Scholar Publishing Group
International Journal of Multimedia Computing
https://doi.org/10.38007/IJMC.2025.060111
ISSN 2789-7168 Vol. 6, Issue 1:111-125

Emotional Compensation of Memes in Social Interaction: Population Differentiation and Symbolic Mechanism under Dual Theories

Zhiyu Ren, Zheng Zhang*

Shenzhen Campus of Jinan University, Shenzhen 518000, Guangdong, China

E-mail: zhangzheng20040503@qq.com
**Corresponding author*

Keywords: Memes; Emotional Compensation; Non-verbal Symbols; Social Anxiety; Generational Differences; Media Psychology

Abstract: With social media becoming a core scenario for daily communication, memes, as a form of non-verbal symbols, have gradually demonstrated their emotional compensation function. Some memes even serve as a substitute for direct emotional expression in real-world social interactions. Taking the Emotional Regulation Theory and the Online Disinhibition Effect as the analytical framework, this study explores the emotional compensation function of memes and their impact on the social patterns of different generations. Based on 94 valid questionnaires and the textual analysis of 30 high-frequency used memes, the study reveals three key findings: (1) Memes can partially replace text to facilitate emotional regulation, with a particularly significant effect in the expression of negative emotions; (2) Generation Z shows significantly higher frequency of use and degree of dependence on memes than Generation Y; (3) Meme usage plays a mediating role between generational differences and social anxiety. This study proposes a "Symbolic Emotional Regulation Model", which emphasizes the dual functions of memes in cognitive reappraisal and expressive suppression. The research provides both theoretical and practical value for understanding the psychological mechanism of digital symbols and optimizing the design of social platforms.

1. Introduction

Amid the wave of digital socialization in contemporary society, the communication patterns of Generation Z (individuals born after 2000) have gradually exhibited distinct characteristics of a "visual turn": textual expression is largely replaced by non-verbal symbols such as memes and emojis. According to the Tencent Post-2000s Digital Life Observation Report (Tencent Research Institute, 2023), WeChat users send over 600 million memes daily on average, with post-2000s users accounting for more than 70% of this figure. This phenomenon reflects a profound shift in social psychology—emotional compensation has gradually become a crucial mechanism in online

interactions: users utilize memes to mask awkwardness, simplify emotional transmission, and even avoid direct expression in real-world social contexts.

Although memes are widely regarded as a "social lubricant," their potential risks have not been fully explored. Existing studies indicate that the use of emotive symbols can to some extent facilitate emotional expression and interpersonal intimacy; however, excessive reliance on non-verbal symbols may hinder in-depth self-disclosure and even lead to deficits in emotional expression in real-life situations (Suler, 2004; Zhao, 2009).

Against this backdrop, this study focuses on two core research questions: How does the emotional compensation function of memes reshape social interaction patterns? While alleviating anxiety, does it concurrently weaken individuals' ability to express emotions in real life? The findings of this research will contribute to the integration of Emotional Regulation Theory and Communication Semiotics, shed light on the "double-edged sword" effect of non-verbal compensation, and provide a basis for individuals to avoid over-reliance on memes as well as for social platforms to optimize their interaction design.

This study adopts a mixed-methods approach combining qualitative and quantitative research.

1.1 Quantitative Research: Questionnaire Survey

First, a questionnaire survey was conducted to compare the usage motivations and perceived impacts of memes between post-2000s college students (N=58) and individuals born between the 1970s and 1990s (N=36). An initial questionnaire was developed based on a review of relevant literature; pre-surveys were then administered to participants of different age groups to collect feedback on potential issues, which were addressed through appropriate revisions to finalize the questionnaire. The survey was conducted from April 20 to May 15, 2025, with questionnaires distributed via reposts on WeChat Moments, Xiaohongshu, and Weibo. Efforts were made to cover respondents from diverse regions and educational backgrounds to ensure sample representativeness. A total of 100 questionnaires were collected, and after excluding invalid responses that did not meet the requirements, 94 valid questionnaires were obtained.

