



# GENERATIVE AI-BASED EMOTIONAL VENTING AND ITS RELATIONSHIP WITH EMOTIONAL REGULATION AND EMOTIONAL DEPENDENCY AMONG URBAN YOUNG ADULTS

## *A Cross-Sectional Study*

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**Abstract :** Generative AI tools such as ChatGPT are increasingly used for emotional support, yet it is unclear whether this helps people regulate emotions or leads to dependency. This cross-sectional survey of 62 young adults in Bengaluru who had used AI for emotional venting measured use of AI for venting, emotional regulation, and emotional dependency through a purpose-built web application. All three scales showed good to excellent reliability ( $\alpha = .879$  to  $.946$ ). Most respondents reported low use, regulation, and dependency. Greater use of AI for venting was strongly associated with higher regulation ( $r_s = .657, p < .001$ ) and higher dependency ( $r_s = .649, p < .001$ ), and regulation and dependency were very strongly related ( $r_s = .779, p < .001$ ). Moderate or high dependency was confined to a minority, nearly all of whom also reported moderate or high regulation. The benefits of AI venting and the risk of reliance appear to rise together.

**IndexTerms** - AI companionship, emotional venting, emotional regulation, emotional dependency, young adults

## **I. Introduction**

Conversational AI is no longer limited to functional assistance; many people now use it to talk through worries and feel heard. Unlike human support, AI offers help without reciprocity, judgment, or emotional demand, which raises a central question: does AI venting enhance emotional health, or does it gradually replace human connection? The question is pressing for urban young adults, who are digitally connected, under academic and occupational pressure, and early adopters of new technology. Their informal use of general-purpose assistants for emotional purposes has received far less attention than purpose-built mental health chatbots.

This study examined whether AI-based emotional venting works as a tool for emotional regulation, a substitute for human interaction, or both. It tested two hypotheses: that use of AI for emotional venting is associated with emotional regulation (H1) and with emotional dependency (H2), and explored whether regulation and dependency occur together or separately.

## **II. Review of Literature**

Gross (1998) described emotion regulation as the processes by which people influence which emotions they have, when they have them, and how they experience and express them. Putting feelings into words is itself beneficial (Pennebaker, 1997), so typing out emotions to a conversational system may serve as both expression and a prompt for reflection. Human support, however, buffers the effects of stress (Cohen & Wills, 1985), and perceived isolation harms well-being (Cacioppo & Cacioppo, 2014); AI may offer perceived support but lacks reciprocity and emotional depth.

People respond socially to machines (Reeves & Nass, 1996), disclose more sensitive information to a virtual interviewer they believe is automated (Lucas et al., 2014), and gain from chatbot disclosure benefits comparable to disclosure to a person (Ho et al., 2018). A chatbot delivering cognitive behavioural techniques reduced depressive symptoms in a randomised trial (Fitzpatrick et al., 2017). Yet users of the Replika companion chatbot have described emotional dependence and distress when it changed or became unavailable (Laestadius et al., 2022). Earlier internet research offered competing views: displacement, where social technology reduces involvement with family and friends (Kraut et al., 1998), and social compensation, where people with weaker offline support benefit most (Kraut et al., 2002). Recent work on general-purpose chatbots found emotional use concentrated among heavy users (Phang et al., 2025) and linked higher daily use to greater loneliness and dependence (Fang et al., 2025).

Most studies, however, examine therapeutic chatbots, consider either benefits or harms rather than both, and rarely separate using AI to manage emotions from relying on it in place of people; evidence on urban India is scarce. This study therefore uses a dual framework contrasting emotional regulation via AI (a temporary tool that complements human ties) with emotional substitution via AI (a replacement for human interaction), indexed by the regulation and dependency scores.

### III. Method

A quantitative, cross-sectional, descriptive-correlational design was used, which identifies associations but not causes. Young adults aged 18 and above in Bengaluru were recruited by convenience sampling through an online survey link, with a screening question confirming prior use of AI for emotional venting. All 62 respondents were eligible and completed the survey ( $N = 62$ ); demographic variables were not recorded.

Three self-report scales developed for this study were delivered through a web application, with items scored 1 to 3 and summed (Table 1). The application classified regulation and dependency scores as Low, Moderate, or High, and usage was divided into equal-width bands (Low 10–16, Moderate 17–23, High 24–30). Participation was voluntary and anonymous, and no identifiers were collected.

