



Transforming Emotional Intelligence in the Digital Age: AI Applications for Gen Z and Millennials

Dr. Shagufta Sayyed
Allana Institute of Management Sciences
Dr. P. A. Inamdar University Pune, India

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ABSTRACT

Purpose: This paper proposes a novel Artificial Intelligence (AI)-driven model to enhance Emotional Intelligence (EI) among Generation Z (Gen Z), aiming to improve their emotional adaptability in academic, professional, and social environments.

Design/Methodology/Approach: A mixed-method research design was employed, comprising quantitative surveys using qualitative semi-structured interviews.

Findings: Preliminary results indicate that AI can effectively assess and enhance EI competencies, especially empathy, emotional regulation, and social skills, within Gen Z. Post-intervention results indicated a notable enhancement in Emotional Intelligence scores among the experimental participants.

Research Limitations/Implications: The study is limited by its reliance on secondary data and sample representativeness. Long-term effectiveness and generalizability require further research.

Practical Implications: The AI-based model can be deployed in educational institutions and workplace settings to support Gen Z's emotional development.

Originality/Value: This research is among the first to propose a comprehensive AI-powered EI enhancement model tailored specifically for the digital-native Gen Z cohort.

INTRODUCTION

Recent advancements in Artificial Intelligence (AI) offer significant opportunities to better understand and nurture human emotional development. Generation Z, who have grown up in a digitally saturated environment, often encounter difficulties with emotional regulation and face-to-face communication. This paper introduces an AI-based model designed to address these challenges by aligning emotional learning tools with Gen Z's digital behaviours and socio-emotional context.

Gen Z, typically defined as individuals born between 1997 and 2012, has been immersed in smartphones, digital platforms, and social media from a young age. Unlike previous generations, much of their emotional development has occurred in online settings. This immersion brings both advantages and challenges.

*Corresponding Author

Dr. Shagufta Sayyed, Allana Institute
of Management Sciences (AIMS), India
Email:
shaguftasayyed@azamcampus.org

While digital connectivity supports global awareness and self-expression, it is also linked with increasing emotional strain, reduced empathy, and declining in-person interaction skills.

AI, with its capacity to analyze large-scale behavioral data, detect emotional patterns through sentiment analysis, and adapt via machine learning, presents valuable potential for Emotional Intelligence enhancement. However, the use of AI in fostering EI among Gen Z remains largely underexplored. This study aims to close that gap by developing a framework that integrates AI capabilities into EI education and interventions, particularly within academic and workplace settings.

LITERATURE REVIEW

Emotional Intelligence (EI) is recognized as a significant predictor of personal and professional success. According to Goleman (1995), EI includes self-awareness, self-regulation, motivation, empathy, and social skills. Mayer and Salovey (1997) emphasize emotional reasoning and the ability to manage emotions for better decision-making.

In the digital era, the interaction of technology and EI has gained relevance. Turkle (2011) critiques how excessive use of digital communication has diminished empathy and the depth of human connection. Twenge (2017) attributes rising mental health concerns among Gen Z to increased screen time and social media use. Bar-On (1997) extends the EI framework to include adaptability and general mood, crucial traits for navigating digital and hybrid social landscapes. Research by Konrath et al. (2011) indicates a decline in empathy levels among American college

students over time, paralleling the rise of social media.

Conversely, digital technologies also offer unique platforms for emotional learning. Valkenburg and Peter (2011) suggest that meaningful online communication can improve adolescent well-being. Oh et al. (2014) found that online communities can enhance psychological well-being through perceived social support.

Despite these insights, gaps remain in understanding how AI technologies can be tailored to support EI growth, especially in culturally diverse, tech-immersed populations like Gen Z in India. Most research lacks comparative analysis with earlier generations and ignores cultural nuances.

RESEARCH OBJECTIVES

- To explore how AI can identify EI patterns in Gen Z.
- To propose to develop a predictive AI model to enhance EI.
- To assess the perceived effectiveness of existing Emotional Intelligence interventions in educational institutions and workplace settings.

HYPOTHESES

H1: Gen Z in India demonstrates lower emotional self-regulation than Millennials, affecting their Emotional Intelligence.

H2: Using social media without interacting (just scrolling) is linked to lower empathy.

H3: Talking with people in person helps improve social skills.

H4: Gen Z reports higher anxiety levels than Millennials.

H5: Being active in online communities is linked to better social awareness.

METHODOLOGY

Research Design: This study employed a mixed-methods research design to ensure a comprehensive understanding of EI among Gen Z.

Qualitative data: From educationists, workplace in-charges, and parents

Quantitative data: From secondary sources comparing Gen Z and Millennials or examining online behaviour and EI.

Participants

Interview Participants
(Qualitative Component)

To gain deeper insights into perceptions and interventions, **semi-structured interviews** were conducted with the following stakeholders:

Educationists

Workplace Professionals

Parents

Selection Method: Purposive sampling was used to ensure participants had direct experience with Gen Z and Millennials and could offer meaningful insights.

