3.2 Questionnaire development:

For our research, we carefully crafted a questionnaire (refer Appendix B) comprising two distinct sections. Initially, we sought basic demographic details from the participants, covering aspects such as age, gender, academic course (categorizing into STEM, Non-STEM, and others), and location. This information was crucial for contextualizing and analyzing responses effectively. In the second part, we delved into the participants' Awareness and Perception of AI in Recruitment. While a couple of questions offered multiple-choice options, the majority were open-ended queries designed to capture the nuanced perspectives of the students regarding AI in recruitment. Importantly, we emphasized to the participants that their responses were entirely confidential and anonymous, ensuring their privacy. We also clarified that there were no right or wrong answers, fostering an environment that encouraged honest and diverse insights.

3.3 Data Collection:

In our data collection process, we adopted a specific criterion to select participants, aiming to ensure that their background and experiences would lend credibility to their perceptions. This approach, known as a non-random method, is commonly employed in

empirical studies using survey data (as seen in studies like Fettermann et al., 2018, and Guimarães et al., 2021). Our strategy involved distributing 25 questionnaires among STEM (Science, Technology, Engineering, and Mathematics) students and another 25 among Non-STEM students. Although we initially circulated 50 questionnaires, we received a total of 33 responses. However, three of these responses were partially completed and were consequently excluded from the dataset. This led to a final sample of 30 respondents, with the majority coming from STEM courses (18 respondents) and the remaining 12 from Non-STEM courses, all of whom were enrolled in the Human Resources Management course in Fall 2023.

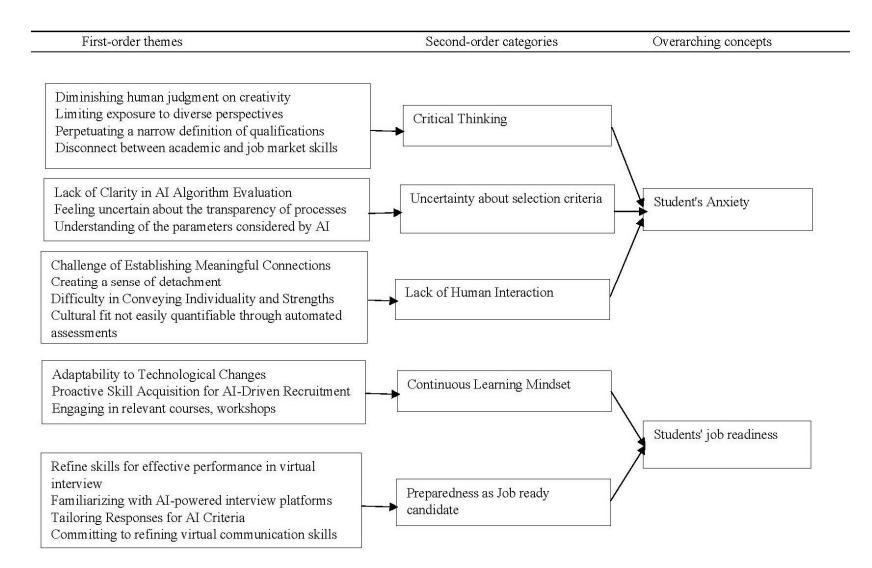
This deliberate selection process allowed us to gather insightful data from participants whose academic backgrounds and course choices were particularly relevant to our study on AI in recruitment.

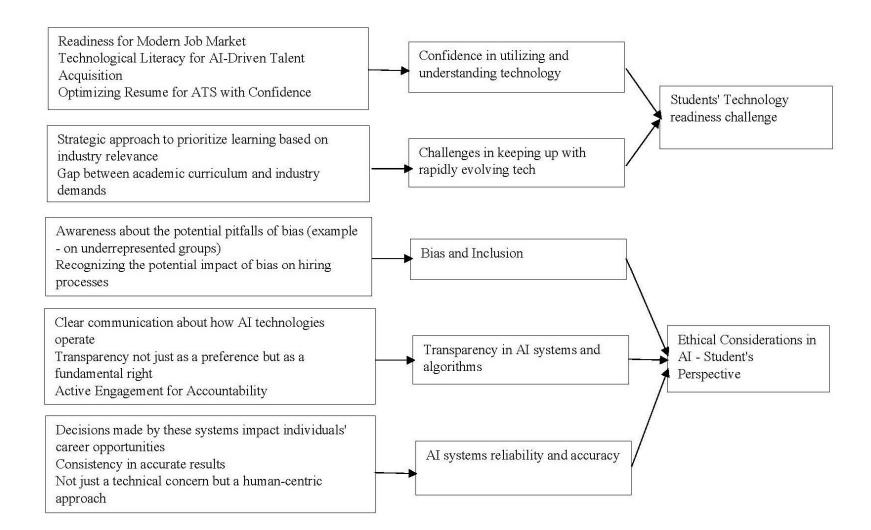
3.4 Data Analysis:

In our research, we followed a solid method called grounded theory, which builds on important ideas from Glaser and Strauss in 1967. We also stuck to the guidelines provided by Gioia and team in 2013 to make sure our study is scholarly and thorough. In the first step of our research, we used an open coding method, inspired by the way Strauss and Corbin worked in 1998, to find the main themes. We carefully looked at each response to see what patterns were coming up about how students are aware of and perceive AI in the recruitment process. Just like how Strauss and Corbin suggested, we wanted to find both similarities and differences in these patterns. Finally, we grouped them into four main themes to explore them more deeply.