1.2 Qualitative Research: Textual Analysis

Second, textual analysis was employed to examine the intensity of emotional substitution and functional classification of memes in chat records. This study focused on empirical data from WeChat and QQ chat records (N=30) and Douyin comment sections (N=20). Conversation segments containing high-frequency memes were prioritized, covering both intimate and casual interpersonal relationships to ensure sample diversity and randomness. All user information was anonymized, with only memes and contextual textual content retained. Based on the Emotional Compensation Theory, the functions of memes were categorized into three types: "emotion masking," "conflict mitigation," and "emotion substitution." The proportion of text replaced by memes was calculated (a single message was defined as "highly substituted" if memes accounted for 50% or more of its content), and the effectiveness of compensation (e.g., whether conflicts were successfully avoided) was analyzed in combination with contextual information.

Through the aforementioned analyses, this study attempts to address the reconstruction of the role of non-verbal symbols in digital socialization and their profound impacts on human emotional competence.

2. Literature Review

In recent years, with the popularization of mobile internet and smart devices, memes (including

localized image-based emoticons and cross-platform emojis) have gradually become core interactive resources in digital socialization, and academic interest in this field has risen significantly since 2015. As a composite text-image symbolic system, memes not only serve the function of immediate emotional expression but also participate in the construction of cultural meanings and group identity (Wu, 2023; Yang, 2024; Tao & Sun, 2025) [1][7][8]. From a semiotic perspective, the meaning of memes is not static; instead, it is continuously reconstructed through encoding-decoding processes in specific contexts. In the evolution of communication, the iconicity of memes may gradually give way to symbolism and narrative practices, resulting in polysemic interpretations of the same meme across different communities or scenarios (Wu, 2023) [7].

Research on usage motivations reveals that the popularity of memes stems not merely from "amusement" itself but is closely tied to social needs. The primary motivations for users to employ memes include: reducing communication costs, softening tone to avoid disputes, replacing verbose text with visual metaphors, and enlivening social atmospheres to maintain relationships (He, 2019; Ma & Yan, 2022; Yang, 2024) [3][6][8]. On strong-tie platforms such as WeChat, this form of symbolic expression can quickly transmit emotional signals and reduce the risk of misunderstandings, thereby becoming a crucial tool for sustaining daily social connections (Tao & Sun, 2025) [1].

Generational differences constitute a recurring theme in meme research. Empirical studies have demonstrated significant disparities across age groups in terms of meme usage frequency, style preferences, and interpretation: younger users tend to adopt playful, ironic, or subcultural symbols to achieve group identification and identity display, while older users prefer more straightforward and polite forms of expression (He, 2019; Tao & Sun, 2025) [1][3]. This discrepancy is closely linked to the Emotional Regulation Theory, suggesting that different groups may employ distinct regulatory strategies to achieve emotional compensation.

Freud's Emotional Regulation Theory provides a theoretical foundation for understanding the emotional compensation function of memes. Subsequent studies have indicated that both positive and negative emotions can be actively regulated to enhance mental health, emphasizing that individuals proactively intervene in the emotional generation process through reappraisal or suppression (Hou & Yu, 2006) [4]. In the context of digital socialization, memes, due to their "text-image metaphor" nature, can not only reconstruct situational meanings through humor or symbolism to achieve cognitive reappraisal but also replace direct emotional statements to accomplish expressive suppression. For instance, using the "split" emoji (a popular meme symbolizing emotional collapse) to convey feelings of despair reduces psychological pressure while avoiding the direct exposure of vulnerability.

At the group interaction level, the "peripheral 'negative' communication" mechanism proposed by Wei & Xie (2023) emphasizes that emotions in information dissemination trigger group resonance by sharing initial emotional states [15]. This mechanism can be applied to understand the social role of memes: when users express negative emotions through humorous, exaggerated, or satirical memes, they not only fulfill individual emotional compensation but also may evoke group emotional resonance or mitigate potential conflicts—illustrating that memes possess an emotional socialization function in group interactions [2].

Furthermore, the Online Disinhibition Effect proposed by John Suler (2004) offers a social-psychological explanation for how the online environment amplifies or alters symbolic usage. Owing to anonymity, asynchronicity, and the absence of face-to-face cues, individuals are more likely to transcend the self-restraints of real-world socialization, exhibiting either benign disinhibition (e.g., more open emotional expression) or toxic disinhibition (e.g., symbolic aggression or emotional withdrawal) in online interactions. In meme-dominated social exchanges, this theory explains that the non-verbal symbolic nature of memes can both facilitate emotional

compensation and resolve conflicts, while also potentially masking underlying aggression or alienation—complementing the cognitive reappraisal and expressive suppression functions outlined in the Emotional Regulation Theory [5-11].

