

"Navigating the Challenges: A Systematic Literature Review on the Limitations of Emotional Artificial Intelligence."

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Abstract

In recent years, notions like artificial intelligence and emotional intelligence have gained a lot of traction in the relevant literature. Artificial intelligence (AI) is thought to increase worker productivity by encouraging creative problem solving and acting as a multifunctional instrument. While much is known about AI's ability to create value through innovation, little is known about how emotional AI's limitations affect innovative work behavior (IWB). Emotional artificial intelligence (Emotional AI) has received a lot of interest as a possible tool to enhance workplace relationships, encourage employee welfare, and increase productivity. Before being widely used in the workplace, emotional artificial intelligence (AI) needs to be thoroughly considered due to its serious disadvantages, even with its potential benefits. The study looks into the primary dangers to identity and restrictions that Emotional AI poses in the workplace.....

INTRODUCTION

In recent years, emotional intelligence (EI) has gained some traction. The degree of a person's life satisfaction, professional growth, social connections, professional friendships, and engagement at work are all strongly impacted by their emotional intelligence (EI). From an organizational standpoint, Emotional Intelligence (EI) enhances workers' commitment, output, and job happiness. These results affect their level of dedication to their work and productivity. EI is especially helpful for workers and companies in communication roles (Yao et al., 2019).

Machine intelligence is another term for artificial intelligence (AI) (Russell and Norvig, 2016). Artificial Intelligence is significantly more productive and efficient in the corporate world, both digitally and physically. It became a popular subject in academic writing after the 1950s.

Artificial intelligence (AI) does more than just automate tedious tasks; it also boosts profits and enhances employee satisfaction. Chatbots that use AI also significantly increase the quality of service (Buhalis and Leung, 2018).

Emotional artificial intelligence (Emotional AI) is the term used to describe the integration of emotional intelligence into artificial intelligence systems. Emotional intelligence in AI refers to a machine's ability to recognize, understand, and respond appropriately to human emotions. AI systems that possess this ability can converse with humans in a more empathetic and human-like manner. Artificial intelligence (AI) is gradually replacing human movement and performance, data processing and analysis, repetitive physical equipment maintenance, and productive individual work performance (Chuang 2020; Malik et al. 2021). However, the body of research (Chuang 2020; Klotz 2018; Malik et al. 2021; Wilson and Daugherty 2019) indicates that by automating routine, monotonous, and uninteresting tasks, AI improves workers' talents (intuition, empathy, and imagination). There has been a lot of interest in emotional artificial intelligence (Emotional AI) as a potential tool to improve relationships at work, support employee wellness, and boost productivity. Before being widely used in the workplace, emotional artificial intelligence (AI) needs to be thoroughly considered due to its serious disadvantages, even with its potential benefits. Businesses are benefiting from the increasing use of emotional AI

in offices. However, little is known about the perceptions and experiences of workers exposed to emotion AI in the workplace. The gaps revealed that: (1) participants believed that emotional AI gravely infringed upon the privacy of highly sensitive emotional information about workers; and (2) they believed AI could be used to monitor compliance with emotional labor demands, with workers using emotional labor as a means of self-defense to preserve their anonymity. (3) There are several hazards associated with the job that employees may have to deal with, such as the possible harm that emotion AI at work could cause. This analysis, in contrast to previous reviews that often focus on the seemingly transformative benefits of AI in the workplace, first identifies the limitations of emotional AI before suggesting that the constraints could potentially encourage innovative work behavior. The study's main question is: How will people's creative job behavior in the workplace be influenced by AI limitations as opposed to its seemingly revolutionary qualities?

3. Methodology: This research paper's methodology is based on an extensive Systematic Literature Review (SLR) with the goal of fully examining the constraints of emotional artificial intelligence (AI). Finding pertinent academic resources, such as Google scholar, Scopus, and Web of Science, is the first step in this procedure. This study create a specific list of keywords and search phrases that includes things like "affective computing," "emotional AI," "limitations," "bias in AI," and "ethical concerns in AI." These will direct the methodical search procedure to guarantee the retrieval of pertinent and excellent research. In order to include the most recent developments and conversations in the area, the selection criteria for the literature will be strictly defined and will only include peer-reviewed works that have been published in the past ten years. The works that particularly address the constraints, difficulties, or inadequacies of emotional AI will be the main emphasis of the inclusion criteria. On the other hand, papers that don't directly advance this topic or don't support it with actual data will be disregarded. Each study will go through a thorough review and data extraction procedure after the literature has been chosen. Important elements like the approaches taken, the particular restrictions found, the situations in which these restrictions occur, the suggested fixes or future lines of inquiry, will all be methodically coded and examined. The goal of the analysis is to find common themes and patterns among many studies, such as the difficulties in precisely simulating human emotions, the moral ramifications of using emotional AI in practical contexts, and the possibility of bias in AI-driven emotional recognition. In addition, the evaluation will look at data privacy issues, technological limitations, and the wider social effects of emotional AI. With a focus on both its potential and its notable limits, this methodology will offer a comprehensive view of the current level of emotional AI. This research will help to a better understanding of the areas where emotional AI falls short and provide insights into areas that need more investigation and development by methodically synthesizing the corpus of available knowledge.

