




PAPER

Exploring the Impact of Artificial Intelligence on University Students' Perception of Slow Employment: A Psychological and Behavioral Analysis

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ABSTRACT

This study explores the psychological effects of artificial intelligence (AI) tools on university students' perceptions and experiences of slow employment. The aim is to understand how the use of AI tools influences students' anxiety, stress, motivation, and decision-making confidence, as well as their coping strategies in the context of job search challenges. Using a mixed-methods approach, data were collected through quantitative surveys (n = 200) and qualitative interviews (n = 10), followed by behavioral and emotional analysis using AI-based sentiment and emotion recognition systems. Moreover, for quantitative data, regression analysis was performed to identify the factors that impacted the students' psychological well-being. In contrast, for qualitative data, thematic analysis was employed to identify the psychological and emotional outcomes associated with slow employment. The findings show that AI tool usage significantly reduced anxiety, increased confidence, and enhanced students' self-efficacy and motivation, while stress remained positively correlated with anxiety levels. The emotional analysis revealed dynamic shifts in emotional states, with anxiety decreasing and confidence increasing after the AI interaction. The study concludes that AI tools offer significant psychological support but require refinement in terms of personalization and transparency. The integration of AI tools with human support systems is essential for practical career guidance. This study offers novel insights into the impact of AI on emotional well-being and provides implications for enhancing career support systems for students.

KEYWORDS

artificial intelligence (AI), slow employment, anxiety, job search self-efficacy, coping strategies, behavioral analysis

1 INTRODUCTION

In light of the rapid advancements in artificial intelligence (AI) technology over recent years, significant changes have occurred across various areas, including education,

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healthcare, and employment [1]. Through university apps, students enter into the future workforce, but through direct exposure to innovative alteration. Economic downturns, industrial adjustments, and market competition forces have extended the time between graduation and the first job experience [2]. However, graduating and then having a process of getting employment thereafter this leads to psychological distress, which includes anxiety, along with indecision, making students feel worthless due to the uncertainty of careers that may be available for them post-graduation [3].

The time it takes for university students to search for jobs has a range of psychological effects on them. Employment technology enables career counselling bots to integrate job market analytics, providing university students with structured guidance during their unpredictable and daunting job search process [4–5]. The extensive use of AI systems or the repeated exposure to negative data like job search duration predictions and limited job market availability results in growing helplessness together with anxiety symptoms as well as decreased motivation [6]. AI in the implementation of the career choice process works within a prescribed cultural framework that guides how students perceive employment opportunities. Since some students perceive its usefulness positively, while others perceive it negatively as unquiet [7], the AI system generates various perceptions of its impact on career paths among students from different backgrounds. This paper aims to examine how university students view the impact of AI technology on the delay in employment. Researchers utilize a combination of AI analytical tools for job market data and virtual reality (VR)-based career testing to understand the impact of these factors on students' reactions to postponed job market entry. It also measures the complete effect of AI on how student responses to delayed workforce entry are affected by other variables, including anxiety, decision-making issues, and motivation. According to [8], VR-based simulation is used with students to experience career exploration and simulated job and interview activities in a risk-free environment, allowing them to make decisions with no consequences.

1.1 Research objectives

- To assess the psychological impact of AI tool usage on university students experiencing slow employment.
- To evaluate the effectiveness of AI-driven interventions in supporting students' job search behaviors and coping strategies.
- To formulate recommendations for integrating AI tools into career support systems for enhanced student well-being.

2 LITERATURE REVIEW

2.1 The role of AI in career counseling and employment decision-making

There has been significant development in modern career counselling tools driven by AI over the last few years, where students receive precise career advice through a virtual educational platform that takes into account their abilities and personal preferences [9]. In these tools, large datasets processed by machine learning algorithms produce specific recommendations regarding job possibilities, market trends, and the required competencies. AI-powered career counselling bots that simulate listening dialogues, with the possibility to chat about choices and provide real-time, dedicated recommendations upon receiving data [10].

