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Adaptive Emotion Regulation and Coping Strategies as Correlates of AI-Based Mental Health Support Acceptability among University Students

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Abstract

Adaptation has long been a key characteristic underlying human survival; however, the nature of the stressors continues to evolve across generations. In the present context, pervasive acceleration of lifestyles shaped by technological advancement and social media-driven environments, has increased the demands placed on individuals, necessitating continual adaptation in coping and emotion regulation strategies. As a result, concerns regarding psychological well-being have become increasingly prominent. However, many individuals still experience accessibility-related barriers to psychological support. In response to this, AI-based mental health systems have emerged as accessible alternatives of psychological support. However, relatively limited research has addressed how the individual differences in coping and emotion regulation strategies are linked to differences in acceptability of AI-based mental health support. The present study explored the relationships among attitudes toward AI-based mental health support, coping strategies, and emotion regulation strategies. A cross-sectional, correlational research design was employed, where 100 university students were recruited using convenience sampling. Participants completed the following measures: Artificial Intelligence in Mental Health Scale (AIMHS), Brief-COPE, and Emotion Regulation Questionnaire (ERQ-30). The findings indicated that problem-focused coping and adaptive emotion regulation strategies were positively correlated with favorable attitudes towards AI-based mental health support. Further, exploratory mediation analyses identified two emotion regulation strategies, namely, cognitive reappraisal and behavioral activation, as significant mediators of the relationship between perceived practical advantages of AI-based mental health support and problem-focused coping. These findings suggest that the individuals who engage in adaptive emotional processing and active coping may be more receptive towards AI-based mental health support. The study therefore highlights the potential relevance of psychological individual differences in shaping the acceptability of AI-based mental health interventions.

Introduction

Humans have proved themselves capable of altering their environment in ways that suit their needs, but regardless of our commendable capabilities, there are many situations in which demands exceed available resources. For instance, imagine a situation where deadlines for multiple assignments suddenly overlap while you are expected to keep up with other responsibilities as well. The pressure and unease we feel in such situations are known as stress. Facing stressful situations is an inevitable aspect of human life, with stress becoming an increasingly pervasive feature of modern life. What we commonly understand as “modern life” may be broadly characterized by the features of pervasive acceleration and increasing flexibilization of nearly all domains of human existence [1]. As a consequence, individuals are required to continuously adapt to an increasingly taxing and rapidly changing social landscape. Contemporary societies are marked by heightened emotional labor, achievement-orientedness, intensified performance pressures, fast-paced lifestyles, and continuous exposure to social, occupational, and technological demands. Social-media-related stressors are also critical to this discussion as social media fosters social comparison processes and fear of missing out (FOMO), exposes users to a continuous stream of information that may exceed their processing capacity, and

increases exposure to negative online interactions (e.g., online harassment, cyberbullying, negative social evaluation, social exclusion); these factors may contribute to increased emotional distress, psychological strain, and ultimately affect mental health adversely [2]. Against this backdrop, researchers have described stress as the “modern-day hidden epidemic,” due to its widespread prevalence and substantial influence on physical and psychological well-being [3].

Although at the same time, humans are equipped with the capacity to deal with such stressful situations through coping and adaptation strategies. Coping is defined as “cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” [4]. However, individuals do not respond to stress uniformly, and may tailor the coping strategies according to the changing situational demands, personal resources and emotional capacities. In the transactional model of stress and coping, Lazarus and Folkman [4] have explained that the coping strategies are based on the secondary appraisal made by an individual. Further, they have distinguished between two types of coping strategies: problem-focused and emotion-focused coping. Problem-focused coping is directed toward changing or managing the source of stress (i.e., the stressor) itself, through strategies such as seeking information, planning, problem-solving, and seeking instrumental social support. Emotion-focused coping is directed toward reducing or managing emotional responses to the stressor, and is employed through strategies such as emotional support, reframing, denial/distraction, acceptance. However, these are not mutually exclusive categories but are often used simultaneously depending on the contextual factors. In the later studies, coping strategies have been broadly categorized into adaptive and dysfunctional forms, where adaptive coping facilitates effective stress management and dysfunctional coping is often associated with poorer psychological outcomes. These categories are not universally fixed classifications and may vary based on the study aims and populations, but in broader terms, approach/engagement-based coping is often treated as adaptive and avoidant/disengagement-based coping as dysfunctional/maladaptive. As mentioned earlier, one important aspect of coping is the ‘flexibility’, which is reflected in the ability to recognize and discontinue an ineffective coping strategy (evaluation coping) and switching to alternatives (adaptive coping) [5]. Since stressful situations vary in nature and intensity, the ability to flexibly adapt coping responses may be particularly important for effective emotional management.