In the next part of our study, we tried to find overarching concepts that could help us understand and explain the themes we found. These overarching concepts are like the main categories that group together similar things. We created a framework that organized these overarching concepts and used it to build a structure for our data, which you can see in Table 2. We took these big ideas and grouped them into different levels: the overarching concepts were the most general dimensions, followed by second-order categories, and then the first-order themes, which are more specific. This way, we organized the information to make it easier to see the connections between different parts of our study.

Table 2: Structure of the data





4.Findings

4.1 Student's Anxiety: AI driven recruitment process

Critical Thinking

The increasing reliance on AI in recruitment processes has sparked concerns among students regarding its impact on critical thinking. As algorithms sift through resumes and applications, there is a growing fear that human judgment, especially in assessing creativity, is being diminished. Students worry that AI may favor standardized qualifications over innovative thinking, limiting exposure to diverse perspectives and unique skill sets. Furthermore, there is a perceived disconnect between the skills emphasized in academic settings and those valued in the job market. As AI-driven systems prioritize specific keywords and metrics, students fear that their ability to think critically and creatively may be undervalued or overlooked in the recruitment process.

From my perspective, the reliance on AI in recruitment processes diminishes the importance of human judgment.

In the context of critical thinking, the quote suggests that relying solely on AI for recruitment undermines the value of human judgment. It implies that AI may prioritize standardized qualifications over creative and critical thinking skills, which are essential for evaluating candidates holistically. This perspective highlights concerns about the potential limitations of AI in assessing candidates' true potential and unique qualities.

The automation of resume screening and candidate selection by AI systems diminishes students' motivation to thoroughly research and tailor their applications.

From the student's perspective, this quote suggests that when AI systems handle resume screening and candidate selection, students feel less inclined to put effort into customizing their applications. It implies that students may believe their efforts in crafting personalized resumes might not be adequately recognized or appreciated in automated processes.

Uncertainty about selection Criteria

Applicants who have performed well during interviews may find themselves in a state of anxiety and uncertainty as they await feedback from the employer. Despite their successful interactions and positive impressions made during the interview process, some candidates may never receive communication regarding their application status. This lack of follow-up communication leaves candidates in a state of limbo, unsure about their prospects and future employment opportunities.

I admit to feeling uncertain about the transparency of AI processes in human resource recruitment. The complexity in decision-making criteria leaves me wondering about the fairness and objectivity of the selection process.

This quote reflects feelings of doubt and confusion regarding how AI systems make decisions in the recruitment process. The complexity of AI criteria makes students question whether the selection process is fair and unbiased. It highlights concerns about transparency and the need for clarity in how AI systems evaluate candidates.

Without a clear understanding of the parameters considered by AI, I may struggle to align my skills and experiences with the expectations of automated recruitment systems.

This quote illustrates a sense of unease stemming from the lack of clarity regarding AI selection criteria. They worry about how their qualifications match up with what the automated systems are looking for. It reflects a need for more transparency in AI recruitment processes to help students better navigate the application process.

Lack of Human Interaction

One significant challenge that students face in AI-driven recruitment processes is the lack of human interaction. Establishing meaningful connections with recruiters or hiring managers becomes difficult when the process is automated. Instead of engaging in personal conversations or interviews, students may feel a sense of detachment from the recruitment experience. This detachment can lead to difficulties in conveying individuality and strengths, as automated assessments may not capture the nuances of personality or communication style. Moreover, cultural fit, which is essential for a positive work environment, is not easily quantifiable through automated processes. Students often find it challenging to showcase their cultural fit and alignment with company values without the opportunity for face-to-face interaction and meaningful dialogue.

The difficulty I encounter in presenting my unique qualities without the personal touch of a human recruiter.

In students' eyes, this quote highlights the challenge of showcasing their individual strengths without the personal connection of a human recruiter. They feel that automated processes might overlook aspects of their personality and abilities that can only be conveyed through direct interaction. It emphasizes the importance of human touch in recruitment, where students can express themselves more fully and feel understood.

The automated nature of AI processes can create a sense of detachment, hindering my abilities and personality that go beyond what can be captured by algorithms.

The above quote suggests that relying solely on AI in recruitment makes them feel disconnected, as it overlooks aspects of their abilities and personality. They believe that algorithms may miss the depth of who they are, hindering their chances of showing their true selves in the application process. It reflects the importance of human interaction, where students can express themselves more authentically and feel valued beyond what technology can assess.

4.2 Students' job readiness

Continuous Learning Mindset

In today's rapidly evolving job market, students face the challenge of adapting to technological changes, particularly in AI-driven recruitment processes. To navigate this landscape successfully, students must cultivate a continuous learning mindset. This involves being proactive in acquiring skills relevant to AI-driven recruitment, such as understanding how AI algorithms work and how they impact the recruitment process. Students can engage in relevant courses, workshops, and online resources to stay updated with the latest trends and developments in recruitment technology. By embracing a continuous learning mindset, students can position themselves as competitive candidates in the job market and adapt to the changing demands of AI-driven recruitment processes.

I am committed to seeking out learning opportunities that enhance my understanding of AI's role in recruitment process. Engaging in relevant courses,

workshops, and industry events allows me to deepen my knowledge and stay ahead in a competitive job market influenced by AI technologies.

