

Design opportunities for daily emotion regulation to enhance young adults' emotional well-being

Jinhee Cha✉ and Chajoong Kim

UNIST, Ulsan, South Korea

✉ geniecha@unist.ac.kr

ABSTRACT: This study examines daily emotion regulation strategies of young adults aged 20-30 and proposes design opportunities for enhancing emotional well-being. Research with 29 participants revealed a preference for behavioral strategies (73.4%) over cognitive strategies (26.6%), particularly “Seek pleasure or relaxation” strategies. Significant differences were observed between positive and negative emotional contexts. Four main categories of emotion regulation strategies were identified: Disengagement, Seek pleasure or relaxation, Reallocate resources, and Engagement. Design opportunities were proposed based on these findings. This study enhances understanding of young adults’ emotion regulation and offers design strategies for product development. Future research should validate these strategies and explore personalized approaches, considering long-term impacts and ethics.

KEYWORDS: emotion regulation, emotional well-being, design methods, emotional design, industrial design

1 Introduction

According to the World Health Organization, ‘mental health’ is a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well, work well, and contribute to their community. Most mental illnesses develop between the ages of 12-25, and one in five young adults aged 16-24 show symptoms of depression or anxiety (Jurewicz, 2015; Uhlhaas et al., 2023). This demonstrates the vulnerability of young people’s mental health, and we can no longer neglect them simply because they are young. Poor mental health negatively impacts an individual’s emotional well-being (World Health Organization, 2022b). Emotional well-being is a comprehensive term encompassing psychological concepts such as life satisfaction, sense of purpose, and positive emotions (Feller et al., 2018). The importance of positive emotions has been repeatedly emphasized in research on emotional well-being (Colombo et al., 2021), indicating that emotional regulation for personal goals is a crucial factor in mental health and emotional well-being.

Emotion regulation goals can include decreasing or increasing both negative and positive emotions (Gross, 2015). People use various methods such as physical exercise or playing music to increase positive emotions while also avoiding emotional distress (Kashdan et al., 2015). Compared to younger adults, middle-aged individuals report significantly fewer negative emotions and find emotion regulation easier (Gross et al., 1997; Helson & Klohnen, 1998). While the ability to regulate one’s emotions may improve with age, there is a greater need for design interventions to support emotional well-being among younger generations. This study aims to explore and categorize how people(young adults) regulate their emotions in daily life, and to investigate design strategies that can assist with emotion regulation.

According to Gross, ‘emotion regulation’ is the process by which individuals attempt to influence their emotional states to achieve personal goals (Gross, 1998). Emotion regulation can occur at various stages of the emotion generation process (Gross, 2015). It can be used before or after emotion generation to attempt to increase or decrease emotions toward a target state. One of the main focuses in this field is

exploring how to organize and evaluate the relevance of numerous strategies people use to regulate their emotions (Gross, 2015).

Attempting various strategies to regulate emotions helps with people's overall happiness (Quoidbach et al., 2010). Common emotion regulation strategies can be broadly classified into adaptive and maladaptive strategies (Campbell-Sills et al., 2006; Gross, 1998). Acceptance, problem-solving, and cognitive reappraisal are classified as adaptive strategies, while avoidance, suppression, worry, rumination, and self-criticism are classified as maladaptive strategies. Various studies on emotion regulation have already suggested that adaptive strategies have positive effects on mental health and well-being (Aldao & Nolen-Hoeksema, 2012).

The World Health Organization, it is projected that there will be a global shortage of approximately 10 million healthcare workers by 2030, and they recommend self-care interventions to ensure and promote universal health (World Health Organization, 2022a). Indeed, during the pandemic, there was an increased interest in teletherapy and self-guided mental health management among college students (Ahuvia et al., 2024). The rapid digitalization of daily life and growing interest in self-directed mental health management suggest that people will need tools and methods for personal mental health care in their everyday lives (Bond et al., 2023; Corp et al., 2023; Iivari et al., 2020). Various products and services for emotional therapy have been proposed, such as smart toys to alleviate children's anxiety in emergency rooms and robotic pets for emotional interaction (Ihamäki & Heljakka, 2021; Theofanopoulou et al., 2019). However, these solutions primarily focus on treatment, and there are few methods for anyone to easily manage their mental health in daily life (Martin, 2022). This study recognizes the need for design interventions from the perspective of daily self-care for emotion regulation and emotional well-being. This study aims to explore and categorize how young adults regulate their emotions in daily life, and to investigate design strategies that can assist with emotion regulation. Specifically, our research objectives are:

- 1) To identify and classify the emotion regulation strategies used by young adults in their daily lives.
- 2) To examine how these strategies differ between positive and negative emotional contexts.
- 3) To develop design opportunities for products and services that can support daily emotion regulation and enhance emotional well-being.