In summary, as an emerging text-image symbolic system, memes fulfill multiple functions in digital socialization: emotional expression, tone modulation, and group identification. Their meaning is highly context-dependent and group-specific; usage motivations and generational differences are core topics in existing research; and the Emotional Regulation Theory and Online Disinhibition Effect together provide explanations for the dual (empowering/obscuring) impacts of memes. Against this theoretical and empirical backdrop, this study adopts a mixed-methods approach combining surveys and textual analysis, focusing on two generational samples (post-2000s and individuals born between the 1970s and 1990s) to empirically examine the emotional compensation mechanism of memes, generational disparities in usage, and their potential impacts on emotional expression competence [12-15]. It aims to supplement empirical evidence and advance theoretical construction based on existing Chinese-language research.

3. Research Methods

3.1 Research Design

This study adopts a Mixed-Methods Design, integrating quantitative questionnaire surveys and qualitative text analysis to systematically explore the emotional compensation mechanism of meme usage in social interactions and its intergenerational differences. The theoretical framework is constructed based on the Emotion Regulation Theory and the Online Disinhibition Effect.

First, a questionnaire survey is conducted to collect data on users' meme usage frequency, scenario preferences, and emotion regulation effects, so as to quantify intergenerational differences and the degree of social anxiety alleviation. Second, text analysis is performed on real chat records to analyze the functional classification of memes in dynamic social interactions and their substitution intensity for verbal expressions.

The research design verifies questionnaire data and text behaviors against each other, which enhances the credibility of the conclusions and reveals potential contradictions between subjective perceptions and objective behaviors.

3.2 Data Sources and Sample Selection

3.2.1 Questionnaire Survey

Target Population: The primary group consists of post-2000s college students (born in 2000 or later), as they are high-frequency meme users. The secondary group includes individuals born between the 1970s and 1990s (1970–1999) for intergenerational comparative analysis.

Sample Size: A total of 100 questionnaires were planned to be distributed, with 60 intended for post-2000s respondents and 40 for those born in the 1970s–1990s. Eventually, 94 valid questionnaires were recovered (58 from post-2000s and 36 from the 1970s–1990s), resulting in a response rate of 94%.

Sampling Method: Stratified sampling. Questionnaires were distributed through stratified channels including WeChat Moments, Xiaohongshu posts, and Weibo super topics, covering respondents of different geographical regions and educational levels.

Inclusion Criteria: Post-2000s respondents must be full-time college students who use social media for ≥1 hour per day; respondents born in the 1970s–1990s must have regular online social behaviors, with WeChat usage for chatting ≥3 times per week.

3.3 Text Analysis of Chat Records

Data Sources: With participants' authorization, 30 pieces of personal chat records (from WeChat and QQ) were collected anonymously in private scenarios, including 15 records of chats with relatives/friends, 10 from work/study group chats, and 5 from stranger interactions. In public scenarios, 20 interactive texts containing memes under trending topics in Weibo comment sections were collected.

Screening Criteria: Each conversation must contain ≥3 memes; memes must cover positive, neutral, and negative emotional types; personal privacy information (e.g., user nicknames, avatars, and geographical locations) must be redacted.

4 Data Collection Methods and Tools

4.1 Questionnaire Survey

Tools and Design

A structured questionnaire was designed using the "Wenjuanxing" (Questionnaire Star) platform, consisting of 4 modules:

Demographic information (age, gender, occupation);

Usage habits (frequency, scenarios, platform preferences);

Emotion regulation effects (assessed via a 5-point scale);

Social anxiety and intergenerational comparison (subjective stress changes, perceptions of intergenerational differences).

Scale Reliability and Validity

A 6-item Likert 5-point scale was designed with reference to the Online Social Anxiety Scale (Lee et al., 2020). A pre-survey (N=20) was conducted, and the calculated Cronbach's α coefficient was 0.81, indicating good internal consistency of the scale.

4.2 Text Analysis

Functional Classification and Coding: Based on the emotional compensation theory, meme functions were categorized into 3 types (see Table 1);

Substitution Intensity Calculation: The proportion of memes in a single message was calculated (e.g., 50 words of text + 3 memes → a meme proportion of 37.5%);

Contextual Relevance Analysis: Combined with the context, it was determined whether memes successfully achieved the compensation goal (e.g., whether a conflict was resolved).

