



Beyond Screen Time: A Narrative Review of Algorithmic Co-regulation and Its Consequences for Psychotherapeutic Practice

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ABSTRACT

Algorithmic systems are increasingly used for mood and emotion regulation. Moving beyond the notion of passive screen time, this narrative review synthesizes literature from biopsychology, Human–Computer Interaction, learning theory, attachment theory, and psychodynamic perspectives to examine algorithmic co-regulation. Algorithmic co-regulation is conceptualized as a bidirectional process in which digital systems respond to users’ behavioral and emotional cues while simultaneously shaping regulatory styles and identity development. The review clarifies how algorithmic systems function as co-regulators by engaging reward-learning pathways and simulating relational processes. Evidence suggests that although algorithmic co-regulation may offer accessible resources for emotion regulation, it is also associated with psychological distress, emotional dependency, erosion of internal coping strategies, and altered identity development. For psychotherapeutic practice, the review highlights the importance of integrating algorithm awareness into assessment and intervention. The article concludes by identifying critical gaps in the literature and emphasizing the need for longitudinal, qualitative, and controlled research to advance understanding of algorithmic co-regulation in mental health contexts.

Keywords: Algorithmic co-regulation, Emotion regulation, Digital mental health, Psychotherapeutic practice, Identity development, Attachment theory, Human-computer interaction.

INTRODUCTION

Co-regulation refers to the process through which individuals in a relationship exert an influence on one another’s emotional states, thereby helping both parties achieve emotional balance (Butler & Randall, 2013). Co-regulation occurs when people or groups utilize available interpersonal opportunities and adjust their goals and emotions in response to one another to support self-regulation (Schunk & Greene, 2017). Human co-regulation is commonly observed in parent–child relationships, where caregivers support children in developing the ability to manage emotions and behavior. Research indicates that when parents and children respond to one another’s emotions in a flexible and comforting manner, interactions tend to be more positive and are associated with stronger child self-regulation (Lobo & Lunkenheimer, 2020). Emotion regulation refers to an individual’s capacity to experience, manage, and express emotions in adaptive ways (Liu et al., 2024). Recent evidence suggests that young people show a high level of interest in using artificial intelligence–based technologies for emotion regulation. Understanding the factors that influence their engagement with these technologies provides important direction for the design and use of digital platforms aimed at supporting emotional well-being (Wang et al., 2025).

Recent reviews indicate that individuals are increasingly using digital technologies to regulate emotions, suggesting that digital emotion regulation is becoming a routine aspect of everyday life (Smith et al., 2022). People frequently regulate their emotions to function more effectively in social contexts (Wadley et al., 2020). For example, chatbots and virtual assistants allow users to express themselves freely and may foster a sense of emotional connection through responsive and seemingly caring interactions. By integrating deep learning techniques for emotion detection with advanced natural language processing capabilities, these systems can adapt communication styles to match users’ emotional states and preferences (Shah et al., 2025). Algorithmic systems analyze users’ speech and text inputs to extract emotional cues, which are then used to generate contextually

appropriate verbal or non-verbal responses. Features such as synchronized lip movements and facial animation further enhance the perceived naturalness and emotional expressiveness of these interactions (Abdelaziz et al., 2025).

Artificial intelligence systems, including algorithmic recommendation engines, adaptive chatbots, and virtual assistants, rely on personal data, search histories, and behavioral patterns to tailor content and responses. As a result, AI-driven personalization not only shapes how information is delivered but may also influence how individuals present themselves and manage their digital personas. These systems operate not only at the individual level but also affect organizational and workplace dynamics (Ogunsola, 2026). Mobile mental health applications can provide accessible psychological support, contribute to emotion regulation, and support the development of emotional intelligence (Taylor et al., 2025; Guevara-Vega et al., 2025). Traditionally, the relationship between client and therapist, referred to as the therapeutic alliance, is considered central to effective treatment. However, it remains unclear to what extent such relational qualities can be replicated or supported through digital tools. Existing research has begun to explore how users experience digital therapeutic alliances and which application features contribute to perceived support (Taylor et al., 2025).

Certain platforms, such as Spotify, contribute to social identity development by allowing users to share listening habits, follow artists, and participate in community-based features such as Spotify Wrapped or Blend. These affordances enable users to express personal preferences and values, thereby contributing to identity construction (Wimboadi et al., 2025).

