



Overview of Emotional Design in Social Media

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Abstract. This paper will focus on the application of emotional design in social platforms, exploring its theoretical foundations, methods, and case studies. Emotional design stimulates the user's emotional responses through design elements, enhancing user experience and satisfaction. It is widely applied in interface design, interactive features, and personalized recommendations. Emotional expressions through text, images, videos, and emojis which can significantly impact the users' emotional experiences and interactions. The online platforms enhance emotional connection and social behavior through features as likes, comments, and shares. The multi-layered application of emotional design in mobile apps and educational multimedia (instinctive, behavioral, reflective) improves user experience and brand value. Research show that designs incorporating emotional elements can significantly boost user satisfaction and loyalty, alleviate negative emotions, and promote digital well-being. Despite its notable role in enhancing user experience and platform stickiness, further exploration of its long-term effects and diverse emotional needs across user groups is needed.

Keywords: Emotional design, user experience, social platforms, personalized recommendations.

1 Introduction

As the internet and mobile communication technologies continue to develop in this era, social platforms have become increasingly important in our daily life. Platforms like Snapchat, Instagram, and Tiktok have become primary means for self-expression, information acquisition, and interaction. However, these platforms also bring negative effects such as over-reliance, emotional fluctuations, and information overload, threatening the younger generation' digital well-being. Therefore, researching the impact of social platforms on user emotions is particularly important. Emotional design stimulates user emotional responses through design elements, enhancing user experience and satisfaction, and has been applied in digital product and platform design. Emotional design not only enhances positive emotional experiences but also alleviates negative emotions, promoting emotional expression and social interaction. This study will explore the application of emotional design in social platforms,

analyze its theoretical foundations, design methods, and practical case studies, to reveal its impact on user emotional experiences and platform usage effectiveness.

Researching emotional design in social platforms holds both theoretical and practical implications. Social platforms have become an indispensable part of modern society, serving as an important media for information dissemination, emotional expression, and interpersonal interaction. Emotional design, by incorporating emotional elements such as emotionally colored interface designs, interactive features, and personalized recommendations, significantly enhances user experience, increases user emotional engagement and satisfaction, and boosts user dependence and loyalty to the platform. Additionally, emotional design can reduce users' negative emotions while using the platform, helping them to better manage and express emotions, reducing anxiety and loneliness, thereby improving digital well-being. Studying emotional design provides a theoretical foundation for future design practices. This could help designers to create social platforms that better meet user needs, enhance user experience, and therefore increase market competitiveness.

This research explores the impact of online social platforms on users' emotional lives, analyzing how their design and functions stimulate emotional responses, examining the theoretical foundations and application methods of emotional design, and studying its effectiveness in alleviating negative emotions and enhancing digital well-being. It summarizes best practices to provide theoretical and practical guidance for future social platform design, enhancing user experience and platform competitiveness. This paper reviews the application of emotional design in social platforms, discussing its theoretical foundations and application methods, analyzing the implementation of interface design, interactive features, and personalized recommendations. It studies emotional expressions through text, images, videos, and emojis, exploring their communicative effects, examining the impact of interactive features on user emotional connections and behaviors, and analyzing the influence of design principles and algorithmic logic on user experience and emotional states, revealing the role of emotional economy and market strategies.

2 Literature Review

2.1 Subject Classification

Steinert and Dennis (2022) pointed out the threat of social media technologies (SMTs) to digital health (DWB), emphasized the impact of SMTs on users' emotional lives, and call for in-depth research on how these emotional effects are related to DWB to guide SMTs design to enhance DWB. Ferrara and Yang (2015) studied the emotional contagion on Twitter and found that after users were exposed to emotional content, the emotional tendency of their posts showed a linear relationship, and users tended to adopt positive emotions. Zareen et al. (2016) explored the psychological and emotional impact of digital emoticons in instant messaging and found that emoticons enhance the meaning and emotional expression of messages, but the absence of expected emoticons leads to negative emotions. Bayer et al. (2016) studied the social and emotional experiences of Snapchat users and found that

Snapchat interaction was associated with more positive emotions, but with lower social support, which was attributed to the transient nature of Snapchat. Wahl-Jorgensen (2018) explores Facebook's emotional architecture and shows how the platform manages and commarkets public emotions through facial reactions, which are designed to bias positive emotions to promote engagement and interaction.