Based on these objectives, we posed the following research questions: How do people attempt to regulate their emotions in daily life? Do emotion regulation attempts show different characteristics according to emotional contexts? What design opportunities can help with daily emotion regulation?

2 Materials and method

2.1 Samples and materials

This study conducted interviews with young adults in their 20s and 30s to understand how they regulate emotions in daily life. Participants were recruited through university posters and online community posts. The selection criteria included the DOPES (Differentiation of Positive Emotion Scale) (Kirby et al., 2014). DOPES assesses the ability to differentiate positive emotions using eight short descriptions of situations that elicit positive emotions. Participants were classified based on their ability to differentiate (positive) emotions using DOPES. A total of 29 participants (15 females, 14 males) were ultimately selected for the study.

This study consisted of a preliminary task, interviews, and a design strategy development workshop. The interviews aimed to understand the daily emotion regulation methods of young adults in their 20s and 30s, while the preliminary task collected data on participants' daily emotions to facilitate smooth interview proceedings. Participants were asked to send at least two emotion reports via mobile messenger from one week to one day before the interview. These reports detailed what emotions they felt and why, and additionally, participants were requested to send photos of products or services they use to regulate their emotions. This preliminary task served as a source for discussing participants' daily emotion regulation during the brief interview period. The interviews were structured to understand the context of emotion regulation in daily life based on the preliminary emotion reports, ensuring balanced responses about both positive and negative emotions. Interview questions were categorized into three types:

- Inquiries about the daily context of positive/negative emotions
- Questions about efforts to regulate these emotions
- Queries about products and services used for emotion regulation

Based on the interview results, strategies were developed that could be applied when designing products and services for emotion regulation in daily life. Discussions for deriving design strategies were conducted with two doctoral students in design. The process involved sharing an explanation of the research and the interview results classified according to emotion regulation strategies, followed by individual brainstorming of ideas, and then a discussion and selection process to develop the strategies.

2.2 Procedure

On the day of the interview, after confirming the study's purpose, guidelines, and consent form, one-on-one interviews were conducted.

The interview results were processed as follows: The author extracted content related to emotions and attempts at emotion regulation from the interview transcripts. Then, in collaboration with two doctoral students in design, these extracts were classified into cognitive and behavioral strategies. The classified strategies were further categorized based on Revised Scheme for Classification of Affect-regulation Strategies of [Figure 1 \(Parkinson & Totterdell, 1999\)](#).

Their research aimed to systematically categorize strategies people use for emotion regulation. Their study involved participants classifying emotion regulation strategies collected through self-reports, interviews, and other methods. The classification scheme broadly distinguishes between cognitive and behavioral strategies, and further categorizes them into:

- Diversion-Disengagement: Tendencies to divert attention or avoid
- Diversion-Distract-Seek pleasure or relaxation: Choosing strategies that are enjoyable or relaxing
- Diversion-Distract-Reallocate resources: Tendencies to redistribute attention or resources to other activities
- Engagement: Directly confronting emotions and problems

		COGNITIVE	BEHAVIOURAL
DIVERSION	Disengagement	Avoid thinking about the problem	Avoid problematic situation
	Distract	SEEK PLEASURE OR RELAXATION	Think about something pleasant Do something pleasant
		Think about relaxing thoughts	Do something relaxing
	REALLOCATE RESOURCES	Think about something that occupies attention	Perform a demanding activity
ENGAGEMENT		Reappraise (usually affect-directed)	Vent feelings (usually affect-directed) Seek help or comfort from others
		Think about how to solve problem (usually situation-directed)	Take action to solve problem (usually situation-directed)

Figure 1. Revised scheme for classification of affect-regulation strategies

3 Results and discussion

A total of 376 cases were collected. [Figure 2](#) shows examples of actual interview quotes categorized according to the classification in [Figure 1](#). For cognitive strategies, Problem and Emotion Separation, Positive Thinking, Attention Reallocation, and Reappraisal were identified. For behavioural strategies, Situation and Environment Separation, Leisure Activities, Energy Reallocation, and Conversation were identified.

