Employee Perception Towards AI Based Emotion Recognition During Virtual Meetings and Interviews

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Abstract

The study focuses on understanding employee perception towards AI-based emotion recognition during virtual meetings and interviews. With the increasing use of virtual platforms in organizations, AI tools are being explored to analyze emotions through facial expressions and voice patterns. This study examines employees' comfort levels, awareness, and acceptance of such technologies. Data were collected from employees and HR professionals using a structured questionnaire, and statistical tools like Chi-square and ANOVA were applied. The findings highlight varying perceptions based on demographic and organizational factors.

Keywords: AI-based Emotion Recognition, Virtual Meetings, Virtual Interviews, Employee Perception, Human Resource Management.

INTRODUCTION

Virtual meetings and interviews have become common due to remote and hybrid work environments. Along with this shift, organizations are exploring artificial intelligence tools to support communication and engagement. AI-based emotion recognition aims to analyze human emotions during virtual interactions.

Understanding employee perception is important for the successful and ethical adoption of such technologies. This study attempts to examine how employees and HR professionals perceive AI-based emotion recognition and its relevance in virtual meetings and interviews.

OBJECTIVES

❖ To understand employees awareness of AI-based emotion recognition tools used in virtual meetings.

❖ To assess employees comfort levels when AI tracks or analyses their emotions during online meetings.

REVIEW OF LITERATURE

1. **Morris and Patel (2017)** have conducted a study on emotion recognition technology used in virtual communication platforms. The research examined the effectiveness of facial recognition and sentiment analysis tools in identifying emotions during online meetings. The study analysed employee reactions to AI-based monitoring during digital interactions. The results showed that emotion recognition tools improved communication clarity and managerial understanding of employee responses. However, some employees felt uncomfortable being emotionally analysed by AI systems. The study suggested that organisations should balance technological benefits with human sensitivity.

2. **Li and Wang (2017)** conducted a research study on AI-driven emotion detection systems and their role in virtual interviews. The study focused on analysing facial expressions, voice tone, and behavioural patterns using machine learning algorithms. The research examined how accurately AI systems identify emotions such as stress, confidence, and nervousness during online interviews. The findings indicated that AI tools provide additional insights for interviewers but should not replace human judgement. The study emphasized the importance of fairness and bias reduction in AI-based interview assessments.

3. **Sharma (2018)** examined employee perception towards digital surveillance and emotion recognition tools in organisations. The study

focused on virtual meetings conducted through online platforms where AI tools are used for behavioural analysis. The research analysed employee awareness, acceptance, and resistance towards AI-based emotion monitoring. The findings revealed that while some employees appreciated improved communication analysis, others expressed fear of excessive monitoring. The study concluded that employee perception plays a crucial role in successful adoption of AI technologies in HR practices.

4. **Brown and Smith (2018)** conducted a study on the role of artificial intelligence in Human Resource Management with special reference to virtual interviews. The research examined how AI-based emotion recognition supports HR professionals in evaluating candidates' emotional responses. The study found that AI tools enhance interview efficiency and provide structured emotional insights. However, concerns regarding data security and emotional bias were also identified. The researchers suggested that AI should be used as a supportive tool rather than a decision-making authority in HR processes.

Data Analysis and Interpretation

Table 1.1

Chi Square Analysis for Age Group of Respondents and Whether It Creates Stress Among Respondents

Null Hypothesis (H_O):

There is no significant association between age group of the respondents and stress level.

Alternative Hypothesis (H_1)

There is a significant association between age group of the respondents and stress level.

Age Group	Agree	Disagree	Neutral	Strongly Agree	Total
Below 20	6	0	10	11	27
21-25	26	6	17	5	54
26-30	11	10	21	2	44
Above 30	5	9	7	7	28
Total	**48**	**25**	**55**	**25**	**153**

Chi square calculated value	df	Chi square table value	sig	Hypothesis result
39.72	9	16.92	0.05	H_O rejected H_1 accepted

Interpretation

The Chi-square test was conducted to study 3the association between the age of respondents and their perception of stress caused by AI-based emotion recognition during virtual meetings and interviews. The calculated Chi-square value (39.72) is greater than the table value (16.92) at the 5% level of significance. Hence, the null hypothesis is rejected and the alternative hypothesis is accepted, indicating that there is a significant association between age and stress perception towards AI-based emotion recognition.

TABLE 1.2

One way anova analysis for designation of the employee and emotion during virtual interactions.

Null Hypothesis (H_O):

There is no significant association between designation of the respondents and emotion during virtual interactions.

Alternative Hypothesis (H_1)

There is a significant association between designation of the respondents and emotion during virtual interactions.

Factors	Source of variation	Sum of Squares	df	Mean Square	F value	Sig. (p)
Satisfaction with mutual fund returns	Between Groups	26.83	3	8.94	12.04	0.00
	Within Groups	110.68	149	0.74		
	Total	137.50	152			

Interpretation:

A One-Way ANOVA was conducted to examine whether there is a significant difference in employees' feelings when AI analyses emotions during virtual interactions across different designations. The calculated F value (12.04) with a significance value of $p = 0.00$ indicates that the result is statistically significant at the 5% level. This shows that employees belonging to different designations have significantly different perceptions towards AI-based emotion analysis during virtual meetings and interviews.

Findings

- The Chi-square analysis reveals a significant association between the age of respondents and their perception of stress towards AI-based emotion recognition during virtual meetings and interviews.
- Younger and middle aged employees show varying levels of agreement and neutrality, indicating mixed emotional responses to AI-based emotion analysis.
- Employees above 30 years show relatively higher levels of disagreement and concern, suggesting increased sensitivity towards emotional monitoring.
- The One-Way ANOVA results indicate a significant difference in employees' feelings towards AI-based emotion recognition across different designations.
- Employees in different organizational roles perceive AI emotion analysis differently, highlighting the influence of job responsibility and experience on perception.

Suggestion

- Organizations should create awareness programs to educate employees about the purpose and benefits of AI-based emotion recognition tools.
- HR departments should ensure transparency regarding how emotional data is collected, used, and protected.
- AI emotion recognition tools should be implemented with employee consent to reduce stress and discomfort.
- Organizations may provide training sessions for managers and HR professionals to interpret AI-generated emotional insights responsible
- Policies should be framed to ensure ethical usage of AI technologies, preventing emotional surveillance and misuse.

CONCLUSION

The study concludes that employee perception towards AI-based emotion recognition during virtual meetings and interviews varies significantly based on age and designation. While some employees view AI emotion analysis as useful, others experience stress and discomfort. The statistical results confirm that demographic and organizational factors influence acceptance levels.

REFERENCE
- **Ahmed (2024)** conducted a study on AI-based emotional analytics and its influence on virtual interview outcomes. The research focused on HR usage of emotional data for candidate evaluation.
- **Kavitha and Mohan (2024)** studied employee acceptance of AI emotion recognition in digital HR practices. The research examined demographic differences in perception and comfort levels.

❖ **Chen et al. (2024)** conducted a research study on cultural bias in AI-based emotion recognition systems. The study examined how emotional expressions differ across regions and cultures.

❖ **Suresh and Deepa (2025)** examined employee perception towards the future use of AI emotion recognition in virtual meetings and interviews. The study focused on willingness to adopt AI technologies and perceived long-term impact.