Conceptual models suggest that digital tools incorporating real-time feedback, progress tracking, reward systems, gamification, and community support may address psychological needs related to motivation and self-regulation (Stalmach et al., 2025). However, research also indicates that although adolescents may initially experience enhanced emotion regulation through digital applications, prolonged use is associated with increased loneliness. Individuals experiencing loneliness tend to engage with these applications more frequently over time (Scott et al., 2024).

Despite growing interest in digital emotion regulation, a significant conceptual gap remains regarding the mechanisms through which these interactions unfold. Much of the existing literature conceptualizes algorithms as passive tools used by individuals, rather than as adaptive systems that interact with users dynamically over time. This review argues that to understand the psychological impact of these technologies, particularly in psychotherapeutic contexts, it is necessary to conceptualize algorithms as active participants in emotional regulation processes (Smith et al., 2022; Guingrich & Graziano, 2025).

Accordingly, this paper introduces the concept of algorithmic co-regulation, defined as a bidirectional process in which adaptive algorithmic systems, such as social media feeds, recommendation engines, and conversational agents, continuously respond to users' behavioral and emotional cues while actively shaping emotional states, regulatory strategies, and patterns of engagement (cf. Butler & Randall, 2013; Lindström et al., 2021; Ogunsola, 2026).

The primary aim of this narrative review is to integrate insights from Human-Computer Interaction, biopsychology, learning theory, attachment theory, and psychodynamic perspectives to develop a multidimensional understanding of algorithmic co-regulation. Specifically, this review aims to: (1) examine theoretical frameworks that explain how and why algorithms function as co-regulators; (2) analyze the influence of algorithmic co-regulation on self-regulation and identity development (Hrbackova et al., 2025; Chauhan, 2025); (3) derive implications for psychotherapeutic assessment and intervention (Diano et al., 2023; Colombo et al., 2019); and (4) discuss ethical considerations and future research directions (Parker et al., 2019). Through this integration, the review seeks to support mental health professionals in more effectively incorporating awareness of algorithmic influences into therapeutic practice.

Theoretical Frameworks for Understanding Algorithmic Co-regulation Neuroscience and Learning Theory

Biopsychology, also referred to as behavioral neuroscience, together with learning theory, offers a foundational explanation for why algorithmic systems are particularly effective agents of co-regulation. These systems are designed to mirror key properties of the brain's reward-based learning mechanisms. Computational learning theory suggests that online behaviors are shaped through reinforcement processes, whereby actions followed by rewarding outcomes are more likely to be repeated (Lindström et al., 2021). At the neurobiological level, dopamine-releasing neurons in the midbrain play a central role in reward processing by signaling reward prediction errors. Neural responses are typically stronger for unexpected rewards and diminish as rewards become predictable (Alikaya et al., 2018; Takahashi et al., 2017). This mechanism underlies associative learning, in which environmental cues become linked to rewarding outcomes.

Algorithmic platforms are intentionally designed to capitalize on these mechanisms. Personalized feeds, notification alerts, and interactive features such as likes and comments function as intermittent reward signals. Through repeated interaction, algorithms learn users' preferences and behavioral tendencies and continuously adjust content delivery accordingly. This creates a feedback loop in which users' emotional and behavioral responses serve as input that trains the algorithm, while the algorithm's outputs, in turn, shape users' emotions, mood, behavior, and engagement patterns. From this perspective, algorithmic co-regulation can be understood as a technology-mediated reward-learning process rather than simple tool use.

Attachment Theory

Attachment theory provides a useful framework for understanding algorithmic co-regulation by highlighting how digital systems may simulate or exploit basic human needs for security, proximity, and emotional reassurance. Attachment orientations are shaped by early caregiving experiences and influence how individuals seek closeness, support, and regulation from relational figures across the lifespan.

In digital contexts, algorithmic systems can acquire characteristics similar to attachment objects. They are consistently available, responsive, and capable of offering perceived emotional comfort. Empirical research indicates that individual attachment styles are associated with distinct patterns of technology use (Grosch, 2025). For instance, individuals with anxious attachment styles may engage more intensely with social media platforms as a means of managing anxiety and maintaining a sense of connectedness (Young et al., 2020). Similarly, individuals with insecure attachment styles may transfer attachment needs onto digital platforms, developing strong emotional affiliations and experiencing distress when access is disrupted (Sun & Miller, 2023).