4. Review of Literature:

The process of educating a machine, computer, or software system to think and act like a human is known as artificial intelligence, or AI. The AI should be able to think, speak in natural language, and comprehend the intelligence of a human. Emotional intelligence is the capacity to enhance human-machine similarities so that the latter can support and understand a single person's perspective on society. Applications of AI are growing quickly, changing businesses by enhancing operations and decision-making and releasing employees from manual, monotonous, repetitive, and physical labor to more creative endeavors. Autonomous vehicles (Bridgelall and Stubbing, 2021); chatbots (Desouza et al., 2020; Go and Sundar, 2019); planning, scheduling, forecasting, and capacity planning (Sohrabpour et al., 2021); gaming, marketing, and pricing strategies (Jeon et al., 2020) are among the fields in which AI with robotics and machine learning is becoming relevant. For example, chatbots benefit from human connection to move beyond machine-like conversations, even as they assist employees in online training, customer service, and cognitive therapy (move and Sundar, 2019). Businesses are benefiting from the increasing use of emotion AI in offices. The viewpoints and experiences of workers who are exposed to emotion AI at work, however, are not well documented. The field of emotion artificial intelligence (AI) has made significant progress in monitoring worker emotion, mood, affect, and related constructs. McStay (2020) defines AI as "sense, learn about, and interact with human emotional life." This means that automated workplace surveillance is becoming more common (Zickuhr, 2021). Previous research indicates that the privacy of data subjects may be jeopardised by commercial applications of emotion AI. These applications carry the danger of data misuse and abuse, which, if taken advantage of, could cause harm to the people that emotion AI systems are intended to assist (Andalibi and Buss 2020). In addition, people interacting with emotion AI can be susceptible to

manipulation and unconsciously change how they behave (Tay and Elliot 2019). Due to employer surveillance tactics that reinforce and legitimise social inequality, these privacy hazards may be especially common in the workplace (Luke Stark, Amanda Stanhaus, and Denise L Anthony, 2020). The table highlights the limitations of emotional artificial intelligence given by different authors:

S no.	year	Authors	Basis	Limitations
1.	1997	Rosalind Picard	Complexity of Emotions	Picard outlined the early difficulties of reliably reading human emotions through computing methods in her groundbreaking work "Affective Computing." She brought up the challenges of developing algorithms that can comprehend the nuances and complexity of human emotions.
2.	2005	Sherry Turkle	Dependency of Technology and Misinterpretation of emotions	Computers and the Human Spirit," Sherry Turkle talked about how emotional artificial intelligence lacks cultural and contextual awareness. The study underlined that cultural and contextual elements have a significant impact on emotions and that AI systems struggle to appropriately comprehend these influences.
3.	2010	Jonathan Gratch	Understanding vs. Mimicking Emotions	Early in the new millennium, Gratch's research concentrated on the technological difficulties of real-time emotional processing. The research mentioned how difficult it is to achieve accurate, real-time emotion recognition and response, as well as how many computational resources are needed.
4.	2011	Sherry Turkle	Misinterpretation of Emotions	Turkle expresses worries about the possible effects of emotional AI on interpersonal relationships,

				including a decline in human empathy and a rise in the use of robots as emotional support.
5.	2012	Dylan Evans and Pierre Livet	Dependency of Emotional AI on data	An Introduction to a Debate," emotional artificial intelligence (AI) systems are not capable of fully understanding human emotions due to their limited comprehension. They stressed that the intricacies of emotional experiences are beyond the reach of present AI algorithms, which are restricted to surface-level signs.
6.	2016	Peter Robinson	Understanding of Context	Robinson talked about how emotional artificial intelligence (AI) depends on high-quality input data in his keynote address at the International Conference on Affective Computing and Intelligent Interaction. He emphasized the difficulties in guaranteeing that the data, which is used to train AI systems, is impartial and inclusive of a range of demographics.
7.	2016	Rana el Kaliouby and Rosalind Picard	Lack of Genuine Empathy	The research talks about how hard it is to build emotional AI systems that can recognize, interpret, and react to emotions in a variety of cultural contexts. A cultural concept of emotional expression might not always translate to the same meaning in another.
8.	2017	Lisa Feldman Barrett	Contextual Variability	Barrett contends that as emotions depend greatly on context and are highly

