ISSN:2790-1661 Volume-14-(2025)

Research on the Prospect of Enterprise Human Resource Management under the Stimulation of New-Generation Artificial Intelligence Technology

Yuanzhu Zhang

Xiamen Institute of Technology, Xiamen, 361021, China

Abstract. AI technology represents a new focal point in international competition, a new engine for economic development, and a new opportunity for social construction. At the same time, its uncertainties also bring challenges. Based on this, this study will design empirical research tools in combination with the stress cognitive appraisal theory, collect data through questionnaire surveys, and analyze the prospects and future of corporate human resource management under the influence of the new generation of AI technology. Through empirical research, this study has found that intelligent technological innovation may, to a certain extent, affect employees' cognitive appraisals. The situation of cognitive appraisals in the intelligent era will significantly influence employees' creativity, and employees' cognitive appraisals in the intelligent era may be related to other external factorsr.

Keywords: Artificial Intelligence Technology; Enterprise Human Resource Management; Development Prospects.

1. Introduction

The rapid development of the new generation of artificial intelligence (AI) technology can be regarded as a product spawned by Industry 4.0 (Mijwil et al, 2023). As AI has generally influenced the manufacturing and production of enterprises, some phenomena of job substitution have emerged. For example, there are conflicts between the intelligent driverless service "Luobo Kuaipao" and traditional online car-hailing services and taxis. AI is capable of performing tasks that were previously done by humans. Therefore, in some industries with a high degree of AI involvement, the phenomenon of job substitution is quite prominent (Idrisi, Geteye & Shanmugasundaram, 2024). In fact, job substitution often occurs in the context of the application of new technologies, and the human rights issues arising from job substitution have also been the focus that existing research attempts to reveal (Van Der Ploeg & Vanclay, 2018). Thus, it can be predicted that the deep involvement of AI technology in the corporate management scenario will stimulate the emergence of new and more complex human resource management problems.

The increased degree of AI involvement has undoubtedly brought about many crucial changes in the workplace environment. Therefore, to address the human resource management issues brought about by AI, the new job opportunities created in emerging industries may consider reconciling the conflicts between humans and intelligent machines and promoting their cooperation. For human resource managers, dealing with the impact of AI has already become a key task (Aunadi & Reyad, 2024). For example, in the context of corporate management in China, applications such as DingTalk have already integrated Alibaba's AI model and are equipped with AI assistants, which undertake some human resource management tasks with strong periodicity. Existing research also starts from the educational scenario and argues that educational scenarios with a high saturation of AI technology may stimulate the emergence of a new series of problems. For instance, the authoritative role played by teachers may be challenged (Gentile, Città, Perna, et al., 2023).

Overall, AI has deeply penetrated our daily lives and is involved in various scenarios ranging from learning to working. In recent years, AI has made several technological advancements. The development of generative AI technology has greatly improved the efficiency of language processing, and the popularization of these complex language models has also changed the criteria for human resource management to evaluate talents (Jain, Khare, Goel, et al., 2023). For example, under the

impetus of enterprises such as OpenAI, technological products like ChatGPT have rapidly achieved version iterations. The collision between humans and machines will also be more common in the workplace environment. With the continuous increase in the degree of intelligence, the phenomenon of job substitution will occur in more job positions (Jumaev, 2024). Therefore, the key issues of this study are: with the frequent occurrence of job substitution phenomena stimulated by the new generation of AI technology, how can we utilize the stress cognitive appraisal theory, and what is the prospect of corporate human resource management? How can we analyze and study the series of impacts brought about by AI technology?

2. Research Review & Hypothesis

2.1 Theoretical Foundation: Stress Cognitive Appraisal Theory

As a commonly employed theoretical model in the fields of management and psychology, the Stress Cognitive Appraisal Theory underscores that different individuals are influenced by stressors to varying extents. According to this model, four questions can be formulated: "What is cognitive appraisal?", "What factors influence cognitive appraisal?", "How do individuals cope with stressors?", and "What outcomes do stressors produce?" These questions are designed to investigate and clarify the stress situations perceived by employees. In some existing empirical studies, the Stress Cognitive Appraisal Theory has been utilized to assess various types of stress perceived by employees, such as technological changes, job substitution, and workplace bullying. For instance, in the case of workplace bullying, during the process of employees experiencing stress, psychological capital is regarded as a variable that plays a crucial moderating role (Majeed & Naseer, 2021).