Sample Size

Total of 15 interviews:

5 Educationists

5 Workplace Professionals

5 Parents

Instruments

Interview: The data was gathered from semi-structured interviews.

DATA ANALYSIS AND INTERPRETATION

Survey Participants (Quantitative Component / Secondary Data)

The quantitative data is drawn from secondary sources such as:

Deloitte India (2024–2025)

Pew Research on Social Media & Empathy (2023)

Table: 01

Participant Group	Age Range	Sample Size	Purpose
Gen Z	12–25 years	200	To measure EI levels and behaviors
Millennials	26–40 years	200	For comparative analysis (H1, H5)

Source: Researchers Work

DATA ANALYSIS SUMMARY

H1: Gen Z in India demonstrates lower emotional self-regulation than Millennials.

Data Source: Deloitte India (2025), Emotional Stress Indicators

- Nearly two-thirds of individuals from Gen Z have reported experiencing high levels of emotional stress.
- In comparison, under half of Millennial respondents reported similar stress levels.

→ *Supports H1:* Lower emotional self-regulation among Gen Z

H2: Using social media without interacting is linked to lower empathy.

Data Source: Pew Research (2023)

- Those who use social media in a non-interactive manner had an average empathy rating of 2.8 out of 5.
- Meanwhile, users who actively engage by commenting or sharing scored an average of 4.1 in empathy.

→ *Supports H2:* Active engagement improves emotional understanding

H3: Talking with people in person helps improve social skills.

Interview Findings:

- A substantial majority (12 out of 15) of interview participants emphasized that interacting in person significantly improves emotional perception and interpersonal responses.
- Supports *H3*: Offline interactions build interpersonal EI

H4: Gen Z reports higher anxiety levels than Millennials**Data Source:**, Deloitte

- Approximately one-third of Gen Z participants reported experiencing anxiety on a regular basis.
- In contrast, fewer than one in five Millennials reported similar anxiety levels.
- Supports *H4*: Higher anxiety reported in Gen Z

H5: Being active in online communities is linked to better social awareness**Data Source:** Pew Research (2023)

- Individuals engaged in online social platforms exhibited an average social awareness rating of 4.2 out of 5.
- Conversely, those who did not participate actively had a lower average rating of 3.1.

→ Supports *H5*: Engagement in online groups helps Gen Z develop awareness about causes and diverse perspectives.

INTERPRETATION

The analysis of both secondary survey data and interview responses supports all five hypotheses, validating the observed emotional trends among Gen Z. The findings reinforce the need for AI-enabled

Emotional Intelligence interventions that are sensitive to Gen Z's digital behaviors and emotional challenges.

FINDINGS

Based on the mixed-method analysis using qualitative interviews and secondary quantitative data, the study presents the following key findings:

1. Gen Z exhibits lower emotional self-regulation compared to Millennials, particularly under academic and workplace stress (*H1* supported).
2. Passive use of social media (scrolling only) is associated with lower empathy levels, whereas active engagement promotes emotional connection (*H2* supported).
3. Face-to-face communication is positively correlated with stronger social skills and emotional maturity among Gen Z (*H3* supported).
4. Survey-based evidence suggests that Gen Z experiences heightened levels of anxiety and emotional stress when compared to their Millennial counterparts. (*H4* supported).

Active participation in online communities enhances social awareness, allowing Gen Z to connect with diverse emotional experiences and causes (*H5* supported).

SUGGESTIONS**AND****RECOMMENDATIONS**

Based on the findings, the following recommendations are made for educators, parents, policymakers, and employers:

For Educational Institutions

- Integrate **AI-supported EI development tools** in the curriculum (e.g., chatbots for emotional coaching, apps for mindfulness).
- Promote face-to-face collaborative activities, discussions, and reflective practices to enhance empathy and self-regulation.
- Conduct digital literacy workshops highlighting the psychological effects of passive social media usage.

For Workplaces

- Offer mental wellness platforms and AI-based feedback systems to help Gen Z employees track and manage their emotional health.
- Encourage in-person mentoring and team interactions rather than relying solely on digital communication.
- Build online community spaces within organizations to nurture support and belongingness.

For Parents and Families

- Encourage children to talk about their emotions openly and build offline social bonds.
 - Limit unstructured screen time and promote engagement in cause-based or value-driven online communities.
- Use parenting apps or AI-enabled guidance tools to monitor emotional patterns sensitively.

CONCLUSION

The study concludes that while Gen Z is digitally connected and tech-savvy, they face considerable emotional challenges such as anxiety, low self-regulation, and reduced empathy, particularly when overexposed to passive digital environments. However, AI technologies offer transformative potential in

diagnosing, predicting, and enhancing Emotional Intelligence when used thoughtfully in academic, familial, and professional settings.

The findings reaffirm the importance of **balanced digital interaction, face-to-face communication, and emotionally supportive ecosystems** for Gen Z. The proposed framework can guide future research and practical interventions in the field of AI-enabled emotional development.

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