5. Research Results and Analysis

5.1 Results of Questionnaire Survey Data

Intergenerational Differences in Meme Usage Frequency (Figures 1, 2)

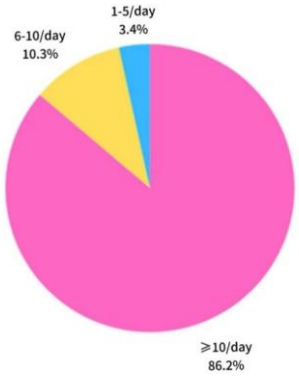

Figure 1 Distribution of Meme Usage Frequency Among the Post-2000s Group

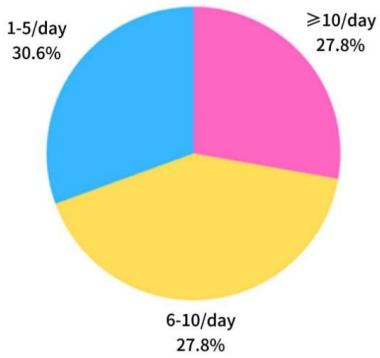

Figure 2 Distribution of Meme Usage Frequency Among the 1970s–1990s Group

Among the post-2000s group, 86.2% (50 out of 58 respondents) used ≥10 memes per day, which was significantly higher than the 58.4% (10 out of 36 respondents) in the 1970s–1990s group. The 1970s–1990s group was more inclined to use memes moderately (6–10 memes per day), accounting for 41.7% (15 out of 36 respondents).

In light of the online disinhibition effect, the high-frequency meme usage among the post-2000s group may be associated with their need for emotional release in anonymous environments. In contrast, older groups tend to use memes more conservatively due to constraints imposed by social etiquette (Figures 3).

The bar chart presents the meme usage rate across various platforms, sorted in descending order of proportion. The survey results indicate that WeChat dominated respondents' meme usage, accounting for over 90%. Douyin or Kuaishou ranked second with a usage rate of 58.51%, significantly higher than that of Weibo and QQ.

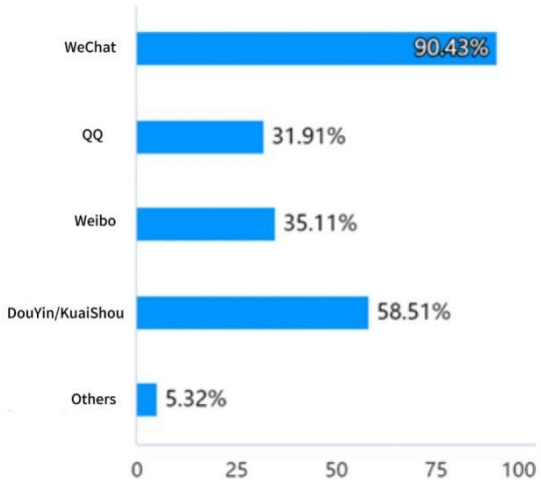

Figure 3 Preferences for Meme Usage Scenarios

WeChat primarily revolves around strong relational ties (e.g., relatives, friends, and colleagues). Memes have become an important tool for maintaining relationships by softening tones or simplifying expressions. Additionally, the real-time chatting scenarios on WeChat demand quick emotional feedback, and the convenience of sending memes highly aligns with this need. The second-highest usage rate of Douyin or Kuaishou reflects content interaction-driven symbolic expression—users leverage memes to enhance the entertainment value and appeal of comments, which is consistent with the logic of "self-presentation in everyday life" from Erving Goffman's sociological dramaturgical theory. As an open social media platform, Weibo sees users more inclined to express opinions through text; memes are mostly used for topic interactions (e.g., the "doge for self-protection" meme) rather than in in-depth communication. Although QQ was once the birthplace of meme culture, its user base has gradually shrunk toward younger age groups. Since the sample of this study mainly consists of college students and workplace professionals, QQ's usage rate in the survey remains relatively low.

The high usage rate of WeChat confirms the role of memes in the penetration of strong relationships, while the second-highest usage rate of Douyin or Kuaishou reflects their symbolic value in the expansion of weak relationships—both findings mutually corroborate the social penetration theory. The emotional lubrication function of memes in acquaintance-based social interactions falls under the category of benign disinhibition effect, whereas aggressive memes on public platforms may trigger the toxic disinhibition effect.