In this investigation, the application and popularization of the new generation of artificial intelligence (AI) technology in certain regions of interest to this study may have a direct impact on the corporate management environment. Returning to the cognitive appraisal of stressors within the framework of the Stress Cognitive Appraisal Theory, it primarily encompasses primary appraisal and secondary appraisal, among others. Meanwhile, individual and environmental factors that affect cognitive appraisal are also significant considerations. Subsequently, the theory also explores the possible ways in which individuals respond to stressors. Finally, social function, mental state, and physical health are considered important variables for evaluating stressors. Therefore, in this study, the significance of variables such as cognitive appraisal has been fully recognized by the researchers, and they play an important mediating or moderating role.

2.2 Research Hypotheses

Against the backdrop of technological innovation, the model of corporate management is constantly evolving. Employees, as the main subjects threatened by the job substitution effect, their perception of stress will also influence the enterprise's judgment and decision-making regarding the introduction of intelligent devices. The job substitution effect triggered by the introduction of intelligent technology will impose stress on employees' work. For example, the substitution of traditional news anchors by AI hosts means that news anchors will inevitably face the impact of intelligent devices and even the crisis of having their jobs replaced. In this context, the primary stressor for employees in the corporate management scenario is technological innovation. At the same time, the application of AI technology also provides significant assistance and support to employees. Some basic document editing and data processing tasks can be swiftly accomplished with the aid of AI, and algorithmic decision-making with the involvement of artificial intelligence technology can effectively enhance employees' sense of procedural justice (Pei J, Liu S, Zhong C, et al., 2021). After the introduction of artificial intelligence technology, there will be certain changes in the cognitive appraisal of employees, and this phenomenon will be more pronounced, especially when artificial intelligence technology devices specifically enhance document processing capabilities (Davenport, 2018). Therefore, this study formulates the following hypothesis:

Hypothesis 1: Intelligent technological innovation has a moderating effect on cognitive appraisal.

Currently, in the corporate management scenario, there have been relatively abundant attempts to analyze the value and significance of artificial intelligence systems for employee management. Artificial intelligence based on machine learning provides a foundation for the intelligent management of employees at the technical level, further enhancing the efficiency of corporate management. Hence, existing research emphasizes that the academic trend of studying the replacement of humans by artificial intelligence, job substitution, and the reshaping of corporate management relationships is undergoing a steady upward trajectory (Haefner, Wincent, Parida, et al., 2021). Artificial intelligence technology plays an evident role in promoting the intelligence of the management system and improving management efficiency. It can effectively empower employees' innovative practices (Füller, Hutter, Wahl, et al., 2022). Then, in the context of intelligent robots replacing employees, employees' creativity will also be influenced by their cognitive appraisal, and employees' innovative behaviors will be affected accordingly (Rampersad, 2020). Therefore, this study deems it appropriate to formulate the following relevant hypothesis:

Hypothesis 2: Cognitive appraisal can significantly influence employees' creativity.

In light of the current reality that corporate management places great emphasis on creative management and the stimulation of creativity, the promoting effect of artificial intelligence on creativity has already been recognized by corporate managers and scholars in this field (Truong & Papagiannidis, 2022). Even over the past decade, the construction of intelligent management systems within enterprises has been a rather significant academic topic in this field. Existing research has analyzed the specific role of intelligent management systems in promoting employees' innovative behaviors, starting from case studies of AI-enabled systems (AIS) (Verma & Singh, 2022). From a management perspective, employees' behaviors are closely associated with their cognitive appraisal levels, yet there is still a lack of empirical research evidence to evaluate the specific nature of their impact relationship. During the process of introducing artificial intelligence technology into the corporate scenario, existing research has highlighted that artificial intelligence technology plays an important "double-edged sword" role in the aspect of employee motivation (Liang, Guo, Shu, et al., 2022). In the process of specific analysis, the "pressure" generated by artificial intelligence technology centrally reflects the negative impacts that employees encounter during technological innovation (Yin, Jiang & Niu, 2024). Therefore, this study formulates the following hypothesis:

Hypothesis 3: Cognitive appraisal has a significant mediating effect.

