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Combating Brain Rot: Reimagining HR for the Distracted Generation with AI and Adaptive Learning Systems

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Abstract

The main purpose of this research is to achieve employee's efficiency in organization where efficient employees directly contribute to organizational goals, growth and profits. As people are the driving force behind every organization, it becomes essential to understand their challenges. Especially, in this distracted generation where brain rot, short attention spans, and digital fatigue are common. this study aims to explore how Artificial intelligence (AI) solutions can help human resource (HR) practices adapt to these challenges and support both employee and students, who are future employees. This study uses primary data approach, collecting responses through google forms and in person surveys. Over 124 participants shared their perspectives, and the data was analyzed using chi-square, spearson correlation, descriptive statistics. findings show how strong interest in AI- driven solutions such as gamified daily tasks with rewards, AI- based monitoring tools for detecting early sign of stress (with privacy assured), and adaptive micro-learning platforms that delivers short 2- minute lessons in the forms of videos, quizzes, and reels. Respondents were also open to AI assistants that track work patterns and suggests breaks or reminders. These results highlights that people are not only aware of "brain rot" but are willing to embrace AI solutions to overcome it. Overall, the study spotlight that the employee efficiency is the backbone of any organization. if the employees are distracted and lack focus, organizational reputation and performance will be affected drastically. By combining AI into HR systems, organizations can help foster focus, engagement, and wellbeing of the employees. This research insist that AI-based adaptive systems are not only appealing but also necessary for both current employees and future generations of students.

INTRODUCTION

The term "brain rot has recently gained popularity among the younger generation. It describes mental exhaustion, inattentiveness, distractibility and declining attention span caused by continuous digital engagement. A recent study revealed that the average person now focuses on one screen for only 47 seconds, a sharp drop from 2.5 minutes in 2004.ths shows how the rise of social media, online gaming, short form content platforms and constant notification has reshaped information consumption, creating information overload as a result, the ability to focus for longer periods is steadily decreasing is steadily decreasing, directly affecting learning outcomes, productivity and workforce efficiency In the context of academics, the young generations face the struggle of retaining information, as they are very much prone to being distracted by continuous scrolling in social media in this digital entertainment era. Correspondingly, in professional environment, employees too face decline in their attention spans and so too their efficiency because of constant burnout and loss of interest which highlights the need for reimagining the HR systems to address these emerging challenges of digital distraction for the current and the future employees. Traditional HR methods, such as standardized training programs or one size-fits-all engagement approaches are no longer sufficient in this digital era. At the same time Artificial intelligence (AI) offers a forward.AI-driven HR practices such as adaptive learning platforms gamified training, AI- based performance tracking, and wellness chatbots can create personalized learning experiences that reduce the negative effects of brain rot. By combining HR with AI solutions, organizations can improve focus, engagement and long term productivity while also supporting emotional well-being. Therefore, this research will explore how AI can reimagine HR practices to combat brain rot among distracted generation.it will examine the connection between digital distraction, employee and student engagement, and AI-driven HR strategies that can reshape academic and workplace performance.

STATEMENT OF THE PROBLEM

In today's digital age, excessive screen time and declining attention spans have raised new challenges for both learning and workplace productivity. Traditional HR practices often fail to address these modern struggles, leaving organizations searching for innovative solutions. the rise of brain rot, driven by digital overload, threats focus, motivation and long term employee growth.AI-driven adaptive learning offers the possibility of reshaping engagement by creating personalized and dynamic experiences. *but how effective are these AI tools in addressing issues of concentration and productivity? Are organizations truly ready to embrace this shift and integrate AI into the future of HR?*

SCOPE OF THE STUDY

The scope of this study extends beyond identifying the challenges of brain rot among the younger generation. It explores how artificial intelligence and adaptive learning can reshape human resource strategies to address declining attention, reduced motivation, and limited long term focus. As well as studying the impact of cognitive decline on a person's employability and productivity in the workplace, the research explores the possibilities of AI powered technology in developing customized and motivating learning environments. The research sheds light on the possibilities aimed at improving the well-being and renewing the creativity and retention of the employees by focusing on the integration of adaptive tools into the HR practices of the organization. Moreover, it also looks at the broader impact of creating and maintaining a technological inclusive culture that evolves with the changes brought about by technology and retains human-centric values. With this approach, the research helps HR professionals and institutions to understand how they may use challenges to build sustainable strategies for growth.