This quote highlights their dedication to staying updated about AI in recruitment. They believe that by attending courses and workshops, they can better understand how AI impacts job hunting. They see continuous learning as essential to staying competitive in a job market shaped by AI.

I recognize that a continuous learning mindset goes beyond acquiring technical skills; it involves understanding the ethical implications of AI in talent acquisition.

Embracing continuous learning means not just picking up technical skills but also grasping the ethical side of AI in hiring. They understand that staying informed about AI's impact on talent acquisition helps them navigate job markets more responsibly. For students, this mindset is about evolving with the technology while considering its broader implications.

Preparedness as Job-Ready Candidate:

Being prepared as a job-ready candidate involves refining skills specifically tailored for effective performance in virtual interviews. With the increasing prevalence of AI-powered interview platforms, students need to familiarize themselves with these technologies to confidently navigate the virtual interview process. This includes understanding how AI algorithms assess candidate responses and tailoring their answers to meet AI criteria effectively. Moreover, committing to refining virtual communication skills is essential for showcasing professionalism and competence in virtual interview settings. By proactively preparing for virtual interviews and leveraging AI-powered platforms,

students can position themselves as job-ready candidates equipped to succeed in the evolving landscape of recruitment processes.

I understand that virtual assessments are becoming increasingly powerful in the hiring process, and I am actively preparing for this shift by familiarizing myself with AI-powered interview platforms.

Being ready for job interviews means adapting to new methods like AI-powered assessments. They realize the importance of practicing with these platforms to showcase their skills effectively. By getting familiar with AI tools, students aim to enhance their chances of securing employment in today's competitive job market.

By understanding the AI algorithms that may be used in virtual interviews, I can tailor my responses to align with the criteria valued by automated systems, increasing my chances of success.

Job interviews involve grasping how AI algorithms work. They believe that understanding these algorithms helps them shape their responses effectively. By doing so, students aim to boost their prospects in virtual interviews where AI plays a significant role.

4.3 Students' Technology readiness challenge

Confidence in Utilizing and Understanding Technology

In the modern job market, being confident in utilizing and understanding technology is crucial for students aiming to succeed in AI-driven talent acquisition processes. This involves developing technological literacy to navigate the complexities of AI-powered recruitment tools and platforms effectively. Students need to optimize their resumes with confidence, ensuring they incorporate relevant keywords and formats tailored

to Applicant Tracking Systems (ATS). By understanding how these systems work and confidently adapting their resumes to meet ATS criteria, students can enhance their visibility to potential employers and increase their chances of securing job opportunities. Embracing technology with confidence empowers students to proactively engage with AI-driven recruitment processes and position themselves as competitive candidates in today's dynamic job market.

Confidence in utilizing technology is a key asset in optimizing my resume for AI-based applicant tracking systems (ATS).

For students, feeling confident in using technology means they can adapt their resumes for AI-driven applicant tracking systems (ATS). They believe that this confidence helps them ensure their resumes are well-suited to pass through these automated systems effectively. Ultimately, students see technology proficiency as crucial for navigating the job market's digital landscape.

I understand that my confidence in technology extends to a continuous learning mindset. Embracing new tools, staying informed about AI trends.

For students, technology means they're always open to learning new things and staying updated on AI trends. They believe that embracing new tools and staying informed helps them adapt to changes in the job market. This confidence in technology allows them to stay competitive and ready for whatever comes their way.

Challenges in Keeping Up with Rapidly Evolving Technology

Students face significant challenges in keeping up with the rapidly evolving landscape of technology, particularly in bridging the gap between academic curriculum and

industry demands. There's a need for a strategic approach to prioritize learning based on industry relevance, as the pace of technological advancement outpaces traditional educational frameworks. The disconnect between what is taught in classrooms and what is required in real-world industries poses a significant hurdle for students striving to stay updated with the latest technological developments. This gap can lead to a sense of disconnection and frustration among students, who may find themselves unprepared to meet the evolving demands of the job market. Consequently, there's a pressing need for educational institutions to adapt their curricula to reflect the dynamic nature of technology and equip students with the skills and knowledge necessary to thrive in an ever-changing tech landscape.

I acknowledge that another challenge in keeping up with rapidly evolving tech requirements is the potential gap between academic curricula and industry demands. Bridging this gap requires self-directed learning, seeking additional resources, and participating in practical experiences to align my skills with current tech requirements.

Keeping up with fast-changing technology is tough because what they learn in school might not match what companies need. To bridge this gap, they have to teach themselves, find extra help, and get real-world experience to match what companies want. It's all about making sure they're ready for the tech demands of the job market.

Engaging in relevant courses, workshops, and industry events, and seeking mentorship are strategies I employ to enhance my tech literacy regularly.

Students face the challenge of keeping up with fast-changing technology by taking courses, attending workshops, and seeking mentors. These actions help them learn new

tech skills and stay updated in a rapidly changing world. It's all about staying ahead and being ready for what's next in the tech world.

4.4 Ethical Considerations in AI - Student's Perspective

Bias and Inclusion

The emergence of AI has introduced the possibility of bias and discrimination in various aspects, including recruitment processes. As algorithms take on decision-making roles, individuals seeking employment, particularly those belonging to marginalized groups, encounter obstacles. Regrettably, the AI algorithms utilized by recruiters may unintentionally sustain biases or discriminate against specific candidates because they may not grasp subtleties related to factors like gender and race. This highlights a concerning trend where AI systems, despite their intended neutrality, can inadvertently perpetuate prejudice and contribute to unfair treatment in the recruitment process.