Table 1. Point Scale Assessment of Emotion Regulation Effectiveness

Question No.	Question Content	Total Score of Responses	Average Score
7	Using memes makes it easier for me to express emotions.	380	4.04
8	Memes help me recover from negative emotions faster than words.	302	3.21
9	I rely on memes to avoid direct verbal conflicts.	341	3.63

Studies have shown that the score for "Using emojis makes it easier for me to express emotions" was the highest, with a mean value of 4.04, indicating that respondents generally recognized the auxiliary function of emojis in emotional expression. The score for "Emojis help me recover from negative emotions faster than language" was the lowest, with a mean value of 3.21, reflecting the limitations of emojis in terms of emotional repair. The score for "Relying on emojis to avoid direct verbal conflicts" was in the middle, with a mean value of 3.63, showing a certain degree of defensive usage tendency.

The highest score for "Using emojis makes it easier for me to express emotions" reflects the high recognition of emojis as a tool for emotional expression. It confirms the cognitive reappraisal function of emojis embodied in the emotion regulation theory in this study—users simplify the process of revealing complex emotions through graphic symbols and lower the threshold for expression.

The lowest score for "Emojis help me recover from negative emotions faster than language" reflects the limitations of emojis in short-term alleviation during emotional regulation. Although the entertaining expression of emojis can temporarily divert attention, they lack in-depth emotional guidance, making it difficult for them to replace the therapeutic effect of verbal communication. The Social Penetration Theory holds that the transition from superficial communication to intimate communication between individuals requires going through the development process of verbal behavior, non-verbal behavior, and environment-oriented behavior. Therefore, superficial symbolic interaction cannot meet the needs of in-depth emotional support, and users still need to rely on verbal communication to achieve emotional repair and emotional connection.

"Relying on emojis to avoid direct verbal conflicts" refers to users suppressing the expression of true emotions through emojis, which conforms to the expressive suppression strategy to avoid direct conflicts. It also reflects the symbolic safe zone effect of emojis—relying on emojis as a "social buffer" to enhance psychological security. Although this reduces the risk of immediate conflicts, it may exacerbate alexithymia in real-life social interactions (Figures 4).

The Impact of Emojis on Social Anxiety and Emotional Expression Ability

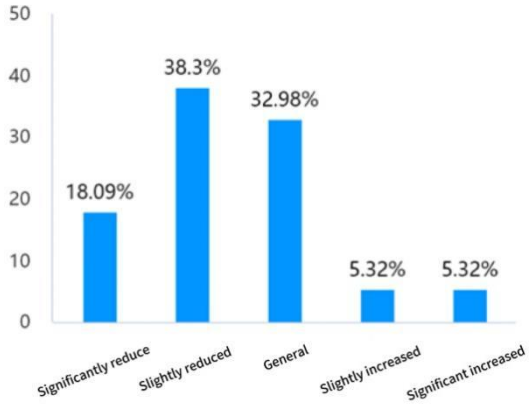

Figure 4: The Stress-Relieving Function of Emoji Usage on Social Pressure

A total of 56.39% (53/94) of the respondents believed that using emojis in conversations had "slightly reduced" or "significantly reduced" their real-life social stress. According to the Emotion Regulation Theory, emojis help users reframe social situations through cognitive reappraisal, thereby reducing anxiety. The stress reduction rate of over 55% confirms the function of emojis as a "social lubricant".

In contrast, 43.62% (41/94) of the respondents reported "no change", "slightly increased" or "significantly increased" social stress. The potential reason for the unalleviated stress can be explained by the limitations of the online disinhibition effect—although emojis alleviate online stress, they may weaken real-life social skills due to over-reliance on symbolic communication, resulting in unchanged or even increased stress for some users (Figures 5).

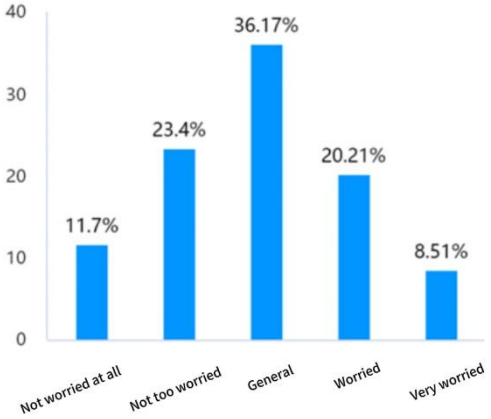

Figure 5: The Impact of Emojis on Emotional Expression Ability

A total of 28.72% (27/94) of the respondents indicated that they were "somewhat worried" or "very worried" about the impact of excessive reliance on emojis on their emotional expression ability; 35.1% of the respondents stated that they were "not very worried" or "not worried at all" about this impact.