Viewed through the lens of algorithmic co-regulation, this process becomes cyclical. Users seek emotional regulation by engaging with digital platforms, while the platforms regulate users in return by delivering personalized content that reinforces continued engagement. For vulnerable individuals, this dynamic may foster maladaptive dependency, positioning algorithmic systems as substitute attachment figures that potentially inhibit offline relational development.

Psychodynamic and Relational Theory

Psychodynamic and relational theories emphasize the interpersonal dimensions of algorithmic co-regulation, particularly through the concept of anthropomorphism, or the attribution of human-like qualities to non-human agents. Research suggests that individuals with a stronger desire for social connection are more likely to anthropomorphize artificial intelligence systems, and that such anthropomorphism mediates the effects of chatbot use on real-world social relationships (Guingrich & Graziano, 2025).

When algorithms are perceived as human-like, they may function as relational objects. Platforms such as Replika and Character.AI are explicitly designed as continuously available companions that provide empathy, emotional responsiveness, and conversational support (Chu et al., 2025). This design facilitates co-regulatory processes in which users seek emotional comfort and algorithms provide reinforcing responses. From a psychodynamic perspective, however, such closeness also carries risks. Unlike the therapeutic frame, which is deliberately structured to support client growth and autonomy, algorithmic systems operate within frames optimized for engagement and data extraction. Longitudinal evidence indicates that although voice-based chatbots may initially reduce loneliness, prolonged use can increase emotional dependence and diminish perceived benefits over time (Fang et al., 2025). This suggests that algorithmic co-regulation may offer short-term relief at the potential cost of longer-term psychological autonomy.

The Impact on Self-Regulation and Identity Development

The mechanisms underlying algorithmic co-regulation, including reward-based learning, attachment-like bonding, and anthropomorphism, translate into observable effects on users' self-regulation and identity development, particularly among adolescents and young adults.

Erosion of Internal Self-Regulation

Algorithmic design features can influence the development and maintenance of self-regulatory capacities. Adolescents with lower levels of self-control are more likely to engage in impulsive and risky patterns of algorithmic media use (Hrbackova et al., 2025). High exposure to personalized social media feeds has been associated with increased psychological distress, emotional dependence, and loneliness (Gupta et al., 2025). These patterns may contribute to cycles of doomscrolling, in which compulsive consumption of content intensifies distress rather than alleviating it (Canoğulları, 2025). Over time, reliance on algorithmic systems for emotion regulation may weaken intrinsic coping strategies and reduce opportunities for autonomous self-regulation.

Algorithmically Mediated Identity Formation

Algorithmic co-regulation also plays a role in identity development by shaping the social feedback and content environments within which identities are constructed. Visual-based platforms such as Instagram, Facebook, and Douyin have been linked to body image concerns, particularly among adolescents and young adults (Lan & Huang, 2025). Conversely, platforms such as Spotify may support identity expression through shared playlists and community features that foster a sense of belonging (Wimboadi et al., 2025). While digital platforms can facilitate identity exploration, algorithmically amplified social reinforcement may also promote conformity, performative self-presentation, and external validation as central components of self-concept (Chauhan, 2025).

Implications for Psychotherapeutic Practice

The increasing presence of algorithmic co-regulation represents a paradigm shift for psychotherapeutic practice. Digital technologies should not be viewed solely as external distractions but as active elements within

clients' psychological and relational ecosystems. This section outlines key implications for assessment, intervention, and ethical awareness.

Assessment and Case Conceptualization

Comprehensive assessment should include evaluation of the client's digital ecosystem, encompassing patterns of platform use, emotional investment, and awareness of algorithmic influence on mood and identity. Clinicians may assess phenomena such as algorithmic fatigue, which includes experiences of informational saturation, perceived loss of control, and frustration with algorithmic opacity (Yang et al., 2024). Patterns of doomscrolling and algorithmic addiction are also clinically relevant, given their associations with psychological distress (Canogullari, 2025). Ecological Momentary Assessment techniques, including smartphone sensor data, may further support in vivo measurement of emotional and behavioral patterns (Colombo et al., 2019). Conceptualizing digital engagement through attachment-based frameworks may help clinicians understand clients' motivations for persistent connectivity.