				individualised, it is difficult for AI to interpret emotions correctly using generic models.
9.	2018	Kate Crawford	Misinterpretation of Emotional Signals	Crawford draws attention to the fact that emotional AI frequently uses faulty datasets, which can result in incorrect assessments and forecasts of human emotions. Biases in the data may have an impact on these systems' dependability.
10.	2018	Meredith Broussard	Technological Limits	In his discussion, Broussard outlines how the creation of trustworthy emotional AI systems is hampered by the shortcomings in existing AI technology, such as its incapacity to comprehend context and subtleties.
11.	2018	Jaron Lanier	Reduction of Human Complexity	Lanier shows how this can result in interactions between humans and machines that are less meaningful since machines replicate human emotions without having a true grasp of them.
12.	2018	Joy Buolamwini and Timnit Gebru	Bias in Data and Algorithms	The biases in AI systems, particularly those that are employed for emotional recognition, were made public by Buolamwini and Gebru. The research emphasized the need for more inclusive and equitable data processes by demonstrating how these biases might result in unjust and discriminatory consequences.
13.	2019	Kate Crawford	Ethical Concerns and Surveillance	Concerns were voiced by Kate Crawford over the

				psychological and social effects of emotional AI. She talked about the potential behavioral changes and psychological discomfort that could result from the introduction of AI that tracks emotions.
14.	2019	Shoshana Zuboff	Disparities in Accuracy	Since these systems frequently need access to private information in order to operate well, Zuboff addresses how emotional AI might be used to violate privacy.
15.	2020	Amit S. Mukherjee	Misunderstandings and misinterpretations	The difficulties in creating emotional AI that can adjust to different cultural norms and practices are highlighted by Mukherjee, which could result in misunderstandings and misinterpretations.
16.	2020	AI Now Institute	Ethical issues	The AI Now Institute addressed privacy and ethical issues related to emotional artificial intelligence. Their research emphasized the dangers of gathering and using emotional data, including the possibility of misuse and the requirement for strong privacy safeguards.
17.	2020	Ben Shneiderman	Understanding human emotions	According to Shneiderman, many AI systems today are not built with the human-centered techniques required to recognize, understand, and react to human emotions.
18.	2020	Catherine D'Ignazio and Lauren F. Klein	Absence of Human Empathy	The authors draw attention to the moral dilemmas raised by the application of

				emotional AI, namely the ways in which it can reinforce racial and gender stereotypes.
19.	2021	Rosalind Picard	Accurate and dependable emotion recognition	Picard reaffirmed the persistent difficulties in obtaining accurate and dependable emotion recognition. She brought up the fact that, in spite of developments, Emotional AI systems are still unable to fully capture the richness and diversity of human emotions.
20.	2023	Sherry Turkle	Absence of true emotional complexity	Turkle discussed the shortcomings of emotional artificial intelligence once more, highlighting the absence of true emotional complexity and the superiority of human-to-human communication over human-AI communication in providing emotional support.

Complexity of Emotions:

Emotions have many facets and are intricate. The subtleties of human emotions, which can differ greatly depending on the situation, the culture, and the individual, are difficult for AI systems to precisely identify and comprehend. Artificial intelligence (AI) cannot feel emotions in the same manner as humans, despite its ability to mimic emotional reactions and identify emotional cues. The authenticity of interactions with emotionally intelligent AI is called into question by this, raising ethical considerations. Data is a key component of emotional AI training. The effectiveness of the system can be strongly impacted by the caliber and variety of the data. The AI may perform poorly in some situations if specific emotional expressions or cultural contexts are not included in the training data. Emotions are frequently situation-specific. Without knowledge of the larger context of a scenario, AI systems may find it difficult to appropriately read emotions, which could result in misinterpretations or improper reactions.

Dependency of Technology and Misinterpretation of emotions:

She cautions against relying too much on emotional AI, citing the possibility that people will choose the convenience of engaging with machines over in-person encounters and real human bonds. Emotional AI systems could misread human emotions or be unable to discern the subtleties of human emotions, which could result in incorrect reactions and miscommunications. Turkle contends that emotional AI has the potential to oversimplify human relationships and complicated emotions, turning rich emotional experiences into meaningless data points. The application of emotional AI presents moral dilemmas pertaining to privacy, manipulation, and the possibility of emotional exploitation. It's possible that users are unaware of the entire use of their emotional

data. Turkle talks on how people's encounters with emotional AI can affect how they see themselves and their relationships with others, which could result in a shattered sense of who they are.