RESEARCH GAP

Most studies talk about social media addiction in general, but they don't look closely at "brain rot" and how it affects students' focus, studies, and future jobs. Also, while AI is used in HR, very few studies show how it can help solve these problems. Our study tries to fill this gap by asking: *Can AI be the key to reducing the negative impact of brain rot among students?*

OBJECTIVE

- To analyze how the "brain rot" behaviors of loss of focus and productivity are impacting the modern workforce, especially the younger generation.
- To explore AI's possibility in revolutionizing HR to engage and nurture performance, mental well-being, and awareness.
- To recommend innovative approaches to HR harnessing AI to help the organization confront the growing challenges of managing a distracted workforce.

RESEARCH METHODOLOGY

Research methodology is a logical and systematic approach used to address the research problem. It involves the techniques and procedures to collect, identify, and analyze data on a specified topic. This methodology provides a framework for defining research questions, hypotheses, and objectives, and outlines the steps adopted by the researcher to study how AI can reimagine HR for the distracted generation.

SAMPLING

• **Sample Size**: For representation of perspectives on digital distraction and productivity challenges, the study enforced 124 participants comprising college students and professionals on the verge of early career.

• **Sampling Procedure**: A simple random sampling technique was applied to grant every individual in the target population with an equal opportunity for selection, which further raises the reliability of results.

• **Period of Study:** Data collection was carried out for a week, as a result encouraging timely and focused responses.

• **Area of Study**: Participants from varied educational and professional backgrounds entered; thus, ensuring that the study captured different experiences in attention span, engagement, and responsiveness to AI-based HR interventions.

DATA COLLECTION

Primary Data: Firsthand insights were collected via a structured Google Form survey, capturing participants' experiences with digital distraction, focus challenges, and their openness to AI-driven HR solutions. This approach provided real-time, authentic data on the impact of brain rot in academic and workplace contexts.

Secondary Data: Complementary information was gathered from **8 highly relevant research papers**, covering AI in HR, cognitive overload, attention span, adaptive micro learning, and gamification strategies. These sources helped contextualize the primary data, validate findings, and provide a solid foundation for understanding interventions to combat brain rot.

STATISTICAL TOOL

- **Chi-Square Analysis** – to examine relationships between categorical variables.
- **Spearman's Rank Correlation Analysis** – to measure the strength and direction of associations between variables with ordinal/non-parametric data.
- **Descriptive statistics** – to summarize and present the data in a meaningful and interpretable manner.

LIMITATIONS

• The research discusses 124 participants, so the result may not generalize all the experiences of students and young professionals faced with digital distractions.

• The survey responses are based on perception, whose extent may vary with awareness and honesty.

• The research focuses on the short-term impressions of the AI-treated HR interventions and cannot therefore observe the long-term effects on focus, productivity, or engagement.

• The study does not consider all possible AI or HR tools but looks into only selected interventions.

• Time and resource constraints limited data collection and analysis in terms of depth and breadth.

LITERATURE REVIEW

- Short form video addiction is correlated negatively with executive control and self- regulation, suggesting that frequent consumption shall undermine sustained attention (Ye et al.,2022)
- Frequent exposure to shortform video contents like reels, shorts correlate with reduced attention span and poorer academic performance (Haliti-Sylaj& Sadiku,2024)
- Involvement towards excessive consumption of digital media has severely impaired the users' ability in executing previously planned works, underscoring disruption of memory (Chiossi et al.,2023)
- Gamification based on engagement training such as flow, Kahn's engagement boosts sharing of knowledge and contributing to promote internal motivation among the employees (SSRN,2023)
- Gamified electronic training systems has increased uptake of content, application of effective learning and sustaining of user engagement (Science Direct, 2024)
- A bibliometric analysis depicts that AI at work can both improve overall productivity and establish job stress based on implementation and context (Scopus Review,2024)
- AI driven human resource management improves work life balance and indirectly diminishes job burnout, highlighting the mediating importance of personal well-being (Aloqaily et al.,2025).
- An AI based system analysing facial expressions and posture achieves 96 percent accuracy in detecting stress ultimately showing potential proactive employee support (Walambe et al.,2023).