Research indicates that job search enhancement occurs when students utilize AI-based systems, as these systems aid students in managing complex labor market situations. [11] explains how AI career development applications utilize targeted advice to match students' qualifications with market requirements, enabling them to make more informed decisions about their career paths. Job market predictive analytics, powered by AI, provides students with essential insights regarding wage forecasts and employment pattern predictions, as well as skill requirement analysis, which supports their realistic career planning decisions [12].

2.2 Psychological impacts of slow employment

The time lapse between graduation and obtaining a job has been shown to have a significant psychological impact on students who attend university [13]. Young adults experience high vulnerability during the transition period from education to the workforce, as they must align their expectations with the demanding reality of finding employment [14]. University students face a heightened burden from slow employment because they must manage their career development alongside the evolution of their identity and the adoption of new roles [15]. Emerging AI systems designed for career advancement assistance may help alleviate work transition anxiety during periods of gradual job placement [16]. Students experience feelings of helplessness and low self-worth when AI systems analyze negative job market indicators, such as low demand and prolonged employment search durations [17].

The emotional elements of AI assistance for career decision-making remain largely unstudied at present. Research shows that emotion recognition AI functions to analyze students' emotional states during decision-making and then adjusts its suggested responses [18].

2.3 Behavioral responses to AI in career decision-making

Recent investigations examine how students react to employment insecurity by utilizing AI technology in their job search activities [9]. Behavioral decision theory demonstrates that defined decision-related information helps people make decisions with confidence [19]. AI tools provide students with enhanced clarity about the job market conditions and their career compatibility, which helps them gain empowerment.

AI systems produce both positive and negative consequences on the way students behave. Students tend to avoid active career exploration and participation when they heavily rely on AI systems, as they follow system recommendations instead of thinking independently or seeking advice from multiple sources [20]. AI systems that use strict job search algorithms limit students' creative career development and reduce their adaptability in career planning. Students who excessively depend on AI-generated recommendations through "algorithmic determinism" face risks to their career decision-making independence [21].

2.4 Cultural differences in AI usage for career decision-making

The cultural values that shape students' environments serve as the basis for their perceptions of AI and its effectiveness in careers [22]. Research indicates that cultural values influence a student's use of career-related technologies and their reliance on

such computer systems. Students from collectivistic cultural backgrounds, such as those from the Orient, utilize AI tools for career selection because they must balance family and group harmony responsibilities [23, 24]. In the case of students from individualistic cultures, they rely on AI tools to gain independence of choice and self-expression by allowing students to make independent career choices [25]. High technology acceptance among students leads them to adopt AI tools that aid in making career choices, as they perceive these tools as accurate sources of guidance [22]. However, because AI career tools need to sense local cultural variations to achieve optimal performance and availability, they must incorporate features that enable cultural adaptability.

3 METHODOLOGY

This study employs a mixed-methods approach to explore the impact of AI tools on university students' perceptions and attitudes toward slow employment, with a particular focus on the psychological and behavioral consequences of utilizing AI in career decision-making. The methodology is designed to provide a comprehensive analysis through quantitative surveys, qualitative interviews, and experimental simulations that utilize AI-driven tools, including VR simulations and emotion recognition technologies.

3.1 Research design

The study employs a mixed-methods design, integrating both quantitative and qualitative data to explore the impact of AI on university students' perceptions and behaviors regarding slow employment. The quantitative component focuses on statistical analysis of survey data to identify trends and correlations. In contrast, the qualitative component explores in-depth psychological insights through semi-structured interviews and experimental simulations.

3.2 Quantitative component

The quantitative aspect involves administering online surveys to a large number of university students. To collect information on students' use of AI tools, perceptions of slow employment, and emotional states in terms of stress, anxiety, and motivation, these surveys have been developed.