4.3 Understanding vs. Mimicking Emotions:

While emotional AI systems are frequently able to identify and react to emotional stimuli, they are not fully cognizant of emotions. Without actually feeling or understanding the underlying emotions, they are able to simulate emotional reactions. AI systems may find it difficult to interpret emotional cues correctly if they don't have a thorough grasp of the particular circumstance or the history of interactions. This is because emotions are very context-dependent. It can be challenging to accurately understand emotions in real time, particularly in dynamic contexts where emotional expressions might shift quickly.

4.4 Misinterpretation of Emotions:

Emotional AI systems may misunderstand human emotions or be unable to comprehend how complex human emotional states might be, which could result in incorrect or insufficient reactions. Turkle cautions about depending too much on emotional AI because this might lead to dependency, when people seek for emotional support from machines rather than from other people, which can worsen feelings of loneliness. Concerns around permission, manipulation, and the possibility of machines using human emotions for profit are brought up by the application of emotional AI. According to this study, depending too much on emotional AI may lead to interactions with robots that lack the complexity and unpredictability of genuine human relationships, therefore diminishing the richness of the human experience.

4.5 Dependency of Emotional AI on data:

Emotional AI frequently has trouble figuring out the context of an emotion's expression. Given how closely human emotions are related to context—which includes social, cultural, and situational elements—AI may find it difficult to appropriately comprehend human emotions. Emotions in people are intricate and multidimensional. Emotional AI has the potential to misread or oversimplify emotions, which could result in improper or ineffective reactions. Ethical concerns about privacy invasion and manipulation are brought up by the use of emotional AI. The collection, utilization, and dissemination of emotional data has raised certain concerns. The caliber and variety of the training data that these systems utilize to learn are critical factors in determining how effective emotional AI is. Data biases may result in skewed emotional reactions, which would reduce the AI's applicability to a variety of demographics.

4.6 Understanding Context:

Emotional AI frequently has trouble figuring out the context of emotional expression. Artificial intelligence (AI) may find it challenging to appropriately understand human emotions due to their complexity and the influence of situational, cultural, and societal factors. Human emotions are complex and don't always manifest themselves in obvious or observable ways. It could be difficult for emotional AI to identify nuanced emotional signs like sarcasm or conflicting feelings. EAI is not a real emotional being, even though it can mimic emotional reactions. Because consumers may be aware that they are interacting with a machine rather than a sentient individual, this constraint has an impact on the authenticity of interactions.

4.7 Lack of Genuine Empathy:

Emotional AI may mimic feeling and reacting to emotions, but it is not capable of true empathy or developing human-like emotional bonds, which are crucial in a lot of social situations. An over-reliance on emotional AI may result in a decline in interpersonal relationships and emotional intelligence since people may resort to computers rather than interacting with one another when they need emotional support. The accuracy with which current technologies can identify emotions across many modalities (e.g., facial expressions, voice tone, body language) may be limited, which may result in partial or inaccurate assessments of emotional states.

4.8 Contextual Variability:

According to Barrett's hypothesis, emotions are built by the brain depending on context, culture, and individual experiences rather than being universal, hardwired reactions. Emotional AI, which frequently depends on identifying supposedly universal emotional cues like voice tones or facial expressions, may have trouble because it makes the assumption that these cues are constant across people and cultural backgrounds. Barrett contends that feelings vary depending on the situation. Because emotional AI frequently lacks the more comprehensive contextual information that humans employ to generate emotional meaning, it may be unable to

effectively read emotions. AI systems might not be able to interpret subtleties in facial expressions, such as how a single expression might convey different meanings depending on the context.

4.9 Misinterpretation of Emotional Signals:

Several limits of emotional artificial intelligence (also known as emotional AI) have been brought to light by Kate Crawford, a renowned expert in the topic of AI ethics and social ramifications, especially in her publications from 2018. Criticisms center on the moral, ethical, and practical difficulties these systems present. Crawford contends that overly simplistic and reductive representations of human emotions are frequently used in emotional AI, which might result in misunderstandings. Although emotions are complicated and situation-specific, emotional AI usually aims to correlate particular emotional states with physiological markers, vocal tones, or facial expressions. Reductionism like this can lead to erroneous conclusions and possibly negative effects.