DATA ANALYSIS AND INTERPRETATION

To test our primary hypotheses, we conducted a comprehensive statistical analysis.
To assess the significance of the association between respondents who reported difficulty in focus and their preference towards four of the proposed HR features, a Chi-Square test of Independence was performed.
Subsequently, Spearman's rank order correlation was performed for the findings that were significant statistically to measure the strength and direction of relationship.

The significance level was set at α=0.05 for the performed tests

HR System Features	Statistical Test	Degrees of Freedom (df)	p-value	Correlation	Result
Personal AI Assistant	Chi-square	12	0.974	N/A	Not Significant
Adaptive Micro-learning	Chi-square	6	0.139	N/A	Not Significant
Proactive Burnout & Stress Detection	Chi-square & Spearman's	9	< .001	.39	Significant
Gamified Wellness Dashboard	Chi-square & Spearman's	9	.001	.34	Significant

INTEREPRETATION OF FINDINGS:

The results presented in Table 1 provides us with a multi-dimensional knowledge of how the proposed HR system features are influenced by self-reported focus issues.

In the statistical testing we assumed:

Null hypothesis (H_0): There is no significant relationship between the variables.
Alternate hypothesis (H_1): There is a significant relationship between the variables.

The Initial two features - Personal AI Assistant and Adaptive Micro-Learning were tested and p-value obtained was 0.974 and 0.139 respectively which failed to show a significant statistical relationship with concentration difficulty, as the calculated p-value was greater than that of the 0.05 threshold ultimately leading us to fail to reject the null hypothesis.

The finding indicates that while these tools are broadly popular, they are not specifically found to be a targeted solution for the individuals facing challenges with acute distractibility.

Correlation analysis was not conducted as it is primarily used to measure the strength of relationships that are statistically significant.

In contrary, the other two features which majorly centred on employee wellbeing and engagement – Proactive Burnout and Stress Detection, Gamified Wellness Dashboard yielded significant results.

For the Proactive Burnout and Stress Detection Feature, the Chi-Square test revealed impressively significant relation ($p<.001$) which allows us to reject the null hypothesis and state the existence of relationship confidently.
Followed by which Spearman's correlation showed a weak-to- moderate positive correlation ($\rho = .39$) , suggesting that , as individuals with stronger difficulty in focus increases, the demand for proactive mental wellness support also increases in a measurable way.

Similarly, the chi square test for Gamified Wellness Dashboard showed a highly significant association ($p=.001$), leading us to reject the null hypothesis and accept the alternate hypothesis for this feature as well.
Consequent of which, the Spearman's Correlation was confirmed as a weak positive relationship ($\rho = .34$), suggesting that individuals with greater difficulty in focus tend to show a higher preference for Gamified Wellness Dashboard feature.

OVERALL INSIGHTS FROM ANALYSIS

The statistical analysis indicated how the proposed HR features variates with relation to the focus difficulties. While the initial two features (Personal AI Assistant & Adaptive Micro-Learning) did not associate significantly, the features of Burnout detection and Gamification showed a significant association.
In parallel, the observed correlations were positive but had as weak to moderate relationship in strength suggesting that despite the fact that some patterns exist, the relationships are not strongly definite.
The variation directs to potential pathways where certain features may require refinement or framed alternatively to capture impact.