Within the transactional model of stress, Lazarus explained stress as being influenced not only by external events but also by an individual’s cognitive appraisal of those events. These appraisal processes are closely linked to emotional responses and emotion regulation [6, 7]. Emotion regulation refers to the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions [8]. In line with this definition, James Gross’s Process Model of Emotion Regulation [8, 9] illustrates that individuals regulate emotions at different stages of the emotion-generation process using strategies such as situation selection, situation modification, attentional deployment, cognitive change and response modulation. These processes can be automatic or deliberate, depending on the adaptive and coping tendencies of the individual. Coping involves broader cognitive and behavioral efforts aimed at managing the demands of the stressful situation, whereas, emotion regulation influences the effectiveness and adaptiveness of such coping

responses by shaping emotional experiences and behavioral reactions to stressors [10, 11]. Hence, while emotion regulation primarily focuses on the management of short-lived emotional experiences, it remains deeply intertwined with the broader coping frameworks.

According to Gross's Model, emotion regulation strategies are categorized based on when they occur in the emotion-generation process. He argues that the antecedent-focused strategies, such as cognitive reappraisal, occur before an emotional response is fully activated. On the other hand, response-focused strategies, such as expressive suppression, occur after an emotional response is already underway, and therefore require cognitive effort on the part of the individual to inhibit the overt behavioral expression of emotion [12, 13]. The use of specific emotion regulation strategies has been shown to have important implications for social functioning and mental health. However, it is important to note that effectiveness of emotion regulation does not depend solely on the use of specific strategies, but also on flexible application of these strategies across changing contexts. Therefore, contemporary research emphasizes regulatory flexibility, which is defined as the ability to adaptively select and apply emotion regulation strategies in accordance with situational demands rather than relying on any single strategy across situations [14]. Nevertheless, certain strategies have consistently been associated with more favorable psychological outcomes and are therefore categorized as adaptive forms of emotion regulation. Such strategies promote adaptive engagement with stressful situations through mechanisms such as cognitive reframing, solution-oriented action, emotional acceptance, and active behavioral engagement with the situation [15]. These strategies differ in their underlying mechanisms, but share the common objective of facilitating adaptive responses. As a result, individuals who demonstrate greater use of adaptive emotion regulation strategies are often better equipped to use adaptive coping responses in the face of stressful situations.

In the contemporary context, where digital technologies have paved their way into nearly all domains of human life, research has increasingly focused on whether artificial intelligence (AI)-based tools can support these regulatory and coping processes by potentially facilitating processes such as emotional reflection, cognitive restructuring, and problem-solving. AI-curated interventions can function as "cognitive scaffolds" or "real-time cognitive amplifiers" during these interactions [16]. These tools are designed to assist individuals by facilitating externalization, whereby they help transform abstract and complex internal emotional representations into more manageable forms [16]. Consequently, they may help reduce the working-memory load required for the processing of such complex representations. Emerging evidence suggests that AI-based systems can provide empathetic, real-time feedback that may help prevent maladaptive patterns such as rumination, although this requires empirical validation.