4.10 Technological Limits :

The difficulties that modern technology faces in precisely identifying and reacting to the subtleties of human emotions are brought to light by Broussard. The study contends that although emotional AI is capable of recognizing specific emotional cues, it is unable to capture the richness and diversity of true human emotions. Broussard highlights that emotional AI is not capable of truly experiencing or comprehending emotions. Rather, it makes use of computers to model emotional reactions based on data patterns. This establishes a basic divide between the emotional experiences of humans and what AI is capable of reproducing. Emotions can be misinterpreted by emotional AI since it frequently uses data that is skewed or incomplete. Broussard draws attention to the possibility that the data used to train AI systems may not fully represent the range of human emotional responses, which could result in biased or inaccurate results. Broussard cautions against depending too much on emotive AI. The research contends that the over-reliance on technology for emotional support and understanding and the decrease of meaningful human interactions could result from the belief that AI is fully capable of understanding and responding to human emotions. Significant ethical questions are raised by the usage of emotional AI, especially in relation to consent and privacy. Broussard talks on how gathering and evaluating emotional data might result in privacy violations and perhaps harmful use of private data.

4.11 Reduction of Human Complexity:

According to Lanier, the use of emotional AI oversimplifies human emotions by turning them into manipulable and studied data points. He contends that a skewed view of emotions results from this reductionist approach's inability to fully convey the complexity and variety of the human emotional experience. Lanier is particularly worried about the exploitation of emotional AI in the context of social media and advertising. He contends that users might be used by emotional AI, which predicts and manipulates users' emotional states, frequently for monetary or political advantage. This calls into question the morality of controlling someone's emotions and taking away their agency.

Lanier talks about how emotional AI might be a factor in people's interactions becoming less genuine. Genuine human connections run the risk of being undermined by inauthentic or fake emotions mediated by AI-driven systems as they grow increasingly adept at simulating emotional reactions. Lanier draws attention to the moral conundrums raised by the gathering and examination of emotional data. He issues a warning that emotional AI has the potential to violate people's privacy by tracking and evaluating their emotional reactions—often without their knowledge or agreement. This may result in the monetization of human emotions and a loss of privacy. Lanier contends that emotional AI is still not a system that can accurately grasp or mimic human emotions, and he is dubious of the claims made by those who support the technology.

4.12 Bias in Data and Algorithms:

According to Buolamwini and Gebru's research, there are frequently noticeable biases in facial analysis algorithms, especially those that are utilized for emotion identification. When it comes to certain demographic categories, including gender and skin tone, these prejudices are very noticeable. The AI systems they examined fared worse on people with darker skin, particularly women, than they did on men with lighter skin. Results from emotional AI may be biased and/or prejudiced. The absence of diversity in the training data is one of the main causes of bias in emotional AI. Buolamwini and Gebru emphasized that these AI systems are frequently not trained on datasets that fully reflect the diversity of humankind. Concerns over the moral ramifications of using biased emotional AI systems were expressed by Buolamwini and Gebru. The research contended that these systems would worsen already-existing societal injustices and result in unfair treatment in a number of contexts, including

hiring, healthcare, and law enforcement. One significant drawback of emotional AI is the possibility that it will be applied in ways that disproportionately affect communities of color. Additionally, the researchers drew attention to the lack of openness and responsibility in the creation and application of emotional AI systems. A lot of AI models are created as "black boxes," which means that consumers cannot see into or comprehend how they make decisions. It is challenging to find and fix biases or mistakes in the systems because of this lack of transparency.

4.13 Ethical Concerns and Surveillance:

Crawford focuses on the moral dilemmas raised by the application of emotional AI, especially with regard to privacy and monitoring. The study raises grave concerns about autonomy and the possibility of abuse in surveillance scenarios by cautioning that emotional AI can be used to track and alter people's emotional states without their consent. Crawford draws attention to the intrinsic errors in emotional AI systems, which frequently misread human feelings. She contends that these systems can produce inaccurate evaluations because they are predicated on erroneous theories on the objectivity and universality of emotions. AI might misunderstand cultural displays of emotion, for instance, or it might not take into consideration the nuance and complexity of human emotional experiences. Crawford notes that, like other criticisms, emotional AI has a tendency to simplify the rich richness of human emotions to oversimplified models or categories. The study contends that this reductionist approach results in a superficial and possibly false understanding of human emotions since it ignores the contextual, cultural, and individual factors that influence how emotions are perceived and expressed. The topic of bias in emotional AI is also covered by Crawford, who points out that these systems are frequently trained on datasets that do not accurately represent the diversity of human populations. This may lead to biased emotional AI that discriminates against specific groups, especially marginalized ones, producing unfavorable results. When these algorithms are applied in delicate fields like mental health, law enforcement, or recruiting, the bias in emotional AI becomes even more problematic.