Overall, this study corroborates the research hypotheses through a questionnaire survey and provides a relatively comprehensive empirical testing process. Recent research indicates that employees can rapidly obtain the support of intelligent technology devices in an intelligent technology environment. Employees can regard artificial intelligence technology as an important tool to regulate their creative behaviors (Wu, de Jong, Raasch, et al., 2020). Just as existing research has suggested, in the current corporate management scenario, intelligent technology devices not only exert pressure on employees but also play a crucial motivating role in employees' innovative behaviors, driving further creative production. In the process of designing the questionnaire, this study has fully considered the role of the research hypotheses, conducted thorough deliberation and analysis of the specific connotations of each hypothesis, and provided important empirical research evidence for further discussion. As a conclusion, this paper contends that by integrating some necessary empirical research considerations, important evidence can be provided for theoretical analysis.

3. Methodology and Findings

3.1 Questionnaire Survey Method

The questionnaire survey is an investigation method that collects data by designing questions according to the specified background and needs, using the preparation and distribution of

questionnaires as tools. It is one of the most commonly used survey methods at present. Compared with other social survey methods, the questionnaire survey method has lower validity. However, some researchers have indicated that compensating for the deficiencies of the questionnaire survey during the process of operationalization can address the issue of insufficient validity (Feng X, 1994).

According to existing research, the approach to addressing careless responses in questionnaire surveys is to implement pre-survey control. The control methods are mainly divided into two categories: The first is to reduce the difficulty of the questionnaire tasks. Common means include adjusting the wording and length of the questionnaire, which can enable respondents to better understand and provide clear answers. The second is to enhance the motivation for respondents to answer. Common methods include imposing external rewards and punishments, asking respondents to promise to answer carefully, and providing feedback to increase social interaction (Zhong X, Li M, & Li L, 2021).

During the process of this study, the design of the questionnaire mainly relies on the Stress Cognitive Appraisal Theory. The basic framework of the questionnaire is constructed according to its theoretical model, and targeted suggestions for improving the questionnaire are provided. At the same time, in order to improve the quality of the responses to the questionnaire, this study actively adjusts the wording and length of the questionnaire and promotes social interaction, to enhance the reliability and validity of the questionnaire survey method.

3.2 Fingdings

3.2.1 Analysis of the Results of the Questionnaire Survey

During the preparation and distribution of the questionnaire, this study adopted the snowball sampling method to obtain respondents, and a total of 120 valid questionnaires were obtained through successive referrals. After a simple data collation, this paper found that more than 50% of the samples among the respondents selected "female", more than 30% of the samples were aged between 21 and 30 years old, the proportion of respondents with educational attainment of "senior high school" was 45.83%, and at the same time, the proportion of respondents from "urban areas" was 56.67%.

Table 1 Basic Demographic Characteristics（N=120）

Appellation	Selection	Frequency	Percentage	Cumulative
Gender	Female	63	52.50	52.50
	Male	57	47.50	100.00
Age	Under twenty-year	17	14.17	14.17
	From 21 to 30 years	37	30.83	45.00
	From 31 to 40 years	33	27.50	72.50
	From 41 to 50 years	18	15.00	87.50
	From 51 to 60years	10	8.33	95.83
	Above 61 years old	5	4.17	100.00
Educational level	Senior high school	55	45.83	45.83
	Undergraduate	35	29.17	75.00
	Postgraduate	16	13.33	88.33
	Doctor	5	4.17	92.50
	Else	9	7.50	100.00
Area of origin	City	68	56.67	56.67
	Village	52	43.33	100.00
Be willing to use artificial intelligence to assist with work	Willing	112	93.33	93.33
	Unwilling	8	6.67	100.00
	Yes	96	80.00	80.00

Appellation	Selection	Frequency	Percentage	Cumulative
Artificial intelligence will be an important	No	24	20.00	100.00
Sum up		120	100.0	100.0

This study found that the reliability coefficient value of the survey instrument used in this survey is 0.882, which is greater than 0.8. Therefore, it indicates that the reliability quality of the research data is high. Regarding the "alpha coefficient when an item is deleted", when any item is deleted, the reliability coefficient does not increase significantly. Thus, it shows that the items should not be deleted. Concerning the "Corrected Item-Total Correlation (CITC) value", the CITC values of all analysis items are greater than 0.4, indicating that there is a good correlation among the analysis items. Meanwhile, it also demonstrates a good level of reliability. The reliability coefficient value of the research data is higher than 0.8. Taken together, it indicates that the reliability quality of the data is high and the data can be used for further analysis.