Given these 'non-conventional' advantages of AI-based tools, people now increasingly report using them for clinical mental health support (psychoeducation, emotional support, self-reflection, and, in some cases, even guidance around clinical concerns) [17]. However, despite the potential psychological benefits of such systems, concerns persist regarding ethical use, emotional overreliance, misinformation, and the overall quality of support. As a consequence, individuals may differ considerably in their perceptions and acceptance of AI-based mental health tools. Although existing research has

explored the functional effectiveness and utility of AI-based mental health tools, relatively limited attention has been directed toward how individual differences in self-regulation processes may shape how individuals evaluate and engage with such technologies. Based on this rationale, the present study aims to explore the relationships among perceived attitudes toward AI mental health chatbots, coping strategies, and emotion regulation strategies.

Methodology

Research Design

For the present study, a cross-sectional correlational research design was employed. The primary variables under study were attitudes toward AI-based mental health support, emotion regulation strategies, and coping strategies.

Participants

A total of 100 university students participated in the study and were recruited through convenience sampling from universities across India. The inclusion criteria were participants falling in the eligible age range and having familiarity with the AI-assisted technologies. Prior to participation, participants were briefed about the study and informed consent was obtained from all the participants. The participants fall in the age range of 18 to 26 years (M = 20.84 years). The sample predominantly constituted of females (72.3%, n = 73), followed by males (26.7%, n = 27), and around 1% (n = 1) participant preferred not to disclose their gender. With respect to the educational qualification, the sample majorly consisted of participants who were pursuing or had completed their undergraduate education (90.1%, n = 91). Few of the participants (5.9%, n = 6) reported being in or had completed post-graduate education and about 4% (n = 4) participants reported other educational qualification.

Measures

Artificial Intelligence in Mental Health Scale (AIMHS) [18] was used to assess participants' attitudes toward the use of AI-based chatbots for the purpose of mental health support. The scale consists of five items that are rated on a 5-point Likert scale. It comprises two primary subscales: AI Technical Support and AI Personal Advantages; and also, a score for overall favorable attitude toward AI mental health chatbots. The Technical Advantages subscale assesses perceptions regarding the empathy and problem-solving abilities of AI chatbots in comparison to human therapists, whereas the Personal Advantages subscale assesses the perceptions regarding the role of AI chatbots in reducing geographic and financial barriers and enabling continuous access to mental health care.

Brief COPE [19] scale was used to assess individuals' coping strategies. The scale measures the cognitive and behavioral strategies individuals employ to manage stressful experiences and emotionally

demanding situations. It is a 28-item self-report questionnaire comprising three subscales: problem-focused coping, emotion-focused coping, and avoidant coping.

Emotion Regulation Questionnaire-30 [20] is a 30-item self-report measure, which assesses how frequently individuals use ten key emotional regulation strategies which are commonly categorized as adaptive or maladaptive. The adaptive strategies include behavioral activation, problem solving, acceptance, cognitive reappraisal, social sharing, whereas the maladaptive strategies include situational avoidance, social withdrawal, distraction, rumination, expressive suppression. This categorization is also consistent with broader emotion regulation literature, in which strategies such as reappraisal, acceptance, and problem solving are often associated with favorable psychological outcomes, whereas suppression, avoidance, and rumination are more frequently linked with psychological distress [12, 15]

Procedure

Data were collected through an online survey. Participants were first required to provide their demographic information and after providing a brief description about the objectives of the study, informed consent was obtained from them. Following the consent, participants completed the three questionnaires. Participants were also informed that they could withdraw at any stage of the study and confidentiality of participants' responses was ensured throughout the process.

Statistical Analysis

The collected data were analyzed using the JASP statistical software to examine relationships among the study variables. Descriptive statistics of the dataset were computed to assess the distribution and characteristics of the data. Pearson's correlation analyses were conducted to examine the associations among perceptions of AI-based mental health support, coping strategies and emotion regulation strategies. Furthermore, mediation analyses were also performed to explore whether any of the emotional regulation strategies mediated the relationship between coping strategies and perceived AI-based mental health support. In the mediation analyses, bootstrapping procedures and confidence intervals were employed to assess the significance of indirect effects.