	COGNITIVE	BEHAVIOURAL
DIVERSION		
Disengagement	Problem and Emotion Separation "I have thoughts about what happened yesterday, but I try not to think about it specifically and try to ignore it as much as possible." (Participant 8)	Situation and Environment Separation "When I felt anxious and stressed, I found a quiet place and stayed there alone." (Participant 18)
Distraction	Positive Thinking "I prefer to think about good things rather than what's bothering me..." (Participant 9)	Leisure Activities "I went to a place I enjoy in my depressed and sad mood, and that changed my mood." (Participant 4)
Reallocate resources	Attention Reallocation "The act of fire gazing (bulmung) itself is the only time when I can let go of and release my thoughts" (Participant 15)	Energy Reallocation "When I clean a lot or do something that requires physical effort... I feel good when I do such work." (Participant 10)
ENGAGEMENT	Reappraisal "Looking at (observing plants) like this gives me inner peace... it makes me change my angry thoughts into 'I should work hard too'" (Participant 1)	Conversation "I talk to my close friends about my concerns. That's usually the timing when I feel better." (Participant 11)

Figure 2. Examples of interview quotes and classification according to the revised scheme for classification of affect-regulation strategies

73.4% of total were behavioral strategies, and 26.6% were cognitive strategies. Among the behavioral strategies, the Distraction-Seek pleasure or relaxation strategy under the Diversion category had a high proportion. For cognitive strategies, the Engagement and Diversion-Distraction-Seek pleasure or relaxation strategies were predominant. These findings suggest that people primarily use behavioral approaches to regulate their emotions, with a particular emphasis on seeking pleasure or relaxation as a means of distraction. The cognitive strategies, while less frequent, also show a tendency towards engagement with emotions and seeking mental diversions through pleasurable or relaxing thoughts. This indicates that participants tend to regulate their emotions in daily life by diverting their attention to activities associated with pleasure and relaxation, both behaviorally and cognitively.

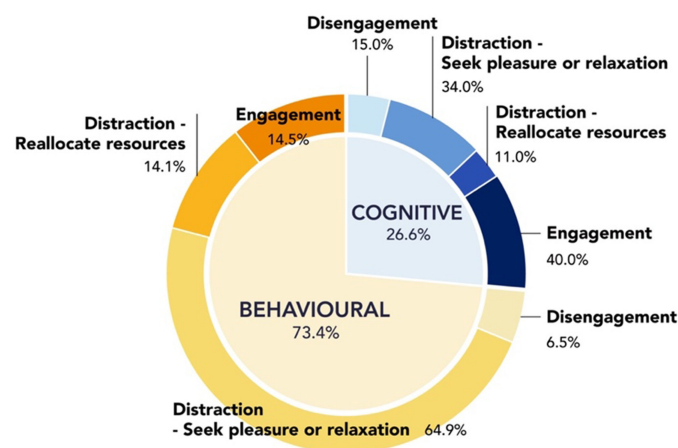


Figure 3. Preference diagram of daily emotion regulation strategies for all samples

3.1 Preference for emotion regulation strategies based on emotion types

By analyzing the context of emotion reports and interviews related to daily emotion regulation, the data could be classified into positive and negative emotions. The chi-square test results revealed statistically significant differences in both cognitive strategies (Chi-square = 30.01, degrees of freedom = 3, $p < .001$) and behavioral strategies (Chi-square = 53.06, degrees of freedom = 3, $p < .001$) based on emotion type. In particular, the Seek pleasure or relaxation strategy was frequently used in positive emotional contexts, while Disengagement and Engagement strategies were more commonly employed in negative emotional

contexts compared to positive ones. This demonstrates that the choice of emotion regulation strategies in daily life can vary depending on the type of emotion.

As shown in Figure 4, the differences are evident. In positive emotional situations, behavioral strategies were more frequently chosen than in negative situations, with Seek pleasure or relaxation being the most commonly used strategy. Similarly, for cognitive strategies, participants also frequently chose pleasure- and relaxation-seeking approaches. In negative emotional situations, the distribution of behavioral sub-strategies was more balanced compared to positive situations. While Seek pleasure or relaxation remained the most frequent strategy, Disengagement, Reallocate resources, and Engagement each accounted for over 10% of the responses. For cognitive strategies, the use of pleasure- and relaxation-seeking strategies was lower than in positive situations, whereas Disengagement and Engagement were chosen more frequently.