As a student, I actively seek opportunities to engage in conversations about bias in AI and the ways it can affect the hiring process.

As students, they make it a priority to talk about how AI might show bias and leave some people out during hiring. They want to be part of discussions that make sure everyone gets a fair chance. It's about making sure nobody gets left behind because of unfairness in AI.

In my view, addressing bias is not just a responsibility but a shared commitment.

From the perspective of students, tackling bias isn't just something one person should do—it's something everyone needs to work on together. They believe that by joining

forces, they can make sure that AI doesn't treat people unfairly when it comes to hiring. It's about everyone taking part to make sure things are fair for everyone.

Transparency in AI Systems and Algorithms:

Students emphasize the importance of clear communication about how AI technologies operate in the recruitment process. They believe that transparency should not just be seen as a preference but as a fundamental right for job applicants. Understanding how AI systems evaluate candidates and make decisions is crucial for ensuring fairness and accountability in the recruitment process. Students advocate for active engagement from organizations and recruiters to uphold transparency standards and ensure that AI systems are accountable for their actions. They believe that by promoting transparency in AI systems and algorithms, organizations can build trust with job seekers and create a more inclusive and equitable recruitment environment. Additionally, transparency enables candidates to make informed decisions about their job applications and fosters a sense of fairness and trust in the recruitment process.

From my perspective, transparency is not just a preference but a fundamental right.

Transparency isn't just something they want—it's something they believe they should have. They think it's essential to know how AI works in recruitment so they can make informed decisions about their applications. It's not just a choice; it's something they feel they deserve to have.

Transparency in AI is, to me, synonymous with fairness. I actively engage with platforms that promote transparency to ensure that the decision-making processes in talent acquisition are accessible and comprehensible to all.

From the students' perspective, transparency in AI means fairness. They believe that if they can see how AI systems work, it helps ensure fairness in talent acquisition. They seek out platforms that prioritize transparency so everyone can understand how decisions are made.

AI Systems Reliability and Accuracy

Students recognize that decisions made by AI systems have a direct impact on individuals' career opportunities. They stress the importance of these systems providing consistent and accurate results to ensure fairness in the recruitment process. For students, reliability and accuracy in AI systems are not just technical concerns but reflect a human-centric approach to recruitment. They believe that AI systems should be designed and implemented in a way that prioritizes the well-being and interests of job applicants. Ensuring the reliability and accuracy of AI systems is essential for building trust and confidence among candidates and organizations alike. Students advocate for continuous monitoring and evaluation of AI systems to uphold their reliability and accuracy standards and mitigate potential biases or errors that may affect the recruitment outcomes.

From my perspective, reliability in AI ensures that the talent acquisition process is not only efficient but also trustworthy.

The quote says, AI reliability means that the hiring process is both efficient and trustworthy. They believe that reliable AI systems ensure fair and accurate assessments, which is crucial for building trust between candidates and employers. Students value AI systems that consistently provide accurate results, enhancing the credibility of the recruitment process.

Reliability is a cornerstone of trust, and as a student, I actively seek to contribute to building trust in AI applications.

From students' perspective, reliability in AI systems is essential for building trust. They believe that trustworthy AI applications contribute to fair and accurate decision-making processes. Students actively support initiatives that prioritize reliability, ensuring transparency and fairness in AI-driven recruitment processes.

Interconnected Dynamics of Students' Perspectives on AI Recruitment

The findings in the four aggregated dimensions of students' perspectives on AI-driven recruitment processes reveal a complex interconnection, where each dimension influences and shapes the others. Students' anxiety regarding AI's impact on critical thinking and creativity directly correlates with their concerns about the lack of human interaction in recruitment processes. The reliance on AI systems for resume screening and candidate selection diminishes students' motivation to tailor their applications, contributing to feelings of uncertainty about selection criteria and transparency in AI processes. This uncertainty, in turn, exacerbates students' anxiety about the fairness and objectivity of AI-driven recruitment processes.

Additionally, students' readiness for the job market is intricately linked to their ability to navigate the challenges posed by AI technology. Embracing a continuous learning mindset becomes essential for students to adapt to the evolving demands of AI-driven recruitment and enhance their job readiness. However, students also face technology readiness challenges, such as keeping up with rapidly evolving technology and bridging the gap between academic curriculum and industry demands. These challenges underscore

the importance of addressing ethical considerations in AI recruitment, particularly regarding bias and inclusion, transparency in AI systems and algorithms, and the reliability and accuracy of AI systems in ensuring fairness in recruitment.

In essence, students' anxiety about AI-driven recruitment processes influences their job readiness, which, in turn, shapes their technology readiness challenges and ethical considerations. This interconnectedness highlights the need for a holistic approach to addressing students' concerns and preparing them for the realities of AI-driven recruitment processes. By fostering a supportive environment that promotes continuous learning, transparency, and ethical AI practices, educational institutions and organizations can empower students to navigate the complexities of the modern job market with confidence and resilience.

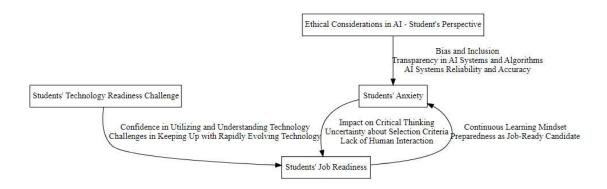


Figure 2: Interconnected Dynamics of Students' Perspectives on AI Recruitment

5.Discussions

Students express anxiety about the increasing reliance on AI in recruitment, fearing that it diminishes the significance of human judgment. This concern aligns with literature suggesting that AI adoption may prioritize standardized qualifications over innovative thinking (Bresnahan et al., 2002). The disconnect between academic skills and job market demands exacerbates students' worries, as they fear that their ability to think critically and creatively might be undervalued in AI-driven recruitment processes.