Table 2 Results of the Reliability Test

Item count	Sample size	Cronbach α coefficient
9	120	0.882

In terms of validity, through calculation, it is found that the commonality values corresponding to all research items in this survey are higher than 0.4, indicating that the information on the research items can be effectively extracted. In addition, the Kaiser-Meyer-Olkin (KMO) value is 0.916, which is greater than 0.6, suggesting that the data can be effectively used to extract information. Moreover, the variance explanation rate of one factor is 51.586%, and the cumulative variance explanation rate after rotation is 51.586%, which is greater than 50%. This implies that the information on the research items can be effectively extracted. Finally, please combine the factor loading coefficients to confirm whether the corresponding relationship between the factors (dimensions) and the research items is consistent with the expectations. If it is consistent, it indicates that there is validity; otherwise, readjustment is required. When the absolute value of the factor loading coefficient is greater than 0.4, it indicates that there is a corresponding relationship between the option and the factor.

Table 3 Results of the Validity Test

KMO value		0.916
Bartlett's Test of Sphericity	Approximate Chi-square	407.603
	df	36
	p-value	0.000

Overall, this survey has obtained a sufficient number of respondents, and the reliability and validity of the survey instrument have also shown good performance. The results of this survey are authentic and valid, with high representativeness. They can reflect the actual situation and major problems of enterprise management with the intervention of artificial intelligence technology, and can help us draw valuable analytical conclusions.

3.2.2 Verification of Research Hypotheses

Table 4 Results of the Linear Regression Analysis (N=120)

	Unstandardized Coefficients		Standardized coefficient	*t*	*p*	Collinearity Diagnosis	
	B	Standard Error	*Beta*			VIF	Tolerance
constant	1.149	0.172	-	6.667	0.000**	-	-
The innovation of intelligent technologies has brought convenience to my work.	-0.064	0.043	-0.180	-1.497	0.137	1.767	0.566

	Unstandardized Coefficients		Standardized coefficient	*t*	*p*	Collinearity Diagnosis	
	B	Standard Error	*Beta*			VIF	Tolerance
I will entrust some of my work to artificial intelligence.	0.002	0.044	0.004	0.035	0.972	1.683	0.594
Do you think that artificial intelligence tools can significantly improve work efficiency?	-0.000	0.044	-0.000	-0.004	0.997	1.805	0.554
Do you think that artificial intelligence can free employees from laborious tasks and create greater benefits?	0.049	0.043	0.139	1.127	0.262	1.851	0.540
Do you think that artificial intelligence has brought opportunities to the work of ordinary employees?	-0.074	0.041	-0.214	-1.813	0.073	1.706	0.586
If artificial intelligence technology becomes more mature, bosses will be more inclined to use machines to complete the work.	0.032	0.040	0.092	0.808	0.421	1.580	0.633
Do you think that artificial intelligence poses a threat to the job substitution of employees?	0.088	0.044	0.240	2.008	0.047*	1.752	0.571
As employees, their opinions about artificial intelligence technology influence their attitudes toward its usage.	0.026	0.041	0.078	0.632	0.529	1.864	0.537
As a boss, the analysis of artificial intelligence technology affects the willingness to use it.	-0.047	0.041	-0.138	-1.166	0.246	1.716	0.583
R^2	0.102						
Adjusted R - squared	0.028						
F	$F(9,110)=1.387, p=0.202$						
Durbin - Watson statistic	1.559						

Remarks: The dependent variable = Recognition that artificial intelligence will be an important
* $p<0.05$ ** $p<0.01$

To test "Hypothesis 1: The innovation of intelligent technology has a moderating effect on cognitive evaluation", this study processed the data using linear regression analysis. Through calculation, the R-squared value of the model is 0.102, which means that the independent variables (including the innovation of intelligent technology, the impact of artificial intelligence on work efficiency, etc.) can explain 10.2% of the reasons for the variation of the dependent variable (whether artificial intelligence will become an important employee in the future workplace). However, the model did not pass the F-test (F = 1.387, p = 0.202 > 0.05), which indicates that the overall model does not have significant explanatory power in a statistical sense. That is to say, the relationship between the independent variables and the dependent variable is not significant.