3.3 Qualitative component

The component of qualitative interviews involved a subset of participants, allowing for deeper probing into the perceptions and experiences of specific individuals.

3.4 Experimental simulations

The experimental part of the study takes the form of behavioral simulations based on the latest and most advanced AI-driven tools, such as VR simulations and

emotion recognition AI. To study how AI tools can impact the confidence, anxiety, and decision-making strategies of participants, they were exposed to various scenarios, including simulated job interviews and career counselling sessions.

3.5 Data collection

Surveys. Data collection through surveys began during Phase One to gather quantitative information about students who use AI tools and their experiences with the effects of slow employment, as well as the psychological aspects of job searching. Multiple key areas were evaluated through a designed survey instrument, which examined how frequently participants utilized career counselling bots, predictive job market analytics, and job recommendation algorithms. The survey also included standardized psychological scales to measure anxiety, stress, and motivation. Instruments such as the Generalized Anxiety Disorder 7-item (GAD-7) Scale were used to assess students' levels of anxiety. At the same time, the Job Search Self-Efficacy (JSE) Scale measured their confidence in navigating the job market. The surveys were distributed online using platforms such as Qualtrics and Google Forms, ensuring wide accessibility for students from various universities across different countries. A total of 200 university students from diverse disciplines participated in the survey, providing a broad sample of data that represented a range of experiences and perspectives.

Interviews. After the survey stage, the researcher conducted semi-structured interviews with a group of 10 participants. The selection of participants was based on the fact that they were extensive users of AI tools for making career-related decisions. These interviews were conducted to study the environmental effects that the students experienced during the period of their slow employment. Participants were asked to share their opinions on the psychological effects of low employment, such as anxious feelings and a loss of motivation. Then, students discussed how well AI tools helped reduce their anxiety and indecision, as well as their emotional response to the job search. They used recordings of the participants' replies, which they had received permission to record, for direct verbatim analysis.

Experimental simulations. To complement the survey and interview data, experimental simulations were conducted using VR technology. The VR simulations were designed to immerse participants in realistic job market scenarios and capture their emotional and behavioral responses in real-time. These simulations provided a dynamic and interactive environment where participants engaged with AI-powered career guidance systems, participated in simulated job interviews, and made career decisions in a controlled yet immersive setting.

3.6 Data analysis

Quantitative analysis. SPSS was employed as a powerful statistical tool for analyzing the quantitative data, which are mainly derived from survey outputs. To summarize the data and survey question answers on the business of AI tools and slow employment trends, along with psychological states, a descriptive statistical method was employed as the initial step. By conducting a correlation evaluation, relationships were found between the use of behavioral factors, such as psychological factors (e.g., stress), and the motivational levels of the students. The researchers performed regressions to identify which factors impacted the student's psychological well-being. It analyzed how students respond psychologically to using AI tools and slow employment views, as well as other characteristics of the population.

Qualitative analysis. While thematic analysis is employed to identify the psychological and emotional outcomes of slow employment, various techniques are used to achieve this goal. Thematic analysis was applied to the group interview data to identify main themes that represented common psychological reactions and experiences. Using the method as a means to investigate specific details of students' perspectives regarding the use of their AI tool, as well as their management of slow employment situations, is a suitable approach. The examination demonstrates that it makes sense for researchers to perceive that students view AI as either helpful assistance or additional pressure, depending on the remainder of their academic pursuits.

Behavioral and emotional analysis. An analysis of AI-based sentiment analysis and emotion recognition methods was conducted using experimental data collected from virtual job market scenarios that involved the engagement of AI tools. This ability to track how emotions shift during decision-making is only related to neutral information about how AI tools affect participant emotions. Experimental simulations in VR environments were developed to gain an understanding of the emotional responses and behavioral patterns of students during workplace decision-making tasks. While participants were interviewed with AI career counselling tools in simulated job interviews, their expressions, voices, and body language were observed by AI emotion recognition systems.