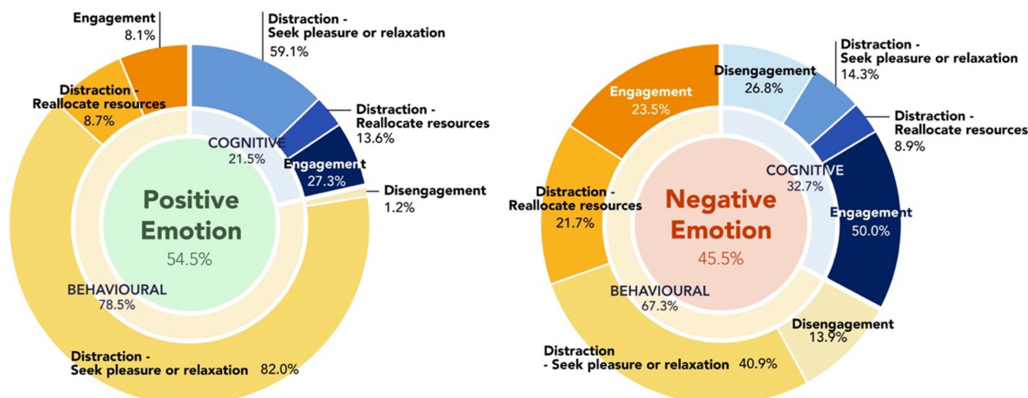


Figure 4. Preference diagram of daily emotion regulation strategies by emotion types

3.2 Discussion

3.2.1 Analysis of preferences for daily emotion regulation strategies

We analyzed the types of emotion regulation strategies used in daily life and identified frequently used strategies. Based on the responses of all interview participants, behavioral strategies were used more than cognitive strategies in a ratio of approximately 7:3. Among the subtypes of behavioral strategies, the Seek pleasure or relaxation strategy was frequently used. While the Engagement strategy was the most used subtype of cognitive strategies, it had the same number of actual responses as the Engagement strategy in behavioral strategies. This is because the Seek pleasure or relaxation strategy in behavioral strategies accounts for an overwhelmingly high proportion. Of course, the Seek pleasure or relaxation strategy in cognitive strategies is also used as much as the Engagement strategy, indicating that the Seek pleasure or relaxation strategy itself is frequently used. Therefore, it appears that young people in their 20s and 30s primarily regulate their emotions through behavioral strategies in daily life, particularly preferring strategies that seek pleasure and relaxation.

The types of emotion regulation strategies based on emotional situations show the patterns among the experimental results. In positive emotional situations, there is a preference for the Seek pleasure or relaxation strategy among behavioral strategies, due to cases of pursuing leisure activities to up-regulate positive emotions. No cases of disengaging or separating from positive emotions were found in positive emotional situations. To suppress or down-regulate negative emotions, people use a wider variety of strategies in negative emotional situations compared to positive ones. It is presumed that humans choose a wider variety of strategies with greater weight in negative situations because they perceive negative emotions more acutely than positive ones for survival and adaptation (Vaish et al., 2008). In behavioral strategies, all four subtypes are used evenly, and cognitively, there are active efforts to engage and resolve negative emotions or situations. Additionally, there were frequent cases of choosing temporary emotional and situational disengagement (separation) considering one's current situation or circumstances.

3.2.2 Characteristics of daily emotion regulation strategies by emotional context

Figure 5 illustrates the distribution of emotion regulation strategies based on positive and negative emotions, categorized into cognitive and behavioural approaches. For positive emotions, behavioural strategies dominate with 78.5% usage, particularly within the Distraction - Seek pleasure or relaxation category (82.0%). These include physical activities, relaxation techniques, entertainment, and outdoor experiences. Cognitive strategies account for 21.5%, with Engagement (27.3%) focusing on reflective practices, emotional awareness and regulation, self-empowerment, social connection, and acceptance, while Distraction - Seek pleasure or relaxation (59.1%) includes sensory experiences, cognitive reframing and mental stimulation, auditory and media-based emotion regulation, and mindfulness.

For negative emotions, behavioural strategies also prevail at 67.3%, though cognitive strategies hold a significant share at 32.7%. The most prominent category of Cognitive strategies is Engagement (50.0%), encompassing cognitive reappraisal, self-reflection, mindfulness, and emotional regulation techniques. Distraction - Seek pleasure or relaxation (40.9%) of behavioural strategies includes physical activities, culinary experiences, animal interaction, entertainment and media consumption, self-care, social activities, and outdoor activities. Notably, Disengagement of cognitive strategies appears more frequently for negative emotions (26.8%) compared to positive emotions (0%), highlighting a tendency to distance oneself from distressing situations or thoughts.