Table 5 Model Summary (N=120)

Model Summary (Intermediate Process)

R	R^2	Adjusted R - squared	Model Error: Root Mean Square Error (RMSE)	DWValue	AICValue	BIC Value
0.319	0.102	0.028	0.379	1.559	127.733	155.608

Specifically, the R-squared value of the model is 0.102, which means that the current model can partially explain (approximately 10.2%) the reasons for the variation of the dependent variable. Therefore, "Hypothesis 1: The innovation of intelligent technology has a moderating effect on cognitive evaluation" does not hold in most cases. Although the moderating effect exists, it is not significant.

Table 6 Pearson Correlation Analysis (N=120)

	Do you think that artificial intelligence tools can significantly improve work efficiency?	Do you think that artificial intelligence can free employees from laborious tasks and create greater benefits?	Do you think that artificial intelligence has brought opportunities to the work of ordinary employees?	Do you think that artificial intelligence poses a threat to the job substitution of employees?	If artificial intelligence technology becomes more mature, bosses will be more inclined to use machines to get the work done.
The innovation of intelligent technology has brought convenience to your work.	0.479**	0.478**	0.501**	0.396**	0.445**
You will entrust some of your work to artificial intelligence.	0.488**	0.486**	0.367**	0.440**	0.365**

* p<0.05 ** p<0.01

According to the data analysis results in Table 6, regarding "Hypothesis 2: Cognitive evaluation can significantly influence employees' creativity", this study suggests that the method of correlation analysis should be adopted to understand the correlation between cognitive evaluation and employees' creativity. The study found that the correlation coefficient values are all greater than 0, indicating that cognitive evaluation can significantly influence employees' creativity, and Hypothesis 2 is valid.

Table 7 Results of t-test Analysis (N=120)

The results of the t-test analysis

	Willingness to use artificial intelligence to assist in work (mean ± standard deviation)		t	p
	willing (n=112)	unwilling (n=8)		
The innovation of intelligent technology has brought convenience to your work.	3.90±1.13	4.13±0.99	-0.543	0.588
You will entrust some of your work to artificial intelligence.	3.78±1.07	3.75±1.28	0.067	0.946

The results of the t-test analysis

	Willingness to use artificial intelligence to assist in work (mean ± standard deviation)		t	p
	willing (n=112)	unwilling (n=8)		
You think that AI tools can significantly improve work efficiency.	3.87±1.11	3.88±1.13	-0.022	0.983
Do you think that artificial intelligence can free employees from laborious tasks and create greater benefits?	3.87±1.13	3.75±1.28	0.277	0.782
Do you think that artificial intelligence has brought opportunities to the work of ordinary employees?	3.50±1.18	3.25±1.04	0.584	0.560
If artificial intelligence technology becomes more mature, bosses will be more inclined to use machines to complete the work.	3.62±1.14	4.00±1.07	-0.923	0.358
Do you think that artificial intelligence poses a threat to the job substitution of employees?	3.71±1.09	3.88±1.36	-0.419	0.676

* $p<0.05$ ** $p<0.01$

According to the analysis results in Table 7, to explain "Hypothesis 3: Cognitive evaluation has a significant mediating effect", this study used the t-test to evaluate the role of relevant cognitive evaluation. Therefore, it can be seen that by using the t-test (the full name is the independent samples t-test) to study the relationship between the two, it is found that there are no significant differences among all the relevant variables. Therefore, "Hypothesis 3: Cognitive evaluation has a significant mediating effect" does not hold.