Table 1. Structure and scoring of the scales

| Scale                 | Items | Score range | Higher score means        |
|-----------------------|-------|-------------|---------------------------|
| Use of AI for venting | 10    | 10–30       | Greater use for venting   |
| Emotional regulation  | 9     | 9–27        | Greater perceived benefit |
| Emotional dependency  | 20    | 20–60       | Greater reliance on AI    |

Reliability was assessed with Cronbach's (1951) alpha. Because scores were markedly non-normal, associations were tested with Spearman's rank correlation with bootstrap confidence intervals (5,000 resamples), interpreted against Cohen's (1988) benchmarks; Kruskal-Wallis tests compared usage bands, and partial correlation and regression were exploratory. Significance was set at .05 (two-tailed).

### IV. Results

All scales exceeded the .70 threshold (Nunnally, 1978):  $\alpha = .879$  (usage), .901 (regulation), and .946 (dependency). Respondents scored low on average (Table 2), with positively skewed, non-normal distributions (Shapiro-Wilk, all  $p < .001$ ) and floor effects: 38.7%, 32.3%, and 24.2% scored at the minimum on usage, regulation, and dependency respectively.

Table 2. Descriptive statistics ( $N = 62$ )

| Statistic | Usage (10–30) | Regulation (9–27) | Dependency (20–60) |
|-----------|---------------|-------------------|--------------------|
| Mean (SD) | 13.45 (4.42)  | 12.94 (4.53)      | 27.21 (8.89)       |
| Median    | 12.0          | 11.0              | 23.0               |
| Skewness  | 1.68          | 1.29              | 1.67               |

Most respondents were in the Low band for regulation (77.4%) and dependency (82.3%); High levels were rare (6.5% and 3.2%). Use of AI for venting was strongly and positively associated with emotional regulation,  $r_s(60) = .657$ , 95% CI [.489, .779],  $p < .001$ , supporting H1, and with emotional dependency,  $r_s(60) = .649$ , 95% CI [.482, .771],  $p < .001$ , supporting H2. Regulation and dependency were themselves very strongly related,  $r_s(60) = .779$ , 95% CI [.665, .860],  $p < .001$  (Table 3).

Table 3. Spearman correlations ( $N = 62$ )

| Pair of variables         | $r_s$ | 95% CI       | p      |
|---------------------------|-------|--------------|--------|
| Usage and regulation      | .657  | [.489, .779] | < .001 |
| Usage and dependency      | .649  | [.482, .771] | < .001 |
| Regulation and dependency | .779  | [.665, .860] | < .001 |

Across usage bands, regulation ( $H(2) = 12.68$ ,  $p = .002$ ) and dependency ( $H(2) = 18.40$ ,  $p < .001$ ) differed significantly: mean dependency rose from 24.41 among Low users to 36.64 among Moderate users (only two respondents were High users). Forty-four respondents (71.0%) were Low on both regulation and dependency. Of the 11 respondents with Moderate or High dependency, seven also reported Moderate or High regulation, no respondent with Low regulation had High dependency, and two of the four with High regulation also had High dependency. The regulation–dependency relationship held after controlling for usage (partial  $r_s = .615$ ,  $p < .001$ ), and in an exploratory regression usage and regulation together explained 63.9% of the variance in dependency.

### V. Discussion

Heavier AI venting accompanied higher perceived regulation, consistent with evidence that expressing feelings is beneficial (Pennebaker, 1997) and that chatbot disclosure can resemble disclosure to a person (Ho et al., 2018). The equally strong link with dependency echoes studies of general-purpose chatbots (Phang et al., 2025; Fang et al., 2025) and of companion-chatbot users (Laestadius et al., 2022). In the dual framework, regulation and substitution did not behave as opposite ends of one dimension: among the minority who used AI more, perceived benefit and reliance appeared together. This is plausible if the qualities that make AI attractive for venting (availability, privacy, non-judgment) also make it easy to lean on. The data fit both displacement and compensation accounts (Kraut et al., 1998, 2002), since they cannot show whether AI supplements or replaces other support.

Practically, clinicians can ask clients without judgement how much they rely on AI relative to people; designers can encourage reflection and point heavy users toward human support rather than maximising attachment; and users are advised to follow AI venting with a trusted person and seek professional help when distress is persistent.

### VI. Limitations

The convenience sample was small ( $N = 62$ ) and unrepresentative, with very few respondents in the High bands. Demographics were not recorded, all measures were self-reported, the Regulation scale captures perceived rather than actual regulation, and the scales were newly developed with only internal consistency established. The cross-sectional design cannot show whether benefit leads to reliance, reliance to perceived benefit, or both stem from unmet need for support.

### VII. Conclusion

Some young adults use generative AI as an accessible, non-judgmental emotional outlet, and heavier users find it more helpful but also report greater reliance. AI venting can thus resemble regulation and the beginning of substitution at once, and the two should be monitored together; moderate use supported by human relationships is preferable. Future work should use larger, more diverse samples, longitudinal designs, validated instruments, and qualitative interviews.

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