These findings emphasize a preference for behavioural strategies in regulating both positive and negative emotions while showcasing distinct patterns in strategy selection depending on the emotional context. Positive emotions are primarily enhanced through pleasurable distractions, whereas negative emotions require more diverse approaches, including engagement and disengagement techniques to manage distress effectively.

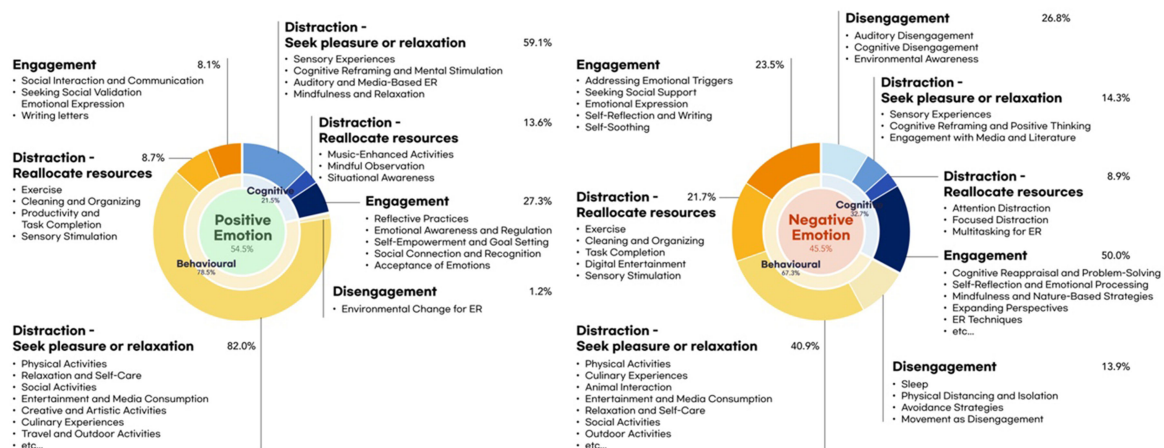


Figure 5. Distribution of daily emotion regulation strategies by emotion types

3.2.3 Identification of Design Opportunities for Daily Emotion Regulation

Figure 6 presents design strategies for products and services that can assist with daily emotion regulation, based on the Revised Scheme for Classification of Affect-regulation Strategies and interview results. To develop these design strategies, we considered how the strategies reported by participants in the interviews were used and what elements might be necessary to actively employ these strategies.

For cognitive strategies:

- Disengagement: Design elements that help interrupt thoughts
- Seek pleasure or relaxation: Active suggestions for positive directions
- Reallocate resources: Elements for diverting attention
- Engagement: Design elements for self-dialogue

For behavioral strategies:

- Disengagement: Encouraging physical space departure
- Seek pleasure or relaxation: Suggesting easy and enjoyable activities
- Reallocate resources: Providing assistance for immersion in activities
- Engagement: Facilitating emotional expression and various forms of conversation

For the Disengagement strategy, cognitive approaches include interrupting thought patterns and shifting mental spaces, while behavioral strategies involve recommending new environments or encouraging physical relocation. The Seek pleasure or relaxation strategy encompasses cognitive methods like proposing positive future scenarios, and behavioral tactics such as providing easy starting points for activities or creating immersive virtual experiences. The Reallocate resources strategy involves cognitive techniques like timely reminders or deliberate distractions, and behavioral methods such as engaging in focused simple tasks or enforcing prioritization. Lastly, the Engagement strategy includes cognitive elements like facilitating self-dialogue and thought reframing, along with behavioral approaches such as creating spaces for emotional expression and accessing others' experiences for perspective.

These design strategies can serve as a foundation for developing personalized emotion regulation tools to enhance individual emotional well-being. Designers can apply these strategies in their ideation process to create products and services, while conducting in-depth user research to ensure a deep understanding of user needs and design feasibility. Unlike existing therapeutic-focused services and products, these strategies emphasize the development of tools that are more accessible and practical for everyday use, allowing individuals to regulate their emotions seamlessly in daily life.