4. Discussions

To further analyze that after the intervention of intelligent devices, managers' cognitive appraisals of employees empowered by artificial intelligence will undergo certain changes, this study has cited some specific examples, including the medical industry and the logistics industry after the introduction of artificial intelligence technology, to discuss that intelligent technological innovation can influence employees' cognitive appraisals to a certain extent, but it may also fail within a certain range. For example, the construction of smart healthcare has been experimentally implemented and promoted to a certain degree in China. The main value of artificial intelligence technology is concentrated on assisting physicians in carrying out necessary smart diagnosis and treatment services. The construction of smart healthcare can utilize artificial intelligence technology to empower all aspects of diagnosis and treatment, enabling physicians to provide more accurate medical treatments (Mi Z, & Qian A, 2019). In contrast, artificial intelligence technology may play a more significant role in the logistics industry, especially in the distribution and inspection processes. The original inspection workers may be quickly replaced by artificial intelligence, and employees in the logistics industry will be affected by intelligent technological innovation in terms of stress cognitive appraisal. Couriers and sorters in the logistics industry are employees in labor-intensive industries, and their work is relatively repetitive. Therefore, AI can quickly imitate their work through machine learning and has the basic ability to replace their occupations. In some logistics enterprises with a high degree of digitization, the situation of gradually replacing occupations with artificial intelligence technology has already occurred (Liu X, & Mao W, 2021).

4.1 Intelligent Technological Innovation May Influence Employees' Cognitive Appraisals to a Certain Extent

There are significant differences in the situations of employees across different industries. For example, smart healthcare serves as a bridge connecting patients, doctors, and hospitals. Online appointment and registration can better help patients gain a deeper understanding of the medical treatment situations of hospitals and doctors. For instance, the use of the medical Internet in the context of intelligent technology applications is good proof (Yang S, Fan X, Ding S, et al., 2021). Patients can perform online operations such as registering, making appointments, paying fees, checking reports, and receiving prescriptions during the medical treatment process, which can better achieve efficient medical treatment and save the time of both doctors and patients. AI cannot replace doctors because AI can only sort out and present theoretical knowledge. Doctors, after years of training and experience accumulation, can combine practice with theory to better treat patients, while AI can only rely on theory, and as a result, it may not be able to treat patients better.

Overall, employees' stress cognitive appraisals in the intelligent era are no longer limited to the internal environment of the organization, but are more related to other external factors. For example, different from the medical industry, employees in the logistics industry in the context of the intelligent era may be significantly affected by technological innovation in terms of stress cognitive appraisal. The logistics industry requires high-intensity standby and accurate identification of item distribution, such as some warehouse distributors. Regarding high-intensity standby, AI has an ultra-long standby time of 24 hours and can work without rest, which not only meets the standby conditions, greatly reduces labor costs, but also can complete tasks accurately and efficiently and reduce human errors. And the replacement of workers by artificial intelligence has already been put into practice. From Amazon to JD.com, globally renowned e-commerce platforms have already used robots to complete tasks such as commodity handling and inventory management, and AI has been able to take a dominant position in the logistics industry.

4.2 The Situation of Cognitive Appraisal in the Intelligent Era Will Significantly Affect Employees' Creativity

The questionnaire in this survey contains relevant questions, that can relatively keenly capture employees' basic attitudes toward artificial intelligence. In fact, on currently active social media platforms, we can also see that college students preparing to enter the workplace and young people already working in the workplace all show a high interest in learning and mastering artificial intelligence technology. College students preparing to enter the workplace and young employees indeed show a high interest in learning and mastering artificial intelligence technology. College students are more familiar with AI because they often use artificial intelligence or study AI courses during their school years. For example, there is a software called Costudy, which is a self-study software. Through this software, they can study efficiently in the dormitory without having to worry about not being able to find a seat in the library. Therefore, college students tend to use AI to complete some basic learning tasks.

At the same time, some college students will participate in AI knowledge competitions to improve their abilities, so they do have some interest in learning and mastering artificial intelligence technology. Young people in the workplace are even more interested in learning and mastering AI technology. For example, with the development of the times, the status of AI itself or its application in companies is gradually increasing. Positions that can reasonably master and use AI-related technologies usually offer higher salaries, which can attract young people. They can use artificial intelligence technology to create innovative projects and enhance their professional competitiveness. Therefore, employees' creativity can be further stimulated by artificial intelligence technology. In the future AI era, the boundaries of some disciplines may also be broken. Students majoring in medicine may also learn about information science, and young people specializing in logistics management may also study some technologies.