Results

The present study examined the relationships among coping strategies, emotion regulation strategies and attitude towards the use of AI chatbots for mental health support. Descriptive statistics and correlation analyses were conducted initially, and exploratory mediation analyses were subsequently performed to further investigate the relationships among the variables. Tables 1–3 present the descriptive statistics for attitudes toward AI mental health chatbots, coping strategy subscales, and emotion regulation subscales.

Table 1
Descriptive Statistics for AI Attitude Dimensions

Variable	Mean	Standard Deviation
AI Technical Advantages	3.24	0.71
AI Personal Advantages	3.70	0.80
Overall Attitude toward AI Mental Health Chatbots	3.52	0.61

For attitudes toward AI mental health chatbots, participants reported relatively higher mean scores for perceived personal advantages subscale (M = 3.70, SD = 0.80) compared to perceived technical advantages subscale (M = 3.24, SD = 0.71).

Table 2
Descriptive Statistics for Coping Strategy Subscales

Variable	Mean	Standard Deviation
1. Problem-Focused Coping	20.07	4.84
2. Emotion-Focused Coping	27.37	6.32
3. Avoidance Coping	14.78	4.19

Among the coping strategy subscales, emotion-focused coping showed the highest mean score (M = 27.37, SD = 6.32), followed by problem-focused coping (M = 20.07, SD = 4.84), whereas avoidance coping was comparatively lower (M = 14.78, SD = 4.19).

Table 3
Descriptive Statistics for Emotion Regulation Subscales

Variable	Mean	Standard Deviation
1. Behavioral Activation	14.00	3.62
2. Problem-Solving	14.73	3.45
3. Situational Avoidance	13.87	3.36
4. Social Withdrawal	13.84	3.36
5. Distraction	14.55	3.61
6. Rumination	12.02	3.34
7. Acceptance	14.04	3.63
8. Cognitive Reappraisal	14.56	3.90
9. Expressive Suppression	13.46	4.12
10. Social Sharing	12.35	4.21

Within emotion regulation subscales, scores were relatively comparable across strategies, with slightly higher means observed for cognitive reappraisal (M = 14.56, SD = 3.90), distraction (M = 14.55, SD = 3.61), problem-solving (M = 14.73, SD = 3.45), acceptance (M = 14.04, SD = 3.63), and behavioral activation (M = 14.00, SD = 3.62). While lower mean values were observed for rumination (M = 12.02, SD = 3.34) and social sharing (M = 12.35, SD = 4.21).

Correlational Analyses

Table 4
Correlations Between AI Attitude Dimensions and Coping Strategy Subscales

Variable	AI Technical Advantages	AI Personal Advantages	Overall Attitude toward AI Mental Health Chatbots
1. Problem-Focused Coping	.07	.25*	.23*
2. Emotion-Focused Coping	.05	.06	.07
3. Avoidance Coping	−.18	−.15	−.20*
Note. $p < .05$*, $p < .01$**, $p < .001$***.			

Problem-focused coping was positively associated with both AI personal advantages (r = .25, p = .012) and overall attitude toward AI mental health chatbots (r = .23, p = .020). In addition, avoidance coping showed a significant negative correlation with overall attitude toward AI mental health chatbots (r = − .20, p = .044).

Table 5
Correlations Between AI Attitude Dimensions and Emotion Regulation Subscales

Variable	AI Technical Advantages	AI Personal Advantages	Overall Attitude toward AI Mental Health Chatbots
1. Behavioral Activation	−.09	.25*	.16
2. Problem-Solving	−.04	.28**	.20*
3. Situational Avoidance	−.16	.05	−.04
4. Social Withdrawal	−.17	.18	.06
5. Distraction	−.14	.11	.02
6. Rumination	−.05	.02	−.01
7. Acceptance	−.03	.26**	.19
8. Cognitive Reappraisal	−.08	.34***	.23*
9. Expressive Suppression	−.06	.28**	.19
10. Social Sharing	.03	−.11	−.07

Note. $p < .05$*, $p < .01$**, $p < .001$***.