The above research results show that social media technologies have a profound impact on users' emotional and digital health through complex emotional mechanisms. Further explore the impact of social media technologies on emotional life to guide healthier technology design. The dynamics of emotional contagion show that users tend to accept positive emotions, and emoticons play an important role in enhancing message meaning and emotional expression, but the absence of expected emoticons leads to negative emotions. The transient nature of Snapchat promotes positive emotions but provides low social support. Facebook manages and commodifies public emotions through affective architectures, which are designed to bias positive emotions to promote user engagement. These studies highlight the central role of emotions in the design and user experience of social media platforms, suggesting the need to consider the emotional impact of social media technologies when designing and using them to enhance digital health.

Plass and Kaplan (2016) : Proposed an integrated model of multimedia learning in which cognition and emotion are interrelated, emphasizing that affective design promotes learning by inducing positive affect. Desmet et al. (2007) : introduced the "design wow" method, focusing on infatuation, pleasant surprise and aspiration, and proposed a measurable wow index to improve emotional engagement with products. Ho and Siu (2012) clarify the definition and relationship of emotional design, emotional design and emotional design, and emphasize the importance of designers' and users' perspectives in the design process. Duan Peng (2022) : Analyzes the correlation between short video platforms and daily life, and reveals the mode of user participation to promote the development of e-commerce. Zhang Xuehui (2019) : Studies the formation of a social platform for NetEase Cloud Music, emphasizing the importance of emotional connection in virtual communities. Chen Juan et al. (2016) analyzed the influence of user experience on mobile social platforms on product design, and found that emotional perception is an important mediator variable of user experience. Kuang, Wenbo and Deng, Ying (2022) : Using media adaptation theory, we study the emotional empowerment of microblogs and discuss the impact of algorithm integration on the emotional expression of fans. Song Yiqin and Sun Yabin (2019) : Discuss the application of emotional design in App development, emphasizing the three levels of emotional design: instinct, behavior, and reflection. Zhao Yujie (2020) : Discusses UI interaction design principles for home shopping apps in the "Internet +" era, emphasizing personalized design. Wang Yang (2018) : Analyzing the psychological principles of UI design in the "Internet +" era, applying Maslow's hierarchy of needs theory and Gestalt psychology, emphasizing that UI design should be based on basic psychological needs.

Research shows that emotional design plays an important role in multimedia learning, product development and user experience. User engagement and brand value can be enhanced by inducing positive affect, increasing emotional engagement,

and emphasizing the emotional perspective of both the user and the designer. In short video and social platforms, emotional connection and group dynamics play an important role in the economic development of the platform. Media adaptation theory reveals the influence of algorithms on emotional expression, and the application of emotional design improves App user engagement and brand value. UI design should consider basic psychological needs to meet the diverse needs of users in the "Internet +" era.

Zhai, Shanshan. (2019) claimed that revenue, immersion, and human interaction in social experiences significantly influence user satisfaction and continued usage intention. While, He, Y F. (2019) believed that exploring the emoticalization of social App emoticon design from the perspective of communication, and proposing a new conceptual framework to enhance the emotional consistency between users and emoticon. Jia-jun Fan and Yu-Xin Wu (2021) holds that applying emotional Design Theory to develop a pet matching App to meet users' emotional needs at the instinctive, behavioral, and reflective levels. Feng Jie and Tang Yayang (2017) : Emotional expression significantly affects the number of likes on wechat articles, but emotional title has no significant effect on emotional identification and communication effect. Baiqing Huang and Ying GUI (2016) : The importance of emotional factors in mobile App interaction design, emphasizing the emotional resonance of visual effects, interactive behaviors and psychological experiences. Yang, Li and Hu, Yina (2017) : Discuss the significance of emotional design in mobile App success and propose a multi-dimensional emotional design approach to improve user satisfaction and product retention.

Research shows that social experience and emotional design have a significant impact on mobile App user satisfaction and continuous usage intention. Emotional design enhances the emotional consistency between users and emojis, meets users' needs in visual, functional and social interaction, and promotes user engagement and brand value. Emotional expression plays a significant role in social media articles, but the impact of sentimentalization of titles is limited. Mobile App design should pay attention to emotional factors, and improve user experience through the emotional resonance of visual effects, interactive behavior and psychological experience. Multi-dimensional emotional design methods can improve user satisfaction and product retention to ensure the success of mobile apps.