4.14 Disparities in Accuracy:

A lot of the time, datasets used to train emotional AI systems do not accurately represent the diversity of human populations. This produces skewed results, especially when it comes to underrepresented groups like women and racial minorities. For instance, because of skewed training data, these algorithms may misread emotions in persons of color more frequently. Research has demonstrated that emotional AI systems can exhibit notable discrepancies in accuracy between various demographic groups, potentially sustaining prejudice in settings such as employment, law enforcement, and medical care. While it may mimic emotional reactions, emotional AI is not able to experience or comprehend emotions in the real world. Because of this lack of authenticity, users may engage in shallow conversations, thinking they are speaking with a system that understands them when, in fact, it is only reacting to patterns found in the data.

4.15 Absence of Human Empathy:

Mukherjee emphasizes that although emotional AI is capable of identifying and reacting to emotional cues, true empathy is absent from it. AI is incapable of sensing another person's emotions, which is a requirement for empathy. This is a serious constraint for a leader because trust and cohesive team dynamics depend on genuine emotional ties. Leaders run the risk of becoming overly dependent on emotional AI systems and substituting them for their own emotional intelligence and discernment, according to Mukherjee. Because AI cannot capture the subtle human elements, leaders who rely too heavily on it may make terrible decisions. According to Mukherjee, emotional AI frequently oversimplifies the nuanced nature of human emotions. These methods miss the rich and complex complexity of human emotional experiences by reducing emotions to measurable data points.

4.16 Emotional Intelligence at Workplace:

Nearly 20% of full working days are predicted to be spent at home once the epidemic ends (Barrero et al. 2021). Chaturvedi and Singh Rathore (2021) claim that the usage of virtual wellness programmes has increased already as a result of the epidemic. Because remote working practices can cause a variety of emotional distress, the researchers point out that employers are using affective tools to counteract lower rates of productivity by workers. Langvik et al. (2021) for example, found that workers with extrovert personalities were more stressed during COVID-19 because they missed their coworkers. In a similar vein, Islam (2021) discovered that women who worked from home were more stressed because of the additional responsibilities of childcare and housekeeping. On the other hand, the effects of COVID have brought to light a decrease in highly skilled white-collar workers'

desire to go back to the traditional workplace. A notable example is Google, where a poll conducted by the firm revealed that more than half of its employees were willing to work from home permanently, with just a tiny fraction being willing to take a forced salary decrease (Hern and Kowelle 2020). Because many workers will become de facto permanent or part-time platform employees as a result of the COVID-19 disturbances, affect-sensing technologies provide businesses and employees the opportunity to benefit from the disruptions. In particular, recent research indicates that people's perceptions of emotion AI are unfavourable. Recent research indicates that people's perceptions of emotion AI in particular are unfavourable (Andalibi and Buss, 2020). Personalized interactions and higher employee engagement are only two benefits of implementing emotional AI in the workplace.

Emotional AI raises ethical questions around privacy and consent. Emotional intelligence may potentially violate employees' privacy rights because it involves obtaining and evaluating personal information about them without their express consent. Emotional AI systems are trained on data that may include biases from the workplace or society at large. This could result in biased decisions and actions, which might treat some individuals or groups unfairly. In addition, people interacting with emotion AI can be susceptible to manipulation and unconsciously change how they behave (Tay and Elliot, 2019). These constraints need to be addressed through continued study and development in order to make emotional AI more responsible and successful. Furthermore, a more complete and sympathetic support system can be developed by combining human empathy with emotional AI.

4.17 Workplace Surveillance of Workers' Interiority:

The internal states of employees are monitored before the modern technologically mediated surveillance methods. Employee privacy may be violated by the ongoing monitoring of their emotions via emotional AI surveillance. It makes workers uncomfortable and could make them feel distrustful of one another. It makes workers uncomfortable and could make them feel distrustful of one another. Workers could grow anxious about it and grow suspicious of one another as a result. Employees who believe they have to suppress their own feelings in order to avoid negative consequences may exhibit a lack of authenticity and emotional expression at work. Depending on the jurisdiction, the use of emotional AI monitoring may give rise to legal problems with data protection, employee rights, and labor law compliance. However, the workplace situation affects worker emotions (Gruenberg, 1980), and emotion identification systems don't sufficiently take this into account (McDuff, Jun, Rowan, and Czerwinski, 2019). Because of this, conclusions drawn from an AI's emotional analysis alone could be unjust or erroneous. A chilly and impersonal workplace could arise from the emphasis on emotional AI leading to fewer real human connections. Finding a balance between the benefits of emotional insights and the defence of individual rights and human connection is crucial for using emotional AI in the workplace.