Significant correlations with AI personal advantages were observed for behavioral activation (r = .25, p = .010), problem-solving (r = .28, p = .004), acceptance (r = .26, p = .009), cognitive reappraisal (r = .34, p < .001), and expressive suppression (r = .28, p = 0.005). Problem-solving (r = .20, p = .043) and cognitive reappraisal (r = .23, p = .020) were also significantly positively correlated with overall attitude toward AI mental health chatbots. No significant correlations were observed between any of the emotion regulation subscales and AI technical advantages.

Table 6
Correlations between Emotion Regulation Subscales and Coping Strategy Subscales

Variable	Problem-Focused Coping	Emotion-Focused Coping	Avoidance Coping
1. Behavioral Activation	.40***	.04	−.07
2. Problem-Solving	.30**	.02	−.05
3. Situational Avoidance	.08	.15	.08
4. Social Withdrawal	.24*	.23*	.17
5. Distraction	.11	.17	.15
6. Rumination	.13	.42***	.29**
7. Acceptance	.27**	.16	−.04
8. Cognitive Reappraisal	.44***	.11	−.003
9. Expressive Suppression	.13	.05	.07
10. Social Sharing	.13	.27**	.09

Note. $p < .05$*, $p < .01$**, $p < .001$***.

Significant positive correlations with problem-focused coping were observed for behavioral activation (r = .40, p < .001), problem-solving (r = .30, p = .002), social withdrawal (r = .24, p = .014), acceptance (r = .27, p = .006), and cognitive reappraisal (r = .44, p < .001). Emotion-focused coping was significantly positively correlated with social withdrawal (r = .23, p = .022), rumination (r = .42, p < .001), and social sharing (r = .27, p = .006). Avoidance coping was significantly positively correlated with rumination (r = .29, p = .003).

Table 7
Parallel Mediation Analysis Examining the Indirect Effects of Perceived AI Personal Advantages on Problem-Focused Coping Through Emotion Regulation Strategies

Indirect Effect	Estimate (B)	SE	95% CI LL	95% CI UL
AI P → ER BA → COPE P	0.13	0.08	0.01	0.36
AI P → ER PS → COPE P	-0.06	0.08	-0.26	0.07
AI P → ER A → COPE P	-0.003	0.06	-0.14	0.13
AI P → ER CR → COPE P	0.22	0.11	0.05	0.47
Total Indirect Effect	0.28	0.11	0.09	0.54

Note. SE = Standard Error, AI P = perceived AI personal advantages; ER BA = behavioral activation; ER PS = problem-solving; ER A = acceptance; ER CR = cognitive reappraisal; COPE P = problem-focused coping. Estimates represent unstandardized regression coefficients (B). Confidence intervals were estimated using bootstrap resampling with 4,986 successful samples.

For the parallel mediation analysis, only the emotion regulation subscales demonstrating significant correlations with both the predictor (AI personal advantages) and the outcome (problem-focused coping) were entered into the parallel mediation model. The total effect of perceived AI personal advantages on problem-focused coping was significant, B = 0.50, SE = 0.12, 95% CI [0.15, 0.84]. The analysis revealed a significant total indirect effect of perceived AI personal advantages on problem-focused coping through emotion regulation strategies, *B* = 0.28, *SE* = 0.11, 95% CI [0.09, 0.54]. Specifically, cognitive reappraisal (*B* = 0.22, 95% CI [0.05, 0.47]) and behavioral activation (*B* = 0.13, 95% CI [0.01, 0.36]) significantly mediated the relationship, whereas problem solving and acceptance did not. As the direct effect of perceived AI personal advantages on problem-focused coping after accounting for the mediators was no longer significant (B = 0.22, SE = 0.16, CI [-0.12, 0.53]). The pattern is consistent with an indirect-only (full) statistical mediation model (see Fig. 1). However, given the cross-sectional design, this should be interpreted as an exploratory association rather than evidence of causal mediation.