Intervention and Therapeutic Integration

Intervention may begin with psycho-education aimed at increasing clients' awareness of how algorithmic systems utilize reward mechanisms and emotional cues. Such awareness can support more intentional and autonomous technology use. Psychotherapy may also integrate selected digital tools, such as emotion regulation applications, when used transparently and collaboratively (Diano et al., 2023). Educational gamification tools, including neuroscience-based platforms, illustrate how algorithmic design can be harnessed for learning and engagement without reinforcing maladaptive dependency (Tran et al., 2025). Emerging concepts such as the digital doula highlight the potential for context-specific, supportive AI applications when ethical boundaries are clearly defined (Gao et al., 2025). The broader principle of digital hygiene emphasizes establishing boundaries that protect attention, emotional autonomy, and relational balance.

Conclusions and Future Directions

This narrative review introduces algorithmic co-regulation as a reciprocal process through which digital platforms and users mutually shape emotional states and regulatory patterns. Framing human computer interaction through this lens underscores that algorithmic systems are not merely neutral tools but active participants with meaningful implications for mental health. Drawing on neuroscience, attachment theory, and psychodynamic perspectives, the review demonstrates that algorithms function as co-regulators by engaging reward-learning pathways, simulating attachment-related processes, and operating within anthropomorphized relational frames. While such systems may offer accessible support for mood regulation, they also pose risks related to dependency, externally driven identity formation, and increased psychological distress. For psychotherapeutic practice, it is therefore essential that clinicians develop literacy in algorithmic dynamics in order to assess digital influences, identify potential harms, and navigate emerging ethical complexities. Future research should move beyond cross-sectional observation toward longitudinal designs that examine developmental trajectories of algorithmic co-regulation, particularly among young people. In-depth qualitative studies are needed to capture lived experiences and subjective meanings, while controlled trials should evaluate the effectiveness of both app-supported and app-aware therapeutic interventions. As algorithmic systems become increasingly embedded in daily life, understanding and addressing algorithmic co-regulation will be critical for responsible and effective psychotherapeutic care.