The findings on the differential use of emotion regulation strategies based on emotional contexts can be directly applied to enhance the effectiveness of design interventions. By carefully selecting and combining design opportunities that align with the patterns observed in positive and negative emotional situations, we can create more targeted and impactful design interventions. For instance, in positive emotional contexts, where behavioral strategies and "Seek pleasure or relaxation" are preferred, design elements could emphasize suggesting enjoyable activities or providing immersive experiences. Conversely, for negative emotional contexts, where a wider range of strategies is employed, a balanced approach incorporating elements that support cognitive reappraisal, facilitate emotional expression, and offer various forms of engagement would be more effective. This tailored approach, based on the emotional context and individual preferences, has the potential to significantly improve the efficacy of emotion regulation tools in daily life.

To explore how these design strategies can be applied in practice, further research is necessary. For instance, some activities people engage in to improve their mood may be effective in the short term but could lead to long-term issues (Thayer, 2001). In addition to evaluating effectiveness, ethical considerations must also be addressed. Designers should account for these factors when creating responsible and realistic ideas (Desmet, P. M., 2015). Furthermore, understanding the potential negative impacts of design on emotion regulation and exploring the goals of emotion regulation can deepen our comprehension of this field. This understanding can support designers in developing interventions that not only contribute to human emotional well-being but also integrate seamlessly into daily routines, making emotion regulation more approachable and sustainable.

	COGNITIVE	BEHAVIOURAL
DIVERSION		
Disengagement	<p>Mention restraint Help users avoid thinking about certain points by restraining mentions of them. Examples A service that detects and excludes uncomfortable words from daily life</p> <p>Thought flow interruption Help interrupt and block the flow of thoughts. Examples Products or apps that help users zone out</p> <p>Cognitive space and mood transition Help users escape from current thoughts by creating a feeling of being in a different space Examples Guide cognitive spatial changes through combined products and services such as lighting and music</p>	<p>New space recommendations Help users escape from their current space whenever needed. Examples A app that recommends nearby places worth visiting</p> <p>Space departure inducement Provide behavioral triggers through elements that encourage leaving the current space. Examples Products or apps that send notifications to leave the current space</p>
Distraction	<p>Seek pleasure or relaxation</p> <p>Positive future suggestions Present possible positive futures based on current facts. Examples A service that suggests realistically achievable positive futures</p> <p>Positive future simulation Show a better future when users input their envisioned future. Examples A future life panorama simulation service</p>	<p>Easy starting trigger Help users easily start something. Examples Timer for regular exercise, diary writing with AI conversation, meditation guide service</p> <p>Providing virtual activity experiences Give users a feeling of accomplishment even without actually doing the activity. Examples Cleaning games, products that create a nature-like mood, apps recommending personally taken landscape photos</p> <p>Playful activities Make activities accessible like play. Examples Sensory stimulating products like slime and clay play</p> <p>Creating a mood that induces emotion-regulating activities Create an atmosphere that encourages relaxing activities like journaling, reading, and meditation.</p>
Reallocate resources	<p>Appropriate timing alerts Detect emotionally elevated states and provide appropriate methods for distraction. Examples Mobile products that provide distraction, notification services for important tasks, addictive content like short-form videos</p> <p>Irritating elements when detecting depression When feeling depressed or sad, create intentional irritation to help distract attention. Examples Apps that create irritation through repetitive sounds</p>	<p>Simple activities requiring concentration Enhance immersion through activities that are simple but require focus. Examples Products involving activities that could be slightly risky without concentration, like Chopping</p> <p>Forced immersion Block access to other things when there's something that needs to be done. Examples View-blocking products, blocking services</p> <p>Priority notifications Provide notifications to help prioritize important tasks. Examples To-do list notification services</p>
ENGAGEMENT	<p>Creating an emotion-soothing atmosphere Create a patial atmosphere that allows users to focus on their emotions. Examples Thinking chair, partitions for emotional separation</p> <p>Self-conversation Enable users to have conversations with themselves like chatting. Examples AI self-diary service</p> <p>Thought switching Provide switching elements that help shift thinking to focus on positive aspects rather than negative ones. Examples Switching products and apps</p> <p>Emotion-calming Help users calm their emotions so they can think for themselves. Examples Apps that encourage self-reflection</p>	<p>Providing emotional expression space/mood Provide elements that allow comfortable expression of emotions. Examples Emotional expression avatar service</p> <p>Conversation and comfort Provide not only conversation but also comfort.</p> <p>Access to others' experiences Allow access to others' emotion-centered experiences. Examples Community service where users can hear stories from adults</p> <p>Providing 'objective' perspective Enable users to see objective viewpoints from different sources. Examples AI service providing different perspectives</p>

Figure 6. Design opportunities for daily emotion regulation

4 Conclusions

This study analyzes the daily emotion regulation strategies of young adults in their 20s and 30s and proposes design strategies for enhancing emotional well-being. The research reveals that young adults primarily use behavioral strategies (73.4%) over cognitive strategies (26.6%) to regulate their emotions in daily life, with a particular preference for the “Seek pleasure or relaxation” strategy among Distraction strategies.