4.18 Emotional privacy:

The application of emotional AI in the workplace raises serious issues about emotional privacy. Through continual observation and analysis of employees' emotions, these artificial intelligence systems has the capability to penetrate people's personal emotional space. Employees may feel exposed and uneasy if they are aware that their emotional states are being watched all the time. This invasion of emotional privacy may lead to anxiety and unease, which could negatively impact worker satisfaction and job happiness. Moreover, Emotional AI may not always be able to discern emotions correctly, which could lead to misconceptions or incorrect assumptions regarding an employee's emotional state. This could result in incorrect evaluations, conclusions, or even disciplinary measures that are based only on emotional analysis. Achieving a balance between safeguarding and honoring employees' emotional privacy and using emotional AI insights for workplace advantages is crucial. Emotional AI significantly compromises workplace emotional privacy since it continuously monitors and analyses workers' emotions. With access to sensitive and private emotional data, employers using these AI systems may be able to override their workers' emotional boundaries. Concerned that their psychological and emotional states are being watched, workers may feel exposed and insecure. As a result of this interference, people may chillingly conceal or distort genuine emotional expression, as they may do so to avoid scrutiny. Emotional AI may also read emotions incorrectly, leading to erroneous interpretations and conclusions regarding the emotional well-being of an employee. As a result, biased decisions or unjustified judgments might be made, which could harm a worker's career and overall work experience.

4.19 Workers Trust:

The use of emotional AI in the workplace is a significant obstacle to employee trust. Because they are concerned about the morality and reliability of these AI systems, workers may become less trusting of their managers. Since trust is crucial in any workplace, the implementation of emotional AI could be viewed as invasive or dishonest, leaving employees to question why it is being used. Concerns about data privacy, misuse of emotional data, or biased decision-making based on emotional analysis may harm the sense of openness and trust between management and employees. To get past this restriction, organizations should emphasize open communication and transparency regarding the purposes and benefits of emotional AI. The application of emotional AI in the workplace severely undermines employee trust. The use of these AI systems may cause employees to doubt the company's ethics and dependability, which could damage their faith in it. Fears of biased decision-making based on emotional analysis, worry about data privacy, or anxiety over the exploitation of emotional data can all negatively impact the degree of trust and openness between staff members and management. To get around this barrier by creating defined criteria for the collection and exchange of data, organizations must place a high value on transparency and engage in an open debate about the use cases and benefits of emotional AI.

4.20 Emotional Manipulation:

Employees' ability to control their emotions may be impacted by the employment of emotional AI in the workplace. The ability of emotional AI systems to identify emotions and deliver tailored messages may raise concerns about manipulation, even while its primary objectives are to increase worker productivity and wellbeing. Businesses may, for example, utilize emotional AI to subtly influence employees' thoughts, feelings, or decisions in ways that advance company goals. Such manipulation might cause workers to feel under pressure or emotionally mistreated, which would undermine their confidence in the company and their happiness at work. Furthermore, utilizing emotional AI for performance evaluation or feedback could result in unfair or biased decisions that are made based more on sentiments than on objective criteria. Utilizing emotional AI to deliver supporting services while keeping a close eye on things. Furthermore, making unfair or biased decisions based on sentiments rather than impartial criteria could result from employing emotional AI to assess performance or provide feedback. Finding a delicate balance between preventing the misuse of emotional AI for manipulative purposes and using it for helpful support is necessary to promote a moral and effective work environment. By establishing clear guidelines, encouraging transparency, and soliciting employee feedback, employers may lower risks and ensure that the benefits of emotional intelligence are applied appropriately.

5. Analysis:

The thorough analysis of the literature on the constraints of emotional artificial intelligence suggests that tackling these limitations calls for a careful and moral approach to how to make use of emotional AI in the workplace. Employers can impose emotional labour perfectly and continuously thanks to emotional AI's automatic monitoring of workers' emotions, which can worsen the practice's detrimental impact on employees' wellbeing. This paper evaluated limitations of Emotional AI using the SLR method (Massaro, Dumay and Guthrie, 2016). As suggested by Massaro et al, An SLR makes it possible to examine the scientific corpus of a field of study, including the scientific rigor, dependability, and reproducibility of the procedures researchers carry out. Numerous academics have argued that the process combines a systematic literature review with qualitative and quantitative characteristics to identify the top authors, publications, and keywords. Despite being widely used in management and business (Secinaro and Calandra 2020), the SLR is also employed in these fields because of the same guiding principles that led to its creation (Mas, Massaro, Lombardi and Biancuzzi, 2020).