Note

Parallel mediation analysis examining the indirect effects of AI Personal Advantages on Problem-focused Coping through Emotion Regulation strategies. Values a1-a4 and b1-b4 represent the unstandardized path coefficients (B). c=total effect; c'=direct effect after inclusion of mediators.

Discussion

The present study examined the relationships among perceived attitudes toward AI mental health chatbots, coping strategies, and emotion regulation strategies. The findings indicated that adaptive coping (problem-focused coping) and adaptive emotion regulation strategies (behavioral activation,

cognitive reappraisal, problem-solving, and acceptance) were associated with more favorable perceptions of AI mental health chatbots. These associations were significant particularly for perceived personal advantages of AI mental health chatbots (i.e., geographic accessibility, continuous access, and financial accessibility). Interestingly, avoidant coping demonstrated a negative association with favorable attitudes toward AI mental health chatbots. Further, exploratory mediation analysis suggested that adaptive emotion regulation strategies may play an intermediary role in the relationship between perceived AI personal advantages and problem-focused coping.

Individuals' perceptions of the efficacy of AI mental health chatbots revealed an interesting pattern. Perceived personal advantages concern the accessibility, affordability, and the availability aspects of AI mental health chatbots, whereas perceived technical advantages concern empathy and problem-solving capabilities compared to a human therapist. The relationships observed in the study were especially strong for the personal advantages dimension rather than for purely technical competence. This may be attributed to the fact that evaluations of technical advantages represent comparatively higher-bar judgments than evaluations of personal advantages. Individuals may recognize and value the practical usefulness of AI mental health chatbots while remaining doubtful or skeptical of their ability to provide authentic human-like empathy. Experiential and interpersonal capabilities like empathy or sympathy are often regarded as uniquely human, and studies have revealed that their incorporation into AI-based responses may result in lower perceived authenticity of the overall interaction, regardless of the better perceived conversational quality of chatbots [21, 22]. Thus, individuals may demonstrate pragmatic acceptance of AI-based mental health support while continuing to value the emotional and relational qualities associated with human therapists, potentially suggesting that users perceive AI mental health chatbots as supplementary or complementary tools rather than as substitutes for human [23, 24].

Individuals who frequently use problem-focused coping are more likely to actively seek solutions and effectively utilize the available resources. In contrast, those who use avoidant coping are more likely to reflect disengagement, resistance, and an unwillingness to adopt a solution-oriented approach [4]. In the present study, individuals reporting more favorable perceptions of AI also reported greater use of problem-focused coping strategies and lower use of avoidant coping. One possible interpretation is that AI systems may be perceived as supplementary coping resources that act as readily available sources of guidance and practical support, thereby aligning more closely with problem-focused coping tendencies [25].

The study interestingly demonstrated that individuals who reported more favorable perceptions of the practical advantages of AI-based support also reported greater use of adaptive emotion regulation strategies, including behavioral activation, cognitive reappraisal, problem-solving, and acceptance. These positive associations may partly reflect the unique characteristics of conversational AI systems. Among these, cognitive reappraisal showed one of the strongest associations. These findings are consistent with the notion that AI-based interventions can function similarly to cognitive restructuring techniques used in CBT by aiding reflective thinking, structured cognitive processing, and reframing [26]. Conversational AI systems may therefore support both cognitive reappraisal and problem-solving

processes by helping individuals evaluate alternative perspectives and generate structured responses. Individuals also tend to value the structured prompts provided by conversational AIs for organizing thoughts, gaining perspective, and feeling acknowledged [27]. Together, these findings support the conceptualization of AI systems as “cognitive scaffolds” that may facilitate the externalization of thoughts and guided self-reflection.

Acceptance and behavioral activation were also associated with more favorable perceptions of the practical advantages of AI-based support, reflecting that individuals who are able to engage more adaptively with their emotional experiences may be more open to utilizing such tools, while AI systems themselves may also support adaptive emotional engagement. As behavioral activation emphasizes goal-directed behavior, it may additionally reflect a greater tendency towards proactive help-seeking. AI chatbots may facilitate such goal-directed behavior through structured guidance and ongoing interaction, acting as a space for monitoring progress [28], thereby serving as a practical aid for managing emotions.