2.2 Current State of Research

In recent years, emotional design in social media technologies and mobile applications has become a research hotspot, focusing on its effects on user experience, continued usage intentions, and platform economic development. Research has proposed cognitive and emotional integration models in multimedia learning, emphasizing that emotional design promotes learning by inducing positive emotions; it focuses on fascination, joyful surprise, and desire, enhancing emotional engagement with products. Social media platforms influence user participation and interaction through emotional architecture, favoring positive emotions for commercialization,

while emotional contagion dynamics reveal users' tendencies to embrace positive emotions.

In terms of user experience and continued usage intentions, benefits, immersion, and interpersonal interaction in social experiences significantly impact user satisfaction and continued usage intentions. The functions and interactions of mobile social platforms greatly influence user experience, with emotional perception acting as an important mediating variable. Specific platform studies reveal user participation patterns in short video platforms and e-commerce development models, the critical role of emotional connections in virtual communities on music social platforms, and the application of emotional design in app development, enhancing user interaction experiences and brand value through instinctive, behavioral, and reflective design layers.

Current research gaps include insufficient studies on the long-term impacts of emotional design on user behavior, incomplete research on the emotional needs of different user groups, and inadequate exploration of emotional contagion mechanisms and pathways to improve digital health through emotional design. Future research trends include integrating emotional and cognitive factors, developing precise user emotional feedback mechanisms, cross-platform emotional design, and personalized emotional design.

Recent studies highlight the profound impact of social media technologies on users' emotions and digital health, exploring the emotionalization of emoji design in social apps from a communication perspective and proposing new conceptual frameworks to enhance users' emotional consistency with emojis. Overall, emotional design plays a crucial role in enhancing user experience, increasing platform stickiness, and promoting platform economic development. Future research will continue to explore the diverse applications of emotional design and its long-term effects on user behavior and digital health.

3 Methodology

To comprehensively understand the impact of social media technologies on digital health and emotional design, this study employed a systematic literature search strategy, utilizing databases such as CNKI, Google Scholar, and Web of Science. Search keywords included: "social media technologies," "digital well-being," "emotional design," "emotional contagion," "emojis in instant messaging," "Snapchat emotional impact," and "Facebook emotional architecture."

Literature selection criteria included relevance to social media technologies, digital health, and emotional design, empirical studies, theoretical research, and systematic reviews published in peer-reviewed academic journals, prioritizing high citation counts and requiring complete research methods and results. This study gathered Chinese literature and domestic research from CNKI, global literature from Google Scholar, covering various disciplines, and high-impact international journal literature from Web of Science to ensure quality and academic value. The focus was on literature published in the past 15 years (2007-2022) to reflect current

developments and trends in the fields of social media technology and emotional design. Particular attention was given to highly cited works to ensure breadth and depth, as these papers have significant academic influence and citation value, providing comprehensive and authoritative research findings.

The literature selection and data extraction process included: initial screening based on titles and abstracts to identify relevant works; full-text review to exclude non-compliant literature; data extraction of research objectives, methods, results, and conclusions; and quality assessment to ensure reliability and validity. Through this methodology, the study aims to systematically summarize and analyze the impact of social media technologies on digital health and emotional design, providing a theoretical foundation and practical guidance for research and applications in related fields.

4 Discussion

In recent years, the emotional design of social media technologies and mobile applications has gradually become a research hotspot, revealing its significant role in user experience, continued usage intentions, and platform economic development. Research indicates that emotional design promotes learning and enhances product emotional engagement by inducing positive emotions, while satisfying users' emotional needs through multi-layered design (instinctive, behavioral, reflective), thereby improving user experience and brand value. Additionally, social media platforms influence user participation and interaction through emotional architecture, with designs favoring positive emotions achieving commercialization goals. The dynamics of emotional contagion show that users tend to embrace positive emotions, further impacting their interaction behaviors on social platforms.

Different studies apply emotional design in various ways on social platforms, but some commonalities and differences exist. Commonalities include the widespread belief that emotional design can enhance user experience and product value by inducing positive emotions, with multi-layered emotional design repeatedly emphasized across studies. The emotional architecture of social media platforms significantly affects user participation and interaction. Differences are evident in the specific mechanisms and impacts of emotional contagion as explored in different studies, as well as the specific applications of emotional design in educational multimedia learning versus mobile applications, with the former focusing more on cognitive and emotional integration and the latter emphasizing personalized user experience. The depth of research into the emotional needs of different user groups varies, with some studies focusing on general user experiences while others concentrate on specific platforms or applications.