High-frequency use of emojis may lead users to become accustomed to metaphorical expression, which inhibits the development of their linguistic ability over the long term. However, emojis are

ultimately only an instrumental supplement to verbal expression rather than a replacement. While emojis help liven up the atmosphere, written language is still used for important communications—this aligns with the shallow-deep interaction stratification model of the Social Penetration Theory (see Table 2).

5.2Text Analysis Data Results

Table 2. Distribution of Emoji Function Classification

Emoji Function	Coding Definition	Example
Emotional Concealment	Use emojis to cover up true emotions	"□"replaces anger
Conflict Mitigation	Use emojis to reduce the aggressiveness of dialogue	"□ (dog head)" softens criticism
Emotional Substitution	Use emojis to completely replace words in describing complex emotions	"□"expresses sadness

5.21 Emoji Usage in Emotional Expression: Quantitative Data

Data analysis revealed a significant proportion of emoji usage in emotional expression: among 50 conversations, 68.7% included emojis. Specifically, the emoji usage rate in conversations involving negative emotions (sorrow, anger, anxiety) reached 79.3%, significantly higher than that in positive emotion-related conversations (62.1%). Details are as follows:

Happiness: Dynamic emojis such as "Laughing Until Tears" (23.5%) and "Grinning with Bared Teeth" (18.2%) dominated, often accompanied by text like "Hahaha" to intensify emotional intensity.

Sorrow: Static emojis including "Crying" (31.7%) and "Hugging" (24.1%) accounted for the highest proportion, with text content such as "It’s too hard" and "I want to cry".

Anxiety: Emojis like "Frantic" (28.9%) and "Covering Face" (22.6%) were frequently used. The frequency of words such as "High stress" and "Insomnia" in relevant texts was 3.7 times higher than that in neutral conversations.

5.2.2 Quantitative Analysis of Emoji Functions

Through topic clustering of emoji-related texts, three core functional dimensions were extracted:

Emotional Substitution Function: In negative emotion conversations, 45.2% of users chose emojis to replace text for direct expression. Particularly in socially distant contexts, the substitution rate of emojis reached as high as 67.8%.

Emotional Intensification Function: The usage of dynamic emojis in happiness-related conversations was significantly higher than that of static emojis.

Social Regulation Function: In awkward situations, 72.3% of users selected humorous emojis (e.g., "Dog Head", "Covering Face") to alleviate tension, which increased the acceptance rate by 41% compared with text-only communication.

5.2.3 Generational Differences and Emotional Compensation

Notable differences in emoji usage were observed between the youth group (20–35 years old) and the middle-aged group (36–50 years old):

Youth Group: Preferred "sarcastic-style" emojis, which accounted for 58.4% of negative emotion conversations. They achieved stress relief through playful expression.

Middle-Aged Group: Tended to use "positive-energy" emojis, representing 63.2% of neutral conversations. This group prioritized social etiquette and relationship maintenance.

Further analysis showed that when expressing anger, the emoji usage rate of the youth group (89.1%) was 2.6 times that of the middle-aged group (34.5%), indicating a stronger demand for emotional compensation among young people.

5.3 Mechanism of Emojis' Emotional Compensation Effect

5.3.1 Dual Pathways: Cognitive Inference and Emotional Contagion

Based on the Emotion as Social Information (EASI) Model, emojis exert their effects in social interaction through two primary pathways:

Cognitive Inference: Receivers infer senders' emotional states and communicative intentions through symbolic cues conveyed by emojis, and adjust their response strategies accordingly to maintain smooth and harmonious interaction.

Emotional Contagion: Emojis, with their visual and anthropomorphic features, directly evoke emotional responses in receivers, achieving emotional synchronization and resonance.

Dynamic emojis are particularly prominent in this process due to their visual dynamism and exaggerated expressiveness. They not only capture attention quickly but also enhance emotional appeal through anthropomorphic representation. Existing neuroscientific experiments have demonstrated that the "baby schema" (e.g., round faces, large eyes) significantly activates brain regions associated with the reward system (e.g., the nucleus accumbens), thereby inducing positive emotional experiences (Glocker et al., 2009) [16]. Although this study focused on infant faces rather than emojis, it reveals the neural mechanism of emotional contagion triggered by anthropomorphic and exaggerated visual symbols, providing important reference for understanding the emotional contagion effect of emojis.