Significant differences were observed in the types of emotion regulation strategies used in positive and negative emotional situations. For positive emotions, behavioral strategies dominated (78.5%), particularly within the Distraction - Seek pleasure or relaxation category (82.0%). In contrast, negative emotional contexts showed a more balanced distribution, with behavioral strategies at 67.3% and cognitive strategies at 32.7%. A wider variety of strategies were employed in negative emotional situations, likely due to the more acute recognition and judgment of negative emotions compared to positive ones.

The study identified four main categories of emotion regulation strategies: Disengagement, Seek pleasure or relaxation, Reallocate resources, and Engagement. Based on these findings, design opportunities were proposed for daily emotion regulation, such as creating tools to interrupt negative thought patterns, suggesting enjoyable activities, and facilitating emotional expression.

This research contributes to understanding the emotion regulation patterns of young adults and presents design opportunities that can be applied to product and service development for enhancing emotional well-being. The findings on differential strategy use based on emotional contexts can be directly applied to create more targeted and impactful design interventions. For instance, design elements for positive emotional contexts could emphasize suggesting enjoyable activities, while interventions for negative contexts might incorporate a balanced approach supporting cognitive reappraisal and various forms of engagement.

The study acknowledges limitations due to its small sample size of 29 participants and specific age group focus (20s and 30s), suggesting future research with larger and more diverse populations. Additionally, further investigation is needed to explore the practical application of the proposed design strategies, considering both short-term effectiveness and potential long-term impacts. Future research should focus on the application and effectiveness verification of the proposed design opportunities to develop customized approaches for emotion regulation based on individual emotional states and preferences. This could contribute to the improvement of emotional well-being for those needing assistance with daily emotion regulation, while also considering potential long-term effects and ethical implications of design interventions.

Acknowledgment

This work was supported by the Ministry of Education of the Republic of Korea and the National Research Foundation of Korea(NRF-2020S1A5A2A03045893) and Korea Institute for Advancement of Technology(KIAT) grant funded by the Korea Government(MOTIE)(RS-2025-02263062, HRD Program for Industrial Innovation).

References

- Ahuvia, I. L., Sung, J. Y., Dobias, M. L., Nelson, B. D., Richmond, L. L., London, B., & Schleider, J. L. (2024). College student interest in teletherapy and self-guided mental health supports during the COVID-19 pandemic. *Journal of American College Health*, 72(3), 940–946. <https://doi.org/10.1080/07448481.2022.2062245>
- Aldao, A., & Nolen-Hoeksema, S. (2012). The influence of context on the implementation of adaptive emotion regulation strategies. *Behaviour Research and Therapy*, 50(7), 493–501. <https://doi.org/10.1016/j.brat.2012.04.004>
- Bond, R. R., Mulvenna, M. D., Potts, C., O'Neill, S., Ennis, E., & Torous, J. (2023). Digital transformation of mental health services. *Npj Mental Health Research*, 2(1), 1–9. <https://doi.org/10.1038/s44184-023-00033-y>
- Campbell-Sills, L., Barlow, D. H., Brown, T. A., & Hofmann, S. G. (2006). Effects of suppression and acceptance on emotional responses of individuals with anxiety and mood disorders. *Behaviour Research and Therapy*, 44(9), 1251–1263. <https://doi.org/10.1016/j.brat.2005.10.001>
- Colombo, D., Pavani, J.-B., Fernandez-Alvarez, J., Garcia-Palacios, A., & Botella, C. (2021). Savoring the present: The reciprocal influence between positive emotions and positive emotion regulation in everyday life. *PloS One*, 16(5), e0251561.
- Corp, N., Bray, L., Chew-Graham, C. A., Polidano, K., Fisher, T., Farmer, A. D., McDermott-Hughes, M., & Saunders, B. (2023). Self-directed self-management interventions to prevent or address distress in young people with long-term physical conditions: A rapid review. *Health Expectations: An International Journal of Public Participation in Health Care and Health Policy*, 26(6), 2164–2190. <https://doi.org/10.1111/hex.13845>