The uncertainty surrounding selection criteria worsens students' anxiety. Despite performing well in interviews, the lack of follow-up communication from employers leaves candidates feeling uncertain about their prospects. This uncertainty reflects concerns raised by Van Esch et al. (2019), who found that applicants' anxiety levels regarding AI impact their willingness to apply for positions.

The absence of human interaction in AI-driven recruitment processes poses a significant challenge for students. They struggle to establish meaningful connections with recruiters, hindering their ability to convey individuality and strengths. This resonates with the literature highlighting the importance of human touch in recruitment (Stoilkovska et al., 2015), which suggests that automated assessments may not capture the nuances essential for cultural fit and alignment with company values.

In today's fast-paced job market, students are faced with the challenge of staying relevant amidst technological advancements, particularly in AI-driven recruitment processes. As highlighted in the literature review, the adoption of AI tools in recruitment has become increasingly common, emphasizing the need for students to adapt and stay

informed about these changes. A continuous learning mindset is essential for students to navigate this dynamic landscape effectively.

Research by Hsu (2023) underscores the importance of students proactively seeking learning opportunities to understand the role of AI in talent acquisition. Engaging in relevant courses, workshops, and industry events, as suggested by Moules (2017), enables students to deepen their knowledge and stay ahead in a competitive job market influenced by AI technologies. By embracing continuous learning, students position themselves as competitive candidates equipped to adapt to the evolving demands of AI-driven recruitment processes.

Moreover, being prepared as a job-ready candidate involves honing skills tailored for effective performance in virtual interviews. As discussed by Vardarlier & Zafer (2020), the increasing prevalence of AI-powered interview platforms necessitates that students familiarize themselves with these technologies. Understanding how AI algorithms assess candidate responses and refining virtual communication skills are crucial steps in showcasing professionalism and competence in virtual interview settings. By actively preparing for virtual interviews and leveraging AI-powered platforms, students demonstrate readiness to succeed in the changing landscape of recruitment processes.

In today's job market, students must feel confident in utilizing and understanding technology, especially with the increasing prevalence of AI-driven talent acquisition processes. As discussed by Kerrin and Kettley (2003), technological literacy is crucial for students to navigate AI-powered recruitment tools effectively. By optimizing their resumes with relevant keywords and formats tailored to Applicant Tracking Systems (ATS), students enhance their visibility to potential employers, as highlighted by Baraniuk (2015).

Moreover, confidence in utilizing technology extends beyond mere proficiency; it encompasses a continuous learning mindset, as emphasized by Moules (2017). Embracing new tools and staying informed about AI trends are integral aspects of this mindset. By adopting a proactive approach to learning, students position themselves as adaptable candidates capable of engaging with AI-driven recruitment processes effectively.

However, students face significant challenges in keeping up with the rapidly evolving landscape of technology, as highlighted by the literature review. The disconnect between academic curricula and industry demands poses a significant hurdle, as discussed by Andeani et al. (2021). The pace of technological advancement often outpaces traditional educational frameworks, leaving students feeling unprepared to meet the evolving demands of the job market.

To address these challenges, students must engage in self-directed learning and seek additional resources, as suggested by Okolie and Irabor (2017). Participating in practical experiences and aligning skills with current tech requirements are essential steps in bridging the gap between academic education and industry demands, as outlined by Kerrin and Kettley (2003).

The emergence of AI in recruitment processes has raised concerns among students regarding bias and inclusion. As highlighted by Dastin (2018), AI algorithms may unintentionally perpetuate biases or discriminate against specific candidates, hindering fairness in the recruitment process. This underscores the need for conversations about bias in AI and its impact on hiring, as emphasized by Van Esch et al. (2019).

Transparency in AI systems and algorithms is another key consideration for students, echoing discussions by Moules (2017). Students advocate for clear communication about how AI technologies operate in the recruitment process, believing that transparency is a fundamental right for job applicants. Transparency fosters trust and fairness, enabling candidates to make informed decisions about their applications, as outlined by the literature review.

Moreover, students emphasize the importance of reliability and accuracy in AI systems, aligning with discussions by A. Johnson (2019). Decisions made by AI systems directly impact individuals' career opportunities, emphasizing the need for consistent and accurate results to ensure fairness. Reliability in AI systems is crucial for building trust among candidates and organizations, promoting a human-centric approach to recruitment.

6.Implications

6.1 Theoretical Implications

The theoretical implications derived from the literature review on AI adoption in recruitment processes, especially from students' perspectives, reveal several key insights. Firstly, the research underscores the critical role of technology and AI adoption in enhancing organizational efficiency and competitiveness. It highlights how AI, particularly in recruitment, is becoming increasingly prevalent across various industries and emphasizes the importance of understanding the factors influencing its adoption (Bresnahan, 2002; Brynjolfsson et al., 2002).

Secondly, the literature review underscores students' anxieties and challenges regarding AI adoption in recruitment. Students express concerns about potential biases in AI algorithms and the impact on job application outcomes (Van Esch et al., 2019; Baraniuk, 2015). Moreover, they face difficulties in navigating AI-driven recruitment processes, including uncertainties about selection criteria and the lack of human interaction (Hsu, 2023).