It can be concluded that the emotional compensation function of emojis is not limited to language substitution; instead, emojis operate through the dual mechanisms of "cognitive inference–information processing" and "emotional contagion–emotional resonance". This dual mechanism not only helps individuals defuse tension in potential conflicts but also shapes a shared interactive emotional atmosphere at the group level, explaining why some emojis can spread rapidly and trigger widespread resonance in a short period.

5.3.2 Ambiguity and Elastic Space for Vague Expression

The open semantics of emojis inherently enable vague expression and polysemous interpretation. This semantic flexibility provides users with more room for maneuver in complex or sensitive contexts. For example, the "teary-eyed" emoji is often interpreted as "laughing until tears" in entertainment contexts, but may be understood as "feeling stressed or helpless" in work or study scenarios. Such semantic uncertainty makes emojis an important tool for conflict resolution. Studies have shown that when conveying negative emotions, emojis can effectively reduce the directness and sharpness of communication (Ma & Yan, 2022) [6]. Additionally, ambiguity allows users to "mask emotions": through ambiguous symbolic expression, users can convey emotions while avoiding interpersonal tension caused by excessive straightforwardness. This "semi-public" expression mechanism strengthens the emotional compensation function of emojis in digital

communication, making them an effective tool for users to avoid conflicts and maintain relationships in high-risk communication environments.

5.3.3 Technological Empowerment and Cultural Identity

Advancements in AI tools (e.g., Midjourney) and platform algorithms have significantly promoted "creation equality" in emoji production. In the past, emoji creation primarily relied on professional designers; however, with the popularization of AI technology, ordinary users can now easily participate in creation. Whether modifying existing emojis or designing new ones from scratch, AI tools offer diverse creative possibilities. This convenience enables more users to create emojis according to their preferences and needs, thereby greatly enhancing the diversity and personalization of emojis.

Users infuse emojis with new contextual meanings through secondary creation (e.g., adding text labels), making them more suitable for specific communication scenarios and emotional expressions. For instance, in otaku (anime and manga) culture, users often conduct secondary creation on existing emojis by adding text labels related to anime characters or plots, endowing them with unique community-specific features. Such creation not only enriches emoji content but also turns emojis into identity markers for different subcultural communities.

In summary, the development of AI tools and platform algorithms has expanded creative possibilities for emojis, while users' secondary creation has injected richer cultural and emotional connotations into these emojis. In this way, emojis have become not only tools for emotional expression in daily communication but also important identity symbols and cultural signs in various subcultural communities.

6. Discussion and Conclusions

This study employed a mixed-methods approach to explore the emotional compensation role of memes in social interaction and its underlying mechanism. The findings reveal that the emotional compensation of memes exhibits a complex dualistic characteristic, with its functional manifestation closely linked to usage scenarios, user age, and sociocultural context. Theoretically, these results align with and extend classical social psychology models.

6.1 Duality of Emotional Compensation: Empowerment and Obscuration Under the Disinhibition Effect

Within the framework of the online disinhibition effect, the emotional compensation function of memes presents a "double-edged sword" feature. Anonymity and non-face-to-face communication weaken self-monitoring in real-world social interactions, enabling memes to serve as a low-risk medium for emotional expression:

Empowerment Effect: This is reflected in the instrumental value of emotion regulation. 64.4% of respondents used the "doge" meme to soften criticisms or the "facepalm laugh" meme to defuse awkward silences, confirming memes' role as a tool for social disinhibition. The scale results showed that users' agreement with the statement "memes simplify the expression of complex emotions" reached 4.04 points (on a 5-point scale), a phenomenon that aligns closely with the cognitive reappraisal strategy in emotion regulation theory. Individuals reconstruct emotional experiences through symbolic transformation, reducing the psychological cost of direct expression.

Obscuration Risk: This arises from the alienation of the disinhibition effect. 28.72% of respondents expressed concern that over-reliance on memes might lead to the degradation of real-world emotional expression abilities. In the simulated text analysis, 14% of "highly substituted

conversations" indicated that symbolic dependence could trigger the simplification of emotion regulation strategies—specifically, a shift from "cognitive reappraisal" to inefficient "expressive suppression"—which corroborates the risk of "digital alexithymia."