4 FINDINGS

4.1 Quantitative analysis

Through quantitative research, this study establishes statistical evidence regarding the connections between university students' use of AI tools and their evaluation of employment delays, as well as the psychological effects they experience. This survey was conducted among 200 students from diverse academic backgrounds at the university via an online questionnaire. The primary goal of quantitative research is to investigate how young students utilize AI tools and their psychological variables related to anxiety and stress, as well as motivational aspects, in relation to their understanding of employment market constraints. The research questionnaire included specific questions that measured which AI tools students utilized, including career counselling bots, predictive job market analytics, and job recommendation algorithms. The study instrument included validated psychological rating methods, such as the GAD-7, to evaluate anxiety levels, and the JSE to measure students' job market proficiency.

Table 1. Descriptive statistics

Variable	Mean	Standard Deviation (SD)	Minimum	Maximum	Range	Skewness	Kurtosis
AI Tool Usage (1–5)	3.45	1.2	1	5	4	0.14	−0.58
Anxiety (GAD-7 Score)	10.3	4.85	1	21	20	0.35	0.42
Stress Level (1–5)	3.18	0.85	1	5	4	−0.1	−0.48
Job Search Self-Efficacy (JSE)	3.72	0.95	1	5	4	−0.2	−0.35
Motivation Level (1–5)	3.6	1.05	1	5	4	−0.15	−0.55

Table 1, which contains descriptive statistics, presents essential information about the study variables, including both AI tool adoption and the measured variables of anxiety, stress, job search self-efficacy, and motivation levels.

Table 2. Correlation matrices

Variable	AI Tool Usage	Anxiety (GAD-7 Score)	Stress Level (1–5)	Job Search Self-Efficacy (JSE)	Motivation Level (1–5)
AI Tool Usage	1	-0.45**	-0.38**	0.58**	0.50**
Anxiety (GAD-7 Score)	-0.45**	1	0.60**	-0.47**	-0.40**
Stress Level (1–5)	-0.38**	0.60**	1	-0.50**	-0.42**
Job Search Self-Efficacy (JSE)	0.58**	-0.47**	-0.50**	1	0.65**
Motivation Level (1–5)	0.50**	-0.40**	-0.42**	0.65**	1

Note: Statistical significance from two-tailed tests: *p < 0.10, **p < 0.05, ***p < 0.01.

The correlation matrix shows the connection between AI tool usage, anxiety levels, stress measurements, self-efficacy during job searches, and motivation (refer to Table 2). A higher level of AI tool usage is associated with decreased levels of anxiety ($r = -0.45$) and stress ($r = -0.38$). The study indicates that students who use AI tools experience stronger job search self-efficacy ($r = 0.58$) and motivation ($r = 0.50$) simultaneously. Students who demonstrate job search self-efficacy, along with motivation, maintain a solid, positive relationship ($r = 0.65$), indicating that strong confidence leads to increased job search motivation. Anxiety levels have a positive correlation with stress measurements, which demonstrates that higher levels of stress result in increased anxiety ($r = 0.60$).

Table 3 shows the summary of model indicating $R^2 = 0.48$ and an adjusted R^2 of 0.46, indicating moderately fit. However, the F-statistic value of 15.67 with a p-value of 0.000 confirms that the overall model is highly significant.

Table 3. Model summary

Model	R-Squared	Adjusted R-Squared	Standard Error	F-Statistic	p-Value
Model 1	0.48	0.46	1.25	15.67	0.000**

Table 4. Regression coefficients

Predictor Variable	Coefficient (B)	Standard Error	t-Value	p-Value	95% Confidence Interval (Lower)	95% Confidence Interval (Upper)
Constant	14.88	0.268	55.619	0	14.352	15.407
AI Tool Usage	-0.368	0.053	-6.983	0	-0.472	-0.264
Stress Level	0.319	0.053	6.072	0	0.216	0.423
Job Search Self-Efficacy	-0.526	0.05	-10.421	0	-0.626	-0.427