Furthermore, the literature highlights the importance of students' job readiness in the era of AI-driven recruitment. Students recognize the need for continuous learning to adapt to technological changes and prepare themselves as job-ready candidates (Andeani et al., 2021; Kerrin & Kettley, 2003).

Ethical considerations surrounding AI adoption in recruitment also emerge as a significant theme. Students emphasize the importance of addressing bias, promoting

transparency in AI systems and algorithms, and ensuring reliability and accuracy to uphold fairness and trust in the recruitment process (Dastin, 2018; A. Johnson, 2019).

These theoretical implications suggest the need for further research to explore students' experiences and perspectives on AI adoption in recruitment. By understanding students' concerns and challenges, organizations can develop more inclusive and transparent recruitment practices that align with ethical standards and promote fairness and trust.

6.2 Applied Implications

The applied implications stemming from the theoretical insights on AI adoption in recruitment processes, particularly from students' perspectives, are multifaceted and can guide practical interventions in several areas:

Training and Education Programs

Educational institutions and organizations involved in talent development can design training programs to equip students with the necessary skills and knowledge to navigate AI-driven recruitment processes effectively. These programs should focus not only on technical skills related to AI but also on critical thinking, adaptability, and communication skills, which are valued in AI-powered recruitment.

Ethical Guidelines and Policies

Organizations should establish clear ethical guidelines and policies governing the use of AI in recruitment to ensure fairness, transparency, and accountability. This includes measures to address bias in AI algorithms, promote diversity and inclusion, and safeguard candidate privacy and data security.

Technology Integration and Accessibility

To mitigate students' anxieties and challenges related to AI adoption in recruitment, organizations should prioritize the integration of user-friendly AI technologies that enhance accessibility and usability. This may involve developing intuitive interfaces, providing user training and support, and ensuring compatibility with diverse devices and platforms.

Engagement and Collaboration

Stakeholder engagement and collaboration are essential for fostering a shared understanding of AI adoption in recruitment and addressing stakeholders' concerns and preferences. This includes collaboration between educational institutions, employers, policymakers, and technology providers to develop shared standards, best practices, and guidelines for AI-powered recruitment.

Continuous Monitoring and Evaluation

Organizations should implement robust systems for monitoring and evaluating AI-driven recruitment processes to assess their effectiveness, identify potential biases or disparities, and make data-driven improvements over time. This may involve conducting regular audits, collecting feedback from stakeholders, and benchmarking performance against established metrics and benchmarks.

Research and Innovation

Continued research and innovation are critical for advancing knowledge and understanding of AI adoption in recruitment and developing innovative solutions to address emerging challenges and opportunities. This includes interdisciplinary research

collaborations, longitudinal studies, and experimentation with new technologies and methodologies.

By implementing these applied implications, organizations can enhance the effectiveness, fairness, and transparency of AI-driven recruitment processes while promoting positive outcomes for students, employers, and society as a whole.

7. Conclusion

In conclusion, the rise of artificial intelligence (AI) in recruitment processes presents significant challenges for students entering the job market. Their concerns about AI's impact on critical thinking, uncertainty about selection criteria, and the lack of human interaction are valid and warrant attention. However, by embracing continuous learning, preparing for virtual interviews, and fostering confidence in technology, students can navigate these challenges effectively. Moreover, addressing ethical considerations such as bias and transparency in AI systems is essential for creating fair and inclusive recruitment environments. Organizations and educational institutions play a crucial role in supporting students through these changes, ensuring that AI-driven recruitment processes prioritize fairness and equity. By working together to address these concerns and implement ethical practices, we can empower students to succeed in the dynamic landscape of AI-driven recruitment and build a more inclusive future for all aspiring professionals.

8. Future Research

As the landscape of recruitment continues to evolve with the integration of AI-driven processes, several avenues for future research emerge. Exploring the long-term effects of AI adoption in recruitment on organizational diversity and inclusion initiatives presents a compelling area of study. Understanding how AI algorithms influence candidate selection and the potential biases they may introduce is crucial for fostering equitable recruitment practices.

Moreover, examining the ethical implications of AI algorithms in recruitment remains a pressing concern. Future research could delve into the development of frameworks and guidelines for ensuring transparency, fairness, and accountability in AI-driven recruitment practices. Understanding the ethical considerations surrounding AI adoption can inform policymakers, organizations, and educational institutions in developing responsible AI implementation strategies.

Additionally, we need to examine how well AI-based recruitment tools predict job performance and cultural fit. Investigating the correlation between AI-driven candidate assessments and subsequent job performance outcomes can enhance the validity and reliability of AI tools in recruitment decision-making.

Furthermore, longitudinal studies tracking the evolution of AI technologies and their impact on recruitment trends over time can provide valuable insights into the ongoing transformations in the job market. Understanding how AI adoption shapes recruitment practices and workforce dynamics can inform strategic workforce planning and talent management initiatives.

Overall, future research endeavors should aim to address the multifaceted implications of AI in recruitment, ranging from its influence on organizational diversity to its ethical considerations and long-term impact on employee outcomes. By exploring these areas, researchers can contribute to the development of best practices and guidelines for responsible AI adoption in recruitment processes.