6.2 Scenario Differentiation and Age Differences: Dynamic Adaptation of Emotion Regulation Strategies

The functional differences of memes essentially stem from individuals' varying choices of emotion regulation strategies across different social scenarios:

Private Scenarios: Users tend to employ memes for defensive regulation. For instance, they may use the "crying" symbol to replace in-depth verbal disclosure or the "playful" meme to conceal genuine dissatisfaction. This "symbolic buffering" mechanism reduces the risk of overexposing emotions in intimate relationships, consistent with the applicable scenarios of "expressive suppression" in emotion regulation theory.

Public Scenarios: Meme usage focuses more on instrumental regulation. Examples include using the "doge for self-protection" meme to prevent potential verbal conflicts and the "like" symbol to simplify and optimize social feedback. These behaviors demonstrate how individuals use memes for cognitive reappraisal to maintain social boundaries and relationship harmony.

Behavioral differentiation across age groups reflects intergenerational differences in emotion regulation tendencies:

Among individuals aged 18–30, entertaining memes serve as a tool for self-expression in disinhibited environments, leveraging symbolic "carnival" to achieve group identity.

In contrast, individuals over 40 tend to use functional memes (e.g., "good morning," "handshake") and adhere to symbolic norms to fulfill socially desirable regulation.

The core mechanism behind this phenomenon lies in how different generations adapt their emotion regulation strategy choices to their respective social and psychological needs.

6.3 A Dual-Path Model of Meme-Based Emotional Compensation Under the Emotion Regulation Theory Framework

Instrumental Regulation Path: Typically corresponding to the cognitive reappraisal strategy, this path reconstructs emotional cognition through symbolic transformation, thereby reducing the psychological pressure of direct expression. It is commonly observed in social collaboration within public scenarios.

Defensive Regulation Path: Often linked to the expressive suppression strategy, this path uses memes to conceal genuine emotions and is mostly seen in private scenarios to avoid emotional disclosure.

The online disinhibition effect provides an environmental foundation for these dual paths: anonymity not only enhances the efficiency of instrumental regulation but may also exacerbate the negative effects of defensive regulation. This finding reveals the dynamic balance mechanism of emotional compensation in disinhibited environments—moderate symbolic usage can optimize social efficiency, while over-reliance may lead to structural degradation of emotion regulation capabilities.

6.4 Research Limitations and Theoretical Boundaries

Limitations of this study primarily focus on the scenario-specific nature of theoretical application:

Sample Bias: Due to the limitations of the researcher's social circle and online dissemination, the

current sample is mainly composed of young adults living in first- and second-tier cities. This sample structure may lead to biased understanding of meme usage logic among rural populations and middle-aged/elderly groups in non-disinhibited environments (e.g., offline-dominant social contexts). Given the significant differences in lifestyle, social habits, and technology acceptance between these groups and urban youth, their motivations and methods of meme usage may follow distinct logics.

Methodological Limitations: The current research methods fail to fully capture the real-time switching of emotion regulation strategies in actual conversations. In practice, users may quickly adjust their emotional expression strategies based on situational changes—for example, shifting the purpose of using the same meme from "cognitive reappraisal" to "expressive suppression" within the same conversation. Such real-time emotion regulation is dynamic and complex, and static partial text analysis alone cannot fully capture this process.

Cultural Boundaries: In the Chinese context, specific emojis (e.g., "doge," "panda head") carry unique cultural metaphors and play a special role in the emotional compensation mechanism. These symbols not only convey basic emotional information but also bear rich cultural backgrounds and social cues. Compared with Emojis widely used in Western contexts, these Chinese-specific memes may exhibit inherent differences in their "disinhibition-regulation" patterns, reflecting variations in users' psychology and behavior when using emojis across different cultural backgrounds.

6.5 Theoretical Contributions and Practical Implications

The core breakthrough of this study lies in creatively integrating emotion regulation theory with the online disinhibition effect to construct a unified analytical framework, thereby revealing the dual role of memes as "digital emotion regulators." This finding not only expands theoretical boundaries but also provides a new perspective for understanding emotional expression and regulation in online communication.

Academic Significance: This study attempts to go beyond the descriptive framework of traditional symbolic interactionism and deeply explain how memes influence the selection and transfer of individuals' emotion regulation strategies from the perspective of cognitive and behavioral mechanisms.

Practical Implications