- Desmet, P. M. (2015). Design for mood: Twenty activity-based opportunities to design for mood regulation. *International Journal of Design*, 9(2).
- Feller, S. C., Castillo, E. G., Greenberg, J. M., Abascal, P., Van Horn, R., & Wells, K. B. (2018). Emotional Well-Being and Public Health: Proposal for a Model National Initiative. *Public Health Reports*®, 133(2), 136–141. <https://doi.org/10.1177/0033354918754540>
- Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, 2(3), 271–299.
- Gross, J. J. (2015). Emotion regulation: Current status and future prospects. *Psychological Inquiry*, 26(1), 1–26.
- Gross, J. J., Carstensen, L. L., Pasupathi, M., Tsai, J., Götestam Skorpen, C., & Hsu, A. Y. C. (1997). Emotion and aging: Experience, expression, and control. *Psychology and Aging*, 12(4), 590–599. <https://doi.org/10.1037/0882-7974.12.4.590>
- Helson, R., & Klohnen, E. C. (1998). Affective Coloring of Personality from Young Adulthood to Midlife. *Personality and Social Psychology Bulletin*, 24(3), 241–252. <https://doi.org/10.1177/0146167298243002>
- Ihamäki, P., & Heljakka, K. (2021). Robot pets as “Serious Toys”-activating social and emotional experiences of elderly people. *Information Systems Frontiers*, 1–15.
- Iivari, N., Sharma, S., & Ventä-Olkkonen, L. (2020). Digital transformation of everyday life – How COVID-19 pandemic transformed the basic education of the young generation and why information management research should care? *International Journal of Information Management*, 55, 102183. <https://doi.org/10.1016/j.ijinfomgt.2020.102183>
- Jurewicz, I. (2015). Mental health in young adults and adolescents – supporting general physicians to provide holistic care. *Clinical Medicine*, 15(2), 151–154. <https://doi.org/10.7861/clinmedicine.15-2-151>
- Kashdan, T. B., Young, K. C., & Machell, K. A. (2015). Positive emotion regulation: Addressing two myths. *Current Opinion in Psychology*, 3, 117–121.
- Kirby, L. D., Tugade, M. M., Morrow, J., Ahrens, A. H., & Smith, C. A. (2014). Vive la Différence. *Handbook of Positive Emotions*.
- Martin, L. (2022). Better than cure? *Why we should focus on prevention*. In *Psych 2022*, Vol 44.
- Parkinson, B., & Totterdell, P. (1999). Classifying Affect-regulation Strategies. *Cognition and Emotion*, 13(3), 277–303. <https://doi.org/10.1080/026999399379285>
- Quoidbach, J., Berry, E. V., Hansenne, M., & Mikolajczak, M. (2010). Positive emotion regulation and well-being: Comparing the impact of eight savoring and dampening strategies. *Personality and Individual Differences*, 49(5), 368–373.
- Thayer, R. E. (2001). *Calm energy: How people regulate mood with food and exercise*. Oxford, UK: Oxford University Press.
- Theofanopoulou, N., Isbister, K., Edbrooke-Childs, J., & Slovák, P. (2019). A smart toy intervention to promote emotion regulation in middle childhood: Feasibility study. *JMIR Mental Health*, 6(8), e14029.
- Uhlhaas, P. J., Davey, C. G., Mehta, U. M., Shah, J., Torous, J., Allen, N. B., Avenevoli, S., Bella-Awusah, T., Chanen, A., Chen, E. Y. H., Correll, C. U., Do, K. Q., Fisher, H. L., Frangou, S., Hickie, I. B., Keshavan, M. S., Konrad, K., Lee, F. S., Liu, C. H., . . . Wood, S. J. (2023). Towards a youth mental health paradigm: A perspective and roadmap. *Molecular Psychiatry*, 28(8), 3171–3181. <https://doi.org/10.1038/s41380-023-02202-z>
- Vaish, A., Grossmann, T., & Woodward, A. (2008). Not all emotions are created equal: The negativity bias in social-emotional development. *Psychological Bulletin*, 134(3), 383–403. <https://doi.org/10.1037/0033-2909.134.3.383>
- World Health Organization. (2022a). WHO guideline on self-care interventions for health and well-being, 2022 revision. *World Health Organization*.
- World Health Organization. (2022b). WHO guidelines on mental health at work. *World Health Organization*.