Bibliography

- Ahmed, D. A., Ibrahim, M. A., & Saeed, Y. J. (2023). The Role of Information Management Systems in the Implementation of the Digital Economy Development Strategy. International Journal of Professional Business Review, 8(5), e01419–e01419. https://doi.org/10.26668/businessreview/2023.v8i5.1419
- Andreani, W., Herawati, A., Karjo, C. H., Ying, Y., Yasyfin, A. P., & Marie, K. (2021, September). Students'(un) Readiness in Facing Virtual Learning Technological Challenges. In 2021 International Seminar on Application for Technology of Information and Communication (iSemantic) (pp. 410-415). IEEE.
- Aslran, A., Cooper, C., Khan, Z., Golgeci, I., & Ali, I. (2021). Artificial intelligence and human workers interaction at team level: a conceptual assessment of the challenges and potential HRM strategies. International Journal of Manpower, 43(1), 1-14. doi: 10.1108/IJM-01-2021-0052.
- Baraniuk, C. (2015). The AI headhunters. New Sci., 228(3045), 20–21.
- Bartel, A., Ichniowski, C., & Shaw, K. (2007). How does information technology affect productivity? plant-level comparisons of product innovation, process improvement and worker skills. The Quarterly Journal of Economics, 122, 1721–1758.
- Bondarouk, T., & Brewster, C. (2016). Conceptualising the future of HRM and technology research. The International Journal of Human Resource Management, 27(21), 2652-2671. doi: 10.1080/09585192.2016.1232296.

- Bresnahan, T., Brynjolfsson, E., & Hitt, L. (2002). Information technology, work organization and the demand for skilled labor: firm-level evidence. Quarterly Journal of Economics, 117, 339–376.
- Brynjolfsson, E., & McAfee, A. (2014). The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies. WW Norton & Company.
- Brynjolfsson, E., Hitt, L., & Yang, S. (2002). Intangible assets: computers and organizational capital. Brookings Papers on Economic Activity: Macroeconomics.
- Bratton, J., & Gold, J. (2012). Human Resource Management: Theory & Practice (5th ed.).
- Budhwar, P., Malik, A., De Silva, M. T. T., & Thevisuthan, P. (2022). Artificial intelligence challenges and opportunities for international HRM: a review and research agenda. The International Journal of Human Resource Management, 33(6), 1065–1097. https://doi.org/10.1080/09585192.2022.2035161.
- Budhwar, P., & Brewster, C. (2016). Conceptualising the future of HRM and technology research. The International Journal of Human Resource Management, 27(21), 2652-2671. doi: 10.1080/09585192.2016.1232296.
- Dasgupta, A., & Wendler, S. (2019). AI adoption strategies. Retrieved September, 18, 2022.
- Dastin, J. (2018). Amazon scraps secret AI recruiting tool that showed bias against women.

 https://www.reuters.com/article/us-amazon-com-jobs-automation-insight/
 amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-womenidUSKCN1MK08G

- Dwivedi, Y.K., Hughes, L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., Duan, Y., et al. (2019). Artificial Intelligence (AI): multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. International Journal of Information Management.
- Erik Brynjolfsson and Andrew McAfee. (2014). The Second Machine Age: Work,

 Progress, and Prosperity in a Time of Brilliant Technologies. WW Norton &

 Company.
- Fernández, C., & Fernández, A. (2019). AI in Recruiting Multi-Agent Systems

 Architecture for Ethical and Legal Auditing. Proceedings of the Twenty-Eighth

 International Joint Conference on Artificial Intelligence (IJCAI-19), pp. 6428-6429.
- Fettermann DC, Cavalcante C, Almeida T, Tortorella GL (2018) How does Industry 4.0 contribute to operations management? J Industrial Prod Eng 35(4):255–268
- Guimarães MC, Tortorella GL, Taboada CM, Godinho Filho M, Martinez F(2021)

 Association between distribution centre design and contextual characteristics. Journal of Facilities Management, (forthcoming).
- Gioia, D. (2021). A systematic methodology for doing qualitative research. The Journal of Applied Behavioral Science, 57(1), 20–29.
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research. Organizational Research Methods, 16(1), 15–31.
- Glaser, B. G., & Strauss, A. L. (1967). The Discovery of Grounded Theory: Strategies for Qualitative Research. Chicago, USA: Aldine.

- Hmoud, B. (2021). The adoption of artificial intelligence in human resource management. Forum Scientiae Oeconomia, 9(1), 105-118. doi: 10.23762/FSO VOL9 NO1 7.
- Hmoud, B., & Laszlo, V. (2019). Will Artificial Intelligence take over Human Resources

 Recruitment and Selection? Network Intelligence Studies, VII(13), 21-30.
- Hsu, A. (2023). Can bots discriminate? It's a big question as companies use AI for hiring.

 https://www.npr.org/2023/01/31/1152652093/ai-artificial-intelligence-bot-hiring-eeoc-discrimination
- Index.dev Ltd. (n.d.-b). How to make AI part of your recruitment strategy. Comprehensive

 Index.dev guide. https://www.index.dev/post/how-to-make-ai-part-of-yourrecruitment-strategy-comprehensive-index-dev-guide
- 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.
- Kaur, D., Uslu, S., Rittichier, K.J., & Durresi, A. (2022). Trustworthy artificial intelligence: a review. ACM Computing Surveys (CSUR), 55(2), 1-38. doi: 10.1145/3491209
- Kerrin, M., & Kettley, P. (2003). e-Recruitment: Is it Delivering?, Report 402, The Institute for Employment Studies: Brighton.
- Lee, J. W., Kwak, D. W., & Song, E. (2022). Can older workers stay productive? The role of ICT skills and training. Journal of Asian Economics, 79(C). https://ideas.repec.org//a/eee/ asieco/v79y2022ics1049007821001664.html
- Lindmark, A., & Önnevik, T. (2011). Human Resource Management: Organisationens hjärta (2nd ed.).