DESCRIPTIVE FINDINGS

Age	% of Respondents
18-22	87.1
23-27	2.4
28-32	2.4
Others	8.1

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Professional Status	**% of Respondents**
University student	84.7
Employed (Full Time)	12.1
Employed (Part Time)	0.8
Seeking employment	12.4

How often short-form video contents consumed on a typical day (eg: reels, shorts)?	**% of Respondents**
Several times a day	58.9
Constantly throughout the day	20.2
Once a day	14.5
A few times a week	3.2
Rarely or never	3.2

Difficulty in maintain deep focus for more than 20 minutes without the urge to switch task or check my phone	**% of Respondents**
Strongly agree	19.4
Agree	37.9
Neutral	27.4
Disagree	12.1
Strongly Disagree	3.2

Likely to absorb and remember if information is delivered brief, visually engaging formats(eg., infographics, short videos)	**% of Respondents**
Strongly Agrees	22.6
Agree	46.8
Neutral	25.8
Disagree	4.8
Strongly Disagree	0

Open to use a tool like personal AI assistant at work that learns your work patterns and provides customized reminders, content summaries, and suggests optimal times for breaks.	**% of Respondents**
Very open	15.3
Open	37.9
Neutral	28.2
Skeptical	16.1
Not Open	2.4

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How likely are you to engage with a learning platform that delivers 2-minute micro lessons in the form of memes, reels, videos, short reads, polls, and quizzes based on your learning pace?	**% of Respondents**
Very appealing	21.8
Appealing	41.1
Neutral	28.2
Unappealing	8.1
Very Unappealing	0.8

How comfortable would you be if an AI-based internal system monitored workplace communications to identify early signs of stress or burnout and confidentially recommended mental health support?	**% of Respondents**
Very Comfortable, it shows the company cares	11.3
Comfortable, as long as it's private and helpful	59.7
Neutral, I have no strong feelings	21.8
Uncomfortable, it feels like a violation of privacy	6.5
Very Uncomfortable, I would not want this.	0.8

How motivating would you find a system that turns daily tasks into "gamified" challenges or focus sprints, rewarding you with points or badges that contribute to a personal "Productivity & Wellness Score"	**% of Respondents**
Highly motivating	16.9
Motivating	46
Neutral	29.8
Demotivating	6.5
Very demotivating	0.8

SUGGESTION

- **Develop AI-powered mental health Monitoring for early burnout detection**

Aims to build smart AI tools that continuously monitor signs of stress and burnout, enabling timely personalized interventions that directly address the strong link between focus difficulties and mental well-being needs that is found in this research

- **Embedded Deep Gamification to boost focus and engagement**

Leverage gamified wellness dashboards with meaningful rewards and challenges to transform work tasks into motivating experiences, meeting the demonstrated preferences of distracted individuals for gamification as a focus aid

- **Design adaptive, visually engaging Micro-Learning Modules**

To Create short, visually rich learning content tailored to user's attention spans and preferred formats, enhancing absorption and retention as supported by the respondent's content consumption habits

- **Ensure privacy and transparency in AI mental health tools**

To Prioritize employees, trust by implementing privacy foremost AI system with transparent data use policies and user control over monitoring, addressing concerns about AI surveillance raised by our respondents

- **Implement continuous Feedback loops for system refinement**

To Use real time user data and interdisciplinary research to iteratively improve HR systems, ensuring tools remain relevant and effective for evolving focus and wellbeing challenges shown by the moderate correlations in our findings.

- **Create inclusive Tools for diverse cognitive and Mental Health Needs**

To design HR technologies that accommodate neurodiversity and varying mental health profiles, enabling personalized support pathways that maximize accessibility and impact across all employee groups.

CONCLUSION

Our study reveals vital insights for reimagining the HR systems to support the distracted generation effectively who are facing pervasive focus challenges. We analyzed that while the conventional Artificial Intelligence(AI) tools like personal assistant and micro-learning platforms remain popular, they do not adequately address the complex cognitive and emotional needs underlying attention difficulties. In contrast, features centered on proactive stress and burnout detection and gamified wellness initiatives shows a significant association among individuals struggling to maintain stable focus.

These insights underscore the importance of integrating mental health support and motivational elements into HR systems with respect to creating a more holistic approach. By embracing adaptive and privacy conscious AI solutions, well-being monitoring and engaging gamified learning experiences, the organizations can better combat the modern "BRAIN ROT" phenomena among the current and the future employees could help foster a productive workforce.

This approach not only aligns with the patterns of behavior of contemporary employees but also promotes a promising pathway for transforming workplace systems in an increasingly distracted world.

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