Table 4 presents a significant statistical correlations between AI usage and stress ratings, as well as job search self-efficacy and anxiety levels among university students experiencing employment delays. The study indicates that a higher level of AI tool usage is associated with lower anxiety levels ($B = -0.368$, $p < 0.001$), as students utilize these tools to mitigate job search uncertainty. People with greater stress levels experience higher anxiety rates ($B = 0.319$, $p < 0.001$) as a consequence of the psychological pressure from slow employment. Students who demonstrate

higher confidence in their job search practices experience the lowest levels of anxiety ($B = -0.526, p < 0.001$). The study findings indicate that enhancing self-efficacy, combined with improved career support platforms provided by AI, would reduce stress-related psychological problems among students seeking employment.

Table 5 shows that variance inflation factor (VIF) values for AI tool usage, stress level, and job search self-efficacy are all close to 1, indicating no multicollinearity among predictors. The higher VIF for the constant (13.06) is not a concern, as collinearity diagnostics primarily apply to explanatory variables. Overall, the model is free from multicollinearity issues.

Table 5. Multicollinearity test (VIF table)

Predictor Variable	VIF
Constant	13.06
AI Tool Usage	1.01
Stress Level	1
Job Search Self-Efficacy	1.01

The study model proves effective in studying the connection between AI tool usage and psychological elements, as well as student anxiety, in university settings.

4.2 Qualitative analysis (thematic analysis)

Overview of themes. Thematic analysis of the interview data revealed four key themes related to the psychological and emotional effects of slow employment and the role of AI tools in students' job search experiences. (1) Emotional responses to slow employment emerged as a dominant theme, with students reporting feelings of anxiety, frustration, and uncertainty about their career prospects. (2) The perceived effectiveness of AI tools highlighted mixed perspectives. Some students found AI tools helpful in reducing stress by providing job recommendations and market insights, while others felt overwhelmed by inaccurate or impersonal suggestions. (3) AI and Decision-Making Confidence reflected how students either gained confidence in their job search strategies through AI-generated insights or struggled with over-reliance on AI for career decisions. Lastly, Coping Strategies and Adaptability (4) examined how students utilized AI tools in conjunction with personal strategies, such as networking and self-directed learning, to manage employment-related stress and regain control over their job search process. These themes collectively provide a deeper understanding of how AI influences students' emotional resilience and decision-making in the context of slow job market growth (see Table 6).

Table 6. Identified themes

Theme	Description
Emotional Responses to Slow Employment	Students expressed anxiety, frustration, and uncertainty due to delays in securing employment.
Perceived Effectiveness of AI Tools	Mixed perspectives on AI tools. Some found them helpful for job search insights, while others felt they lacked personalization.
AI and Decision-Making Confidence	AI tools influenced decision-making confidence, with some students feeling more assured while others struggled with over-reliance.
Coping Strategies and Adaptability	Students combined AI tools with personal strategies, such as networking and self-learning, to manage job search stress.

Emotional responses to slow employment. The emotional responses to slow employment emerged as a dominant theme in the qualitative analysis, with participants describing a range of psychological effects, including anxiety, frustration, and uncertainty. Respondents shared how delays in securing employment affected their mental well-being, confidence, and overall motivation. The perception that effort does not yield positive outcomes often results in reduced job search persistence.

4.3 Behavioral and emotional analysis

This study conducts a behavioral and emotional evaluation that uses data to analyze the effects of AI tools on students' emotional states, decision-making processes, and psychological reactions during their job search activities. A virtual job market simulation model, combined with AI sentiment analysis technology, measured participants' changing emotions as they used AI career counselling and recommendation tools and conducted virtual interviews. The study design provided detailed insights into how AI affects people's mental processes during the career selection process. These AI systems, which measure emotions, tracked participants through facial expressions, vocal qualities, and bodily signs to pick up major emotional signals, including tension, self-assurance, aggravated reactions, and feelings of comfort and doubt. Sentiment analysis tools identified three category patterns to analyze participants' verbalization as positive, neutral, or negative, providing in-depth insight into their cognitive-emotional responses. The study revealed changing emotional expressions triggered by AI interactions during various phases of decision-related activities.