- McCarthy, J., Minsky, M.L., Rochester, N., & Shannon, C.E. (1955). A Proposal for the Dartmouth Summer Research Project on Artificial Intelligence.
- McMurtrie, B. (2018, August 12). How artificial intelligence is changing teaching.

 Chronicle of Higher Education https://www.chronicle.com/article/how-artificial-intelligence-is-changing-teaching/
- Moules, J. (2017). AI creeps into the work of MBA careers advisers. https://www.ft.com/content/1ac4deba-49dc-11e7-919a-1e14ce4af89b
- Okolie, U.C., & Irabor, I.E. (2017). E-Recruitment: Practices, Opportunities and Challenges. European Journal of Business and Management, 9(11), 116-122.
- P. Van Esch, J. S. Black, and J. Ferolie, "Marketing AI recruitment: The next phase in job application and selection," Comput. Hum. Behav., vol. 90, pp. 215–222, Jan. 2019.
- Russell, S., & Norvig, P. (2010). Artificial Intelligence: A modern Approach (3rd ed.).

 Pearson Education Limited: Boston.
- Savola, H., & Troque, B. (2019). Recruiters Just Wanna Have...AI? Implications of Implementing AI in HR Recruitment. Linköpings Universitet: Linköping.
- Stoilkovska, A., Ilieva, J., & Gjakovski, S. (2015). Equal employment opportunities in the recruitment and selection process of human resource. UTMS Journal of Economics, 6(2), 281-292.
- Strauss, A. L., & Corbin, J. M. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory (3rd ed.). Thousand Oaks: SAGE Publications Inc.

- The state of AI in 2022—and a half decade in review. (2022b, December 6). McKinsey & Company. https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai-in-2022-and-a-half-decade-in-review#/
- Upadhyay, A.K., & Khandelwal, K. (2018). Applying Artificial Intelligence: Implications for Recruitment. Strategic HR Review, 17(5), 255–258.
- Vardarlier, P., & Zafer, C. (2020). Use of artificial intelligence as business strategy in recruitment process and social perspective. In Digital Business Strategies in Blockchain Ecosystems (pp. 355–373). Springer.

Appendices

Appendix A: Grounded Theory Gioia Methodology

Step ^a	Key Features
Research Design	 Articulate a well-defined phenomenon of interest and research question(s) (research question[s] framed in "how" terms aimed at surfacing concepts and their inter-relationships)
	 Initially consult with existing literature, with suspension of judgment about its conclusions to allow discovery of new insights
Data Collection	 Give extraordinary voice to informants, who are treated as knowledgeable agents Preserve flexibility to adjust interview protocol based on informant responses "Backtrack" to prior informants to ask questions that arise from subsequent interviews
Data Analysis	 Perform initial data coding, maintaining the integrity of 1st-order (informant-centric) terms
	 Develop a comprehensive compendium of 1st-order terms
	 Organize 1st-order codes into 2nd-order (theory-centric) themes
	 Distill 2nd-order themes into overarching theoretical dimensions (if appropriate)
	 Assemble terms, themes, and dimensions into a "data structure"
Grounded Theory Articulation	 Formulate dynamic relationships among the 2nd-order concepts in data structure
	 Transform static data structure into dynamic grounded theory model
	 Conduct additional consultations with the literature to refine articulation of emergent concepts and relationships

^aThe Research Design and Data Collection steps are moderate variations on traditional grounded theory approaches. The Data Analysis and Grounded Theory Articulation steps constitute the main distinctive features of the approach.

Appendix B: Questionnaire

Part I - Demographics:
Age Range: □ 18-25 □ 26-35 □ 36-45 □ 46+
Gender: □ Male □ Female □ Non-binary □ Other □ Prefer not to say
Course: □ STEM □ Non-STEM □ Other (Specify)
Location:
Part II - Awareness and Perception of AI in Recruitment:
1) Are you aware of the use of AI in the recruitment process?
□Yes □No
2) In which recruitment processes are you aware that AI is used? (Check all that apply)
□Resume Screening
□CV Shortlisting
□Interview Scheduling
□Skill Assessment
□Other (Please specify):
3) What, in your opinion, are the positive aspects of AI in the recruitment process?
4) How do you feel about AI being involved in the HR recruitment process?

- 5) How do you think students can be well-prepared for technology-driven recruitment processes like AI?
- 6) How prepared do you feel for technology-driven recruitment processes like AI?
- 7) What, in your opinion, are the potential challenges or concerns associated with AI in HR recruitment?

Additional Comments:

8) Do you have any additional comments or suggestions regarding AI in recruitment that you

would like to share?

(Thank you for your participation! Your insights are valuable.

Curriculum Vitae

Candidate's Full Name: Kiruthika Krishnasamy

Universities Attended:

- Bharathiar University, Master of Philosophy in Management, 2019
- The ICFAI University, Master of Business Administration, 2009
- Bharathiar University, Bachelors in English Literature, 2007

Publications: N/A

Conference Presentations: N/A