Based on the aforementioned premises, the authors conclude that the ideal approach is a systematic literature review (SLR) since it combines various inputs, replicability of the study process, and scientific validity. There are boundaries to risk mitigation, regulation, and privacy protection. All societal inequalities can be exposed and made worse if we don't consider whether it is morally appropriate to develop, design, and implement systems that compromise the confidentiality of our innermost thoughts and feelings. As a result, the current study's main objective is to examine the body of published research in order to comprehend the constraints placed on emotional artificial intelligence (EAI). The study searched for pertinent studies using databases from Google Scholar, Web of Science, and Scopus. Emotional AI, Emotion recognition, artificial emotional intelligence, Emotional privacy, workplace monitoring, and Emotional manipulation were the keyword combinations used in the search.

6. Discussions:

Human-AI connection is becoming more widely accepted by society as a result of the continued excitement surrounding emotional artificial intelligence in electronic marketplaces, which is revolutionizing businesses all over the world (Adam et al., 2020; Guan et al., 2020; Thiebes et al., 2020). Companies work hard to comprehend how AI affects people (Neuhofer et al., 2020), particularly in regards to how AI can be used to communicate with workers in the workplace. But new drawbacks for people also occur along with advantages for organisations. Understanding associated disadvantages is therefore essential to lessening or doing away with the effects of Emotional AI's negative aspects. The goal of the current study is to investigate the factors that influence the threat that emotional intelligence poses in the workplace, such as workplace awareness of emotional intelligence's vital nature (Mirbabaie et al., 2020). Therefore, by identifying loss of status position, changes in work, and emotional AI identity as key variables impacting AI identity danger to employees with emotional AI experience in the workplace, the current study will address the research issue.

7. Conclusion:

Technology has always been a part of our life. They have simplified our lives. We are reliant on artificial intelligence, from Humanoid Robots operating on us to Alexa, the Amazon AI assistant, asking to switch on the lights. But emotion-based AI was developed in order to enable us use AI more effectively in our daily lives. Our emotions can be recognized, analyzed, and responded to by this technology. While there are still many obstacles to overcome before human emotions can be fully understood, emotion-based AI has advanced to a very accurate level. Rosalind Picard and Paul Ekman, among other prominent emotion researchers, have made this possible. These days, emotion-based AI is employed in many different industries, including customer service, healthcare, and education.

In educational settings, the integration of artificial intelligence (AI), information and communication technology (ICT), and assistive technology has revolutionized the help provided to students, especially those with learning disabilities, in controlling their emotions and learning. AI-enhanced emotion recognition, ICT-based individualized learning experiences, and assistive technology-enhanced accessibility have all considerably decreased learning barriers for kids with a variety of learning requirements.

This study emphasizes how important technology is for improving emotional intelligence, fostering inclusive learning settings, and encouraging all kids to succeed academically. With the use of cutting-edge technologies, teachers may create personalized lesson plans, give prompt feedback, and assist students with and without disabilities in their academic and emotional growth.

This all-encompassing method of combining AI, ICT, and assistive technology improves emotional support and gives students the resources they require to take an active role in their education. In the end, this makes it possible for the educational process to be more inclusive and successful.

8. Recommendations:

There are numerous chances for industry participants to enhance the protection of emotional privacy and lessen or prevent some of the negative effects of emotion AI both inside and outside of the workplace. It is crucial to stress that even if laws and privacy measures were put in place to lessen the negative effects of emotion AI on people's privacy, those damages might still exist.

Emotional AI should enhance human relationship rather than replace it. Its role should be to provide recommendations and insights; human judgment should be used to reach the final decision. Employees shouldn't feel replaced or underappreciated by technology. As we demonstrate, flawed emotion AI can be harmful to individuals, but increasing machine accuracy is not a perfect answer because more precise surveillance systems can actually worsen privacy problems (Grill and Andalibi, 2022). Considering the various restrictions of emotional artificial intelligence, it is necessary to thoroughly examine the negative aspects of emotional artificial intelligence as outlined above using primary data. Furthermore, Systematic Literature study and a study of various papers from Scopus and Google Scholar can be used in future research

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