However, the emotion regulation strategy of expressive suppression also positively correlated with more favorable perceptions of the practical advantages of AI-based support. Suppression is generally considered less adaptive; however, AI systems may provide an environment characterized by reduced interpersonal pressures that can facilitate emotional disclosure. Attributing to factors such as reduced fear of judgment, perceived anonymity and reduced social threat, research suggests that individuals often find it easier to disclose sensitive information to nonhuman agents [29].

The mediation analysis indicated that the association between problem-focused coping and favorable perceptions of AI-based mental health support operated primarily through the intermediate effects of emotion regulation strategies. Specifically, cognitive reappraisal and behavioral activation emerged as significant mediating mechanisms. The findings further suggested that individuals who have adaptive emotion regulation and coping tendencies may perceive AI-based mental health support as beneficial. This indicates that favorable perceptions of AI-based mental health support are associated with greater reflective emotional processing, cognitive reframing, and active behavioral engagement, which may contribute to greater use of problem-focused coping. This interpretation aligns closely with Lazarus’s cognitive appraisal theory, which proposes that the coping responses are shaped by how individuals interpret and regulate stressful experiences and situations [4]. Therefore, individuals who engage in cognitive reappraisal might view AI-based mental health support as a resource that can assist them in organizing thoughts, clarifying emotions, and facing stressors in a more convenient manner. Existing literature supports the notion that cognitive reappraisal is strongly associated with resilience, psychological flexibility, and improved emotional regulation [13, 30]. Furthermore, the significant mediating effects of behavioral activation indicated that individuals may engage more actively with AI systems as tools for guidance, emotional support, and problem-solving. The Uses and Gratifications Theory [31] aligns with such findings which states that individuals tend to selectively engage with the technological systems to satisfy their emotional and cognitive needs. AI systems may therefore provide their users with emotional validation, cognitive clarity and immediate accessibility during stressful

situations. Additionally, recent studies also suggest that AI-assisted psychological interventions may support emotional awareness, guided reflection and may facilitate adaptive self-regulation through real-time interaction and emotionally enveloped feedback [17, 23]. This study highlights the potential for tailoring AI-based mental health systems according to users' coping and emotion regulation, which can provide more individualized responses and support their integration alongside traditional psychotherapeutic practices. The interpretation of the present findings should be done while taking into account certain limitations. Causal inferences cannot be made due to study's cross-sectional and self-report nature and the findings may be influenced by response biases. Additionally, the exploratory mediation analysis can be further validated using longitudinal or experimental studies.

Conclusion

The findings of the present study demonstrate that favorable attitudes toward AI-based mental health support are positively associated with adaptive forms of coping and emotion regulation strategies. Additionally, specific emotion regulation strategies of cognitive reappraisal and behavioral activation emerged as significant mediators in the relationship between perceived practical advantages of AI-based mental health support and problem-focused coping. These findings have important implications for the development of forms of technologically mediated support systems that are both accessible as well as capable of adapting to users' psychological needs. The results therefore highlight the importance of taking psychological characteristics into account, alongside technological factors, when examining the acceptability of AI-based mental health support. Overall, the study contributes to the understanding of how AI-based systems can complement traditional therapeutic modalities, by helping overcome practical barriers that may hinder the continuity or accessibility of the therapeutic relationship. The study also aligns with Sustainable Development Goal 3 (SDG-3) by highlighting the potential role of AI-based digital tools in promoting mental health access and well-being.

Declarations

Ethics approval and consent to participate

Ethical approval was obtained from the Research Ethical Committee (REC), Directorate of Research & Publication (RDP), IILM University Gurugram (Approval No.: IILM/2026/004). The study was conducted in accordance with ethical guidelines. All procedures performed in studies involving human participants were in accordance with the Helsinki declaration. Participants were informed about the purpose of the study, the voluntary nature of participation, confidentiality of data, and their right to withdraw at any stage. Informed consent was obtained from all participants prior to data collection.