These findings have important implications for the design practices of online social platforms. Theoretically, the results enrich emotional design theory, particularly regarding the integration of emotion and cognition, the application of multi-layered emotional design, and the exploration of emotional contagion mechanisms, providing a theoretical foundation for further research. Practically,

emotional design can enhance user experience on social platforms and mobile applications, increasing user stickiness and platform economic benefits. Emotional design methodologies can assist designers in creating more attractive and user-friendly products that meet users' emotional needs, thereby improving user satisfaction and product retention rates.

However, existing research has some limitations. Studies on the long-term effects of emotional design on user behavior are insufficient, making it difficult to determine their lasting impacts. Research on the emotional needs of users from different age groups, genders, and cultural backgrounds is not comprehensive enough to generalize findings. The specific mechanisms of emotional contagion require deeper exploration to better understand their roles and effects. Furthermore, the specific pathways through which emotional design can improve digital health have not been thoroughly researched.

5 Conclusion

This study explored the impact of social media technologies on digital health and emotional design, focusing on the role of emotional design in enhancing user experience and platform stickiness. The research shows that by incorporating emotional elements—such as emotionally colored interface design, interactive features, and personalized recommendations—social media platforms and mobile applications can significantly enhance users' emotional experiences and satisfaction, increasing user stickiness and loyalty while alleviating negative emotions and promoting digital well-being. The multi-layered application of emotional design (instinctive, behavioral, reflective) has proven beneficial in both educational multimedia learning and product design for improving user experience and brand value. Platforms manage and commodify public emotions through design and algorithmic logic, with positive emotional designs not only encouraging user participation but also achieving commercialization goals. Nevertheless, the dynamics and specific mechanisms of emotional contagion require further investigation. While this study reveals the crucial role of emotional design in social platforms, research on its long-term impact on user behavior remains inadequate, and studies on the emotional needs of different user groups are also incomplete. Future research should continue to explore the diverse applications of emotional design and its long-term effects on user behavior and digital health, developing more precise user emotional feedback mechanisms and personalized emotional design. In summary, emotional design plays a vital role in enhancing user experience on social platforms and mobile applications, increasing user stickiness, and driving platform economic development. Further research and application of emotional design can provide users with better digital experiences and promote their digital well-being.

References

1. Duan, Peng. "Community, Scene, Emotion: Group Participation and E-commerce Development on Short Video Platforms." *Journalism University*, vol. 2022, no. 1, 2022, pp. 86-95, 123-124.
2. Zhai, Shanshan, Xueying Sun, and Jinhua Li. "Research on Continuous Usage Intention of Mobile APP Based on Social Experience: A Case Study of NetEase Cloud Music." *Modern Information*, vol. 39, no. 332, 2019, pp. 128-135.
3. Steinert, Susanne, and Dennis M. J. "Emotions and Digital Well-being: On Social Media's Emotional Affordances." *Philosophy & Technology*, vol. 35, no. 2, 2022, pp. 36.
4. Ferrara, Emilio, and Zeyao Yang. "Measuring Emotional Contagion in Social Media." *PloS One*, vol. 10, 2015.
5. Zareen, N., N. Karim, and U. A. Khan. "Psycho Emotional Impact of Social Media Emojis." *Isra Medical Journal*, vol. 8, no. 4, 2016.
6. Bayer, Jeffrey B., et al. "Sharing the Small Moments: Ephemeral Social Interaction on Snapchat." *Information, Communication & Society*, vol. 19, no. 7, 2016, pp. 956-977.
7. Ho, A. G., and Siu K. W. M. G. "Emotion Design, Emotional Design, Emotionalize Design: A Review on Their Relationships from a New Perspective." *The Design Journal*, vol. 15, no. 1, 2012, pp. 9-32.
8. Desmet, P. M. A., R. Porcelijn, and M. B. Van Dijk. "Emotional Design: Application of a Research-Based Design Approach." *Knowledge, Technology & Policy*, vol. 20, no. 3, 2007, pp. 141-155.
9. Fan, Jiajun, and Wu Youxin. "Research and Design Practice of Pet Matching APP under Emotional Theory." *Design*, vol. 34, no. 5, 2021, pp. 68-71.
10. Feng, Jie, and Tang Yayang. "The Relationship Between Emotional Expression and Communication Effects in Social Media: A Case Study of Emotional Expression in WeChat Articles." *Journalism*, no. 2, 2017, pp. 70-74.
11. Yang, Li, and Hu Yina. "Research on Emotional Design of APP Products: Based on User Experience." *Research on Higher Financial Education*, vol. 20, no. 2, 2017, pp. 81-85, 90.

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