4.3 Employees' Cognitive Appraisals in the Intelligent Era May Be Related to Other External Factors

In the process of analyzing the relationship between the explanatory variables and the outcome variables, intelligent technology devices can be regarded as an important variable, and their roles can be fully considered by researchers. However, in reality, artificial intelligence technology brings both challenges and opportunities. In the future, there will be more choices in jobs, such as new occupations like data analysts and robotics learning engineers. Secondly, many employees in companies are engaged in repetitive tasks, which prevents them from having more energy to create and improve efficiency. They will reasonably use artificial intelligence technology to solve repetitive tasks and improve efficiency. At the same time, artificial intelligence technology also brings about opportunities for ability improvement and learning. For example, the popularization of AI prompts employees to learn new skills such as programming, which also enhances their competitiveness.

In terms of cooperation, artificial intelligence technology can enable cross-disciplinary cooperation. For example, cooperation can be carried out online. AI promotes the integration of different fields, creates cross-disciplinary cooperation opportunities, and also drives the development of innovation. In conclusion, although AI brings some challenges, it also provides a large number of new opportunities for both employees and enterprises. It is mainly necessary to actively adapt to the changes of the times, seize the conveniences brought by artificial intelligence technology, and be able to use these opportunities reasonably. Therefore, it can be said that employees' cognitive appraisals in the intelligent era are related to other external factors, and are not only affected by the pressure brought about by technological innovation. For employees in the new era, especially those in industries such as the logistics industry that are affected by technological innovation, supplementing new skills is an effective way to make up for the negative effects of technological innovation and magnify the promoting effect of intelligent technology on career development.

5. Conclusion and Evaluation

5.1 Conclusion

With the deep involvement of artificial intelligence (AI) technology in the manufacturing and service industries, it has become relatively necessary to conduct an analysis and research on the prospects of corporate human resource management stimulated by the new generation of AI technology. Therefore, this study designs a questionnaire with the help of the stress cognitive appraisal theoretical model and collects data through the questionnaire survey method. It can relatively quickly obtain quantitative data with evidentiary value and verify some hypothetical conjectures based on this data.

This study explores the impact of AI technology on corporate human resource management through empirical research, focusing on analyzing the relationships among employees' cognitive appraisals, creativity, and external factors in the context of intelligent technological innovation. The research results show that although the moderating effect of intelligent technological innovation on employees' cognitive appraisals is not significant, it is understood that the impact of AI on job substitution may lead to a situation where certain positions no longer require human intervention or even disappear. However, at the same time, it will also give rise to new job positions. The progress of technology only changes the occupational structure rather than eliminating it.

Nevertheless, cognitive appraisal significantly affects employees' creativity, and employees' cognitive appraisals are also influenced by other external factors. That is to say, although intelligent technological innovation is not a necessary and sufficient condition, it can still affect employees' cognitive appraisals to a certain extent. At the same time, in the intelligent era, the situation of cognitive appraisal will significantly affect employees' creative abilities, but employees' cognitive appraisals in the intelligent era may also be related to other external factors.

5.2 Evaluation

This research, against the backdrop of the new generation of AI technology, explores its impact on corporate human resource management, especially conducting an in-depth analysis of the relationships among employees' cognitive appraisals, creativity, and external factors. The research adopts the stress cognitive appraisal theory as its theoretical foundation and collects data through the questionnaire survey method to verify three main hypotheses.

(1) The research verifies the significant influence of cognitive appraisal on employees' creativity. This result is consistent with existing research, indicating that employees' cognitive appraisals play an important role in the context of technological changes. Especially after the involvement of AI technology, employees' cognitive appraisals of the technology will directly affect their creativity and innovative behaviors. Therefore, when introducing AI technology, enterprises should attach importance to employees' cognitive appraisals and, through training and communication, help employees better understand and adapt to new technologies, thereby stimulating their creativity.

(2) he enterprises can reduce employees' stress towards AI by providing training and learning opportunities to help employees improve their skills and enhance their adaptability to AI technology. At the same time, enterprises can also adjust management strategies, optimize work processes, and reduce the negative impacts of technological changes on employees.

However, I think the research results of this article also have certain limitations. Firstly, due to the small sample size, the generalizability of the research results may be limited. Future research can expand the sample size and cover more industries and regions to improve the universality of the research results. Secondly, the data analysis method of this research is relatively simple. Future research can adopt more advanced statistical analysis methods to more accurately reveal the relationships among variables. In general, this research provides important theoretical and empirical evidence for understanding the impact of AI technology on corporate human resource management. The research results not only help enterprises better cope with technological changes but also provide a new direction for future research.