Consent to publish

Not applicable

Competing interests

The authors declare that they have no competing interests.

Clinical trials

This study was not registered as a clinical trial because it did not involve a clinical intervention or prospective allocation of participants to treatment groups. Clinical trial number: not applicable.

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Author Contribution

TC, AS, RK, and NK conceptualized the study and developed the research design. MIJNis the responsible corresponding Author of the study. VC and MS contributed to the literature review and manuscript drafting. RK, AS, and NK coordinated data collection and data management. TC performed the statistical analyses and contributed to the interpretation of the findings. NK and MIJN provided critical intellectual input, reviewed the manuscript, and contributed to the refinement of the theoretical framing and discussion. All authors read, revised, and approved the final version of the manuscript.

Data Availability

Data availability statementThe datasets generated and/or analysed during the current study are available from the corresponding author on reasonable request.

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Figures

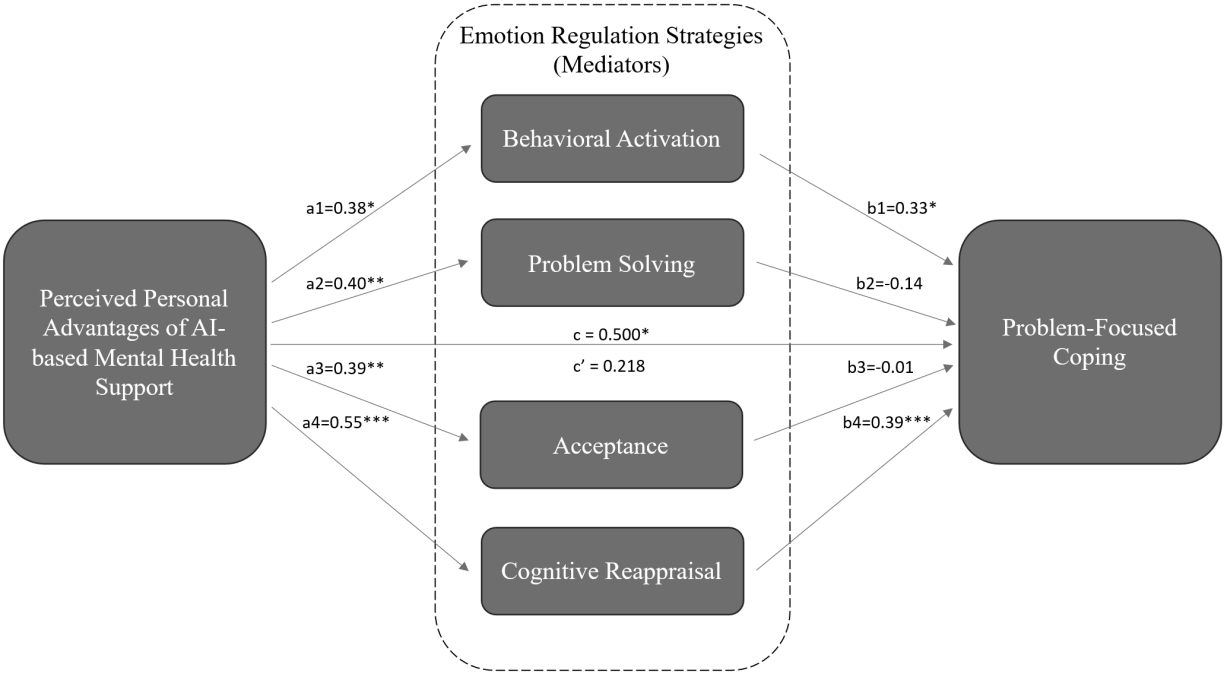


Figure 1

Schematic diagram for Parallel Mediation Analysis

Note. Parallel mediation analysis examining the indirect effects of AI Personal Advantages on Problem-focused Coping through Emotion Regulation strategies. Values a1-a4 and b1-b4 represent the unstandardized path coefficients (B). c=total effect; c'=direct effect after inclusion of mediators.