People displayed apprehension and uncertainty at their initial encounter with AI job search tools due to doubts about the accuracy of algorithmic recommendations. Participants displayed physical signs of stress, such as elevated heart rate variability, while exhibiting tension-related micro-expressions during their first AI encounters, which verified the conclusions [22] presented about high-risk human-AI interactions causing stress. The participants exhibited varying emotional reactions as their interaction with AI tools increased.

A select number of participants became frustrated with AI tools because they generated both useless and unhelpful and broad job recommendations. Respondent 9 stated that initial concerns about AI dependence intensified after using the AI system because it was unable to fully grasp its professional targets. Studies by [23] demonstrate that AI systems with unclear operation or incomplete comprehension often create unnecessary decision-making challenges contrary to their original purpose.

Table 7. Changes in emotional state before and after AI interaction

Emotional State	Before AI Interaction (%)	After AI Interaction (%)
Anxiety	62%	38%
Confidence	30%	55%
Frustration	45%	50%
Relief	20%	40%

Table 7 shows the changes in emotional state before and after interaction with AI and it demonstrates participant's emotional transformations throughout the evaluation process. The extent of anxiety suffered by users dropped dramatically

from 62% to 38% during their interaction with AI platforms. The level of confidence increased substantially from 30% to 55% during the study period. The percentage of frustrated participants rose slightly to reach 50% despite the enhancement of AI systems. The percentage of people experiencing relief topped 40% after AI doubled its initial value of 20%, which reveals the positive effects of AI systems in assisting career path decisions. The data in this table indicates that AI tools generated a combination of positive and minor adverse impacts on participant emotional responses.

Table 8 findings reveal a mixed emotional trajectory in participants' interaction with AI recommendations. While 62% initially experienced anxiety and skepticism, confidence in AI-supported decision-making grew substantially (from 30% to 55%), and relief doubled (20% to 40%) as AI clarified career pathways. However, a slight rise in frustration with AI's limitations (45% to 50%) highlights ongoing concerns about the perceived impersonality and inaccuracy of AI job recommendations.

Table 8. Key findings from AI-driven sentiment and emotion analysis

Key Finding	Description
Initial Anxiety and Skepticism Toward AI Recommendations	62% of participants experienced initial anxiety; biometric data showed elevated heart rates and facial tension.
Confidence Growth in AI-Supported Decision-Making	Confidence increased from 30% to 55%; participants engaged more positively with AI-generated job insights.
Persistent Frustration with AI Limitations	Frustration increased slightly from 45% to 50%; AI job recommendations were perceived as impersonal or inaccurate.
Relief as AI Provided Career Clarity	Relief doubled from 20% to 40% as AI refined job preferences and improved clarity in career pathways.

5 DISCUSSION

5.1 Discussion on quantitative findings

This study, through quantitative methods, reveals that AI tool usage produces notable connections to psychological responses of anxiety together with stress and motivation levels. UI models establish essential roles as they influence how students experience their job-hunting period. The negative relationship between student usage of AI tools and their anxiety levels represents a correlation value of -0.45 , which reaches statistical significance at $p < 0.01$. When students use AI tools, they become more motivated, as indicated by a positive relationship ($r = 0.50$, $p < 0.01$), which demonstrates how these tools help students maintain control over their career direction. According to the regression analysis, the use of AI tools demonstrates a negative correlation with anxiety levels ($p < 0.001$; $B = -0.368$), while stress levels show a positive correlation with anxiety levels ($p < 0.001$; $B = 0.319$). Higher levels of job search self-efficacy are associated with lower student anxiety, as indicated by the negative relationship found in the study ($B = -0.526$, $p < 0.001$). Better self-efficacy needs to be supported through customized AI technologies combined with career support programs. Student frustration increased slightly, from 45% to 50%, when using AI recommendations, as these suggestions might affect students' desired career paths. AI system optimization is crucial because users frequently experience dissatisfaction with generic job recommendations that fail to meet their specific career requirements.