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REFERENCES

- Abdelaziz, M., Mostafa, M., Hesham, R., Mohamed, S. E., & Elgendy, Z. Y. (2025, November 4). Emotion-aware chatbot architecture: Enhancing human-robot interaction through sentiment detection and lip sync. In *Proceedings of the ACM Conference*, 474–477. Association for Computing Machinery. <https://doi.org/10.1145/3757232.3757344>
- Alikaya, A., Rack-Wildner, M., & Stauffer, W. R. (2018). Reward and value coding by dopamine neurons in non-human primates. *Journal of Neural Transmission*, 125(3), 565–574. <https://doi.org/10.1007/s00702-017-1793-9>
- Butler, E. A., & Randall, A. K. (2013). Emotional co-regulation in close relationships. *Emotion Review*, 5(2), 202–210. <https://doi.org/10.1177/1754073912451630>
- Canogullari, Ö. (2025). The effect of social media addiction on psychological stress: The indirect role of doomscrolling. *Journal of Theoretical Educational Sciences*, 18(3), 491–508. <https://doi.org/10.30831/akukeg.1586146>
- Chauhan, N. (2025). Study on the impact of social media on adolescent identity formation. *International Journal of Research – GRANTHAALAYAH*, 13(5), 228–241. <https://doi.org/10.29121/granthaalayah.v13.i5.2025.6216>
- Chu, M. D., Gérard, P., Pawar, K., Bickham, C., & Lerman, K. (2025). Illusions of intimacy: Emotional attachment and emerging psychological risks in human-AI relationships, arXiv, 2505.11649. <https://doi.org/10.48550/arXiv.2505.11649>
- Colombo, D., Fernández-Álvarez, J., García Palacios, A., Cipresso, P., Botella, C., & Riva, G. (2019). New technologies for the understanding, assessment, and intervention of emotion regulation. *Frontiers in Psychology*, 10, Article 1261. <https://doi.org/10.3389/fpsyg.2019.01261>
- Diano, F., Sica, L. S., & Ponticorvo, M. (2023). Empower psychotherapy with mHealth apps: The design of “Safer”, an emotion regulation application. *Information*, 14(6), 308. <https://doi.org/10.3390/info14060308>
- Fang, C. M., Liu, A. R., Danry, V., Lee, E., Chan, S. W. T., Pataranutaporn, P., Maes, P., Phang, J., Lampe, M., Ahmad, L., & Agarwal, S. (2025). How AI and human behaviors shape psychosocial effects of extended chatbot use: A longitudinal randomized controlled study, arXiv, 2503.17473. <https://doi.org/10.48550/arXiv.2503.17473>
- Gao, X., Li, H., Jiang, L., Jia, H., Ding, J., Wang, D., Du, H., & Chang, C. (2025). Digital doula interventions for perinatal mental health: Integrating AI and remote support in neuropsychiatric care. *Digital Neuropsychiatry*, 1(1), 20–26. <https://doi.org/10.64229/a7xak094>
- Grosch, C. (2025). Attachment theory in the digital age: Exploring the psychosocial dimensions of technology use. In *The human side of service engineering* (Vol. 182, p. 1).
- Guevara-Vega, C. P., López Abril, E., Estévez-Hidalgo, J. C., Flores-Jácome, N., & Quina-Mera, A. (2025). Spotify incidence on emotional intelligence in higher basic education students. *Revista Cubana de Educación Superior*, 21(103), Article e4327. <https://doi.org/10.34196/rc.v21n103.e4327>
- Guinrich, R. E., & Graziano, M. S. A. (2025). A longitudinal randomized control study of companion chatbot use: Anthropomorphism and its mediating role on social impacts, arXiv, 2509.19515. <https://doi.org/10.48550/arXiv.2509.19515>
- Gupta, U., Sharma, N., Rawat, K. P., Sriram, N., Kumar, A., & Kumar, U. (2025). Understanding the impact of social media algorithms on teenagers' brain and emotions: A cross-field approach. *International Journal of Environmental Sciences*, 11(22s), 553–559. <https://doi.org/10.64252/vmap3080>
- Hrbáčková, K., Hladík, J., & Safranková, A. P. (2025). What role do self-regulatory mechanisms play in the risky use of digital media by adolescents? *Frontiers in Psychology*, 16, Article 1675778. <https://doi.org/10.3389/fpsyg.2025.1675778>
- Lan, J., & Huang, Y. (2025). Between filters and feeds: Investigating Douyin and WeChat's influence on Chinese adolescent body image, arXiv, 2507.17755. arXiv. <https://doi.org/10.48550/arXiv.2507.17755>
- Lindström, B., Bellander, M., Schultner, D. T., Chang, A., Tobler, P. N., & Amodio, D. M. (2021). Publisher correction: A computational reward learning account of social media engagement. *Nature Communications*, 12(1), Article 1802. <https://doi.org/10.1038/s41467-021-22067-6>
- Liu, X., Geng, S., Lei, T., Cheng, Y., & Yu, H. (2024). Connections between parental phubbing and electronic media use in young children: The mediating role of parent-child conflict and moderating effect of child emotion regulation. *Behavioral Sciences*, 14(2), 119. <https://doi.org/10.3390/bs14020119>
- Lobo, F. M., & Lunkenheimer, E. (2020). Understanding the parent-child regulation patterns shaping child self-regulation. *Developmental Psychology*, 56(6), 1121–1134. <https://doi.org/10.1037/dev0000926>
- Ogunsola, O. (2026). Evaluating how personalized AI agents influence decision-making, self-presentation, and digital identity management: A literature review. *International Journal on Social and Education Sciences*, 8, 56–74. <https://ijonses.net/index.php/ijonses/article/view/5800>
- Parker, L., Halter, V., Karlychuk, T., & Grundy, Q. (2019). How private is your mental health app data? An empirical study of mental health app privacy policies and practices. *International Journal of Law and Psychiatry*, 64, 198–204. <https://doi.org/10.1016/j.ijlp.2019.04.002>
- Schunk, D. H., & Greene, J. A. (Eds.). (2017). *Handbook of self-regulation of learning and performance* (2nd ed.). Taylor & Francis. <https://doi.org/10.4324/9781315697048>
- Scott, R. A., Zimmer-Gembeck, M. J., Gardner, A. A., Hawes, T., Modecki, K. L., Duffy, A. L., Farrell, L. J., & Waters, A. M. (2024). Daily use of digital technologies to feel better: Adolescents' digital emotion regulation, emotions, loneliness,