References

[1] Aunadi, M., Reyad, Z. H. (2024). The Future of Work: How HR Can Prepare for Automation and Job Displacement. 10.33774/coe-2024-71jmd.

[2] Davenport, T. H. (2018). The AI Advantage: How to Put the Artificial Intelligence Revolution to Work. MIT Press.

[3] Füller, J., Hutter, K., Wahl, J. et al. (2022). How AI Revolutionizes Innovation Management–Perceptions and Implementation Preferences of AI-based Innovators. Technological Forecasting and Social Change, 178, 121598.

[4] Gentile, M., Città, G., Perna, S. et al. (2023, March). Do We Still Need Teachers? Navigating the Paradigm Shift of the Teacher's Role in the AI Era. In Frontiers in Education (Vol. 8, p. 1161777). Frontiers Media SA.

[5] Haefner, N., Wincent, J., Parida, V. et al. (2021). Artificial Intelligence and Innovation Management: A Review, Framework, and Research Agenda. Technological Forecasting and Social Change, 162, 120392.

[6] Idrisi, M. J., Geteye, D., Shanmugasundaram, P. (2024). Modeling the Complex Interplay: Dynamics of Job Displacement and Evolution of Artificial Intelligence in a Socio-Economic Landscape. International Journal of Networked and Distributed Computing, 1-10.

[7] Jain, S., Khare, A., Goel, O. et al. (2023). The Impact Of Chatgpt On Job Roles And Employment Dynamics. JETIR, 10(7), 370.

[8] Jumaev, G. (2024). The Impact of AI on Job Market: Adapting to the Future of Work. Modern Science and Research, 3(1).

[9] Liang, X., Guo, G., Shu, L. et al. (2022). Investigating the Double-edged Sword Effect of AI Awareness on Employee's Service Innovative Behavior. Tourism Management, 92, 104564.

[10] Majeed, M., & Naseer, S. (2021). Is Workplace Bullying Always Perceived as Harmful? The Cognitive Appraisal Theory of Stress Perspective. Asia Pacific Journal of Human Resources, 59(4), 618-644.

[11] Mijwil, M. M., Hiran, K. K., Doshi, R. et al. (2023). ChatGPT and the Future of Academic Integrity in the Artificial Intelligence Era: A New Frontier. Al-Salam Journal for Engineering and Technology, 2(2), 116-127.

[12] Rampersad, G. (2020). The Robot Will Take Your Job: Innovation for an Era of Artificial Intelligence. Journal of Business Research, 116, 68-74.

[13] Truong, Y., Papagiannidis, S. (2022). Artificial Intelligence As an Enabler for Innovation: A Review and Future Research Agenda. Technological Forecasting and Social Change, 183, 121852.

[14] Ploeg, L., Vanclay, F. (2018). Challenges in Implementing the Corporate Responsibility to Respect Human Rights in the Context of Project-induced Displacement and Resettlement. Resources Policy, 55, 210-222.

[15] Verma, S., Singh, V. (2022). Impact of Artificial Intelligence-enabled Job Characteristics and Perceived Substitution Crisis on Innovative Work Behavior of Employees from High-tech Firms. Computers in Human Behavior, 131, 107215.

[16] Feng X. (1994). The Questionnaire Survey Method in the Context of Methodology. Sociological Studies, 3, 13-18.

[17] Liu X., Mao W. (2021). A Literature Review of Smart Logistics Research in the Digital Background. Logistics Technology.

[18] Mi Z., Qian A. (2019). A Literature Review of the Current Situation and Trends of Smart Healthcare Development. Chinese General Practice, 22(3), 366.

[19] Pei J., Liu S., Zhong C. et al. (2021). Can AI Algorithm Decision-making Improve Employees' Perception of Procedural Justice? Foreign Economics & Management, 43(11), 41-55.

[20] Yang S., Fan X., Ding S. et al. (2021). The Medical Internet and Smart Healthcare Management. Journal of Management Sciences in China, 34(6), 71-75.

[21] Zhong X., Li M., Li L. (2021). The Control and Identification of Inattentive Responses by Respondents in Questionnaire Surveys. Advances in Psychological Science, 29(2), 225.