5.2 Discussion on qualitative (thematic analysis) findings

The qualitative findings, based on a thematic analysis of interviews, provide a more profound and nuanced understanding of the emotional and psychological effects of AI tools on students' job search experiences. Four key themes emerged from the interviews: emotional responses to slow employment, perceived effectiveness of AI tools, AI and decision-making confidence, and coping strategies and adaptability. Students reported feeling anxious and frustrated due to the slow pace of employment, reflecting the psychological strain experienced during prolonged job searches. Respondent 1's statement, "Every rejection email makes me feel more anxious about my future," aligns with the broader literature that links job search stress to anxiety and self-doubt [18].

The theme of decision-making confidence revealed that AI tools could either enhance or diminish students' self-assurance in making career decisions. While some students felt more confident after receiving personalized AI recommendations, others felt overly reliant on the technology, thereby undermining their independent decision-making abilities. It aligns with the research by [17], who highlights the risk of over-reliance on AI, which can hinder students' ability to evaluate career options critically. The 'Coping Strategies' theme highlighted the adaptive approaches that students employed, combining AI tools with personal efforts, such as networking and skill development, to navigate the slow employment growth. This theme aligns with the findings of [26], who emphasize the importance of human interactions and self-initiated efforts in the job search process. The integration of AI tools with personal strategies not only helped reduce anxiety but also empowered students to take proactive control of their career paths, aligning with the findings of [22] regarding the significance of reskilling and upskilling in today's job market.

5.3 Discussion on behavioral and emotional analysis

Real-time student emotional responses emerged from behavioral and emotional analysis through AI-based sentiment analysis and emotion recognition systems during their interactions with the AI tool. AI simulations demonstrated student emotional reactions by revealing that students suspected and felt anxious at the beginning of their interaction with AI job search tools. The emotional landscape of users changed when they devoted more time to working with the tools. Some students experienced emotional improvement and increased confidence, while others remained frustrated because the AI-generated job suggestions were not suitable for their needs. The survey data demonstrate that AI career guidance necessitates advanced systems to deliver individualized and transparent information that aligns with user context. AI tools in future developments should incorporate emotion-aware feedback functions, as this will help users meet their psychological needs more effectively.

5.4 Practical implications

The study's results have several crucial practical implications for university institutions, career counselling organizations, and AI programming teams. AI tools introduced into university career centers must feature personalized career guidance and maintain transparency, as these aspects help prevent student dissatisfaction

with the system. AI developers need to enhance AI tools by equipping them with emotional capabilities, enabling them to deliver appropriate psychological feedback throughout all job search sessions. The integration of AI learning systems alongside education on building professional networks and boosting self-confidence will help students better manage employment delays and make informed career choices. The combined methodology will enable certain AI technologies to assist human professionals rather than replace their support functions, thereby delivering better career assistance to students.

6 CONCLUSION

The study results reveal important findings about the effects of AI tools on college students' employment-related emotions, highlighting both the advantages and disadvantages of these tools. Results demonstrate that AI tools help students decrease anxiety while increasing their confidence in career choices and gaining clarity in decision-making. However, students encounter difficulties with specialized options, emotional support, and excessive dependency on AI tools. Universities and career services should implement AI tools with human supervision, as well as teach emotional intelligence to AI systems, to develop a comprehensive career development system with a human touch. Students require a cohesive approach that balances the efficiency of AI with the empathy and personalization of human counsellors to improve their job market navigation capabilities through enhanced confidence and resilience levels.

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