- and recovery, considering prior emotional problems. *Journal of Adolescence*, 96(3), 539–550. <https://doi.org/10.1002/jad.12259>
- Shah, V. K., Sahu, J., Gupta, S., Paswan, K., Maheshwari, K., & Lidoriya, N. (2025). *AI chatbot with real time emotion sensing. International Journal of Innovative Science and Research Technology*, 10(5), 3760–3767. <https://doi.org/10.38124/ijisrt/25may2069>
- Smith, W., Wadley, G., Webber, S., Tag, B., Kostakos, V., Koval, P., & Gross, J. J. (2022). Digital emotion regulation in everyday life. In S. Drucker, J. Williamson, & K. Yatani (Eds.), *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems*, 1–15. Association for Computing Machinery. <https://doi.org/10.1145/3491102.3517573>
- Stalmach, A., Reinck, C., D'Elia, P., Di Sano, S., & Casale, G. (2025). *A conceptual impact model of digital support for student self-regulation and emotion regulation grounded in Self-Determination Theory. Discover Education*, 4(1). <https://doi.org/10.1007/s44217-025-00825-8>
- Sun, J., & Miller, C. H. (2023). Insecure attachment styles and phubbing: The mediating role of problematic smartphone use. *Human Behavior and Emerging Technologies*, 2023, Article 4331787. <https://doi.org/10.1155/2023/4331787>
- Takahashi, Y. K., Batchelor, H. M., Liu, B., Khanna, A., Morales, M., & Schoenbaum, G. (2017). Dopamine neurons respond to errors in the prediction of sensory features of expected rewards. *Neuron*, 95(6), 1395–1405.e3. <https://doi.org/10.1016/j.neuron.2017.08.025>
- Taylor, T., D'Alfonso, S., Dolan, M. J. T., Yiend, J., & Jacobsen, P. (2025). How do users of a mental health app conceptualise digital therapeutic alliance? A qualitative study using the framework approach. *BMC Public Health*, 25(1), Article 2450. <https://doi.org/10.1186/s12889-025-23603-5>
- Tran, A., Huang, J. Y., Campbell, C. R., & Hegedus, E. M. (2025). 'SOMS BrainSpace': A digital serious game for undergraduate neuroscience. *Anatomical Sciences Education. Advance online publication*. <https://doi.org/10.1002/ase.70086>
- Wadley, G., Smith, W., Koval, P., & Gross, J. J. (2020, June 18). Digital Emotion Regulation. *Current Directions in Psychological Science*, 29(4), Abstract. google scholar. <https://doi.org/10.1177/0963721420920592>
- Wang, J., Tang, H., Man, S.-S., Chen, Y., Zhou, S., & Chan, H.-S. (2025). Critical Factors in Young People's Use and Non-Use of AI Technology for Emotion Regulation: A Pilot Study. *Applied Sciences*, 15(13), 7476. <https://doi.org/10.3390/app15137476>
- Wimboadi, R. D., Bharata, W., Nurrohman, R., & Hakim, A. F. (2025). The influence of social media engagement on Spotify users from Generation Z and Alpha: Examining the moderating role of FOMO. *Widyakala Journal of Pembangunan Jaya University*, 12(2), 159–172. <https://doi.org/10.36262/widyakala.v12i2.1354>
- Yang, H., Li, D., & Hu, P. (2024). Decoding algorithm fatigue: The role of algorithmic literacy, information cocoons, and algorithmic opacity. *Technology in Society*, 102749. <https://doi.org/10.1016/j.techsoc.2024.102749>
- Young, L., Kolubinski, D. C., & Frings, D. (2020). Attachment style moderates the relationship between social media use and user mental health and wellbeing. *Heliyon*, 6(6), Article e04056. <https://doi.org/10.1016/j.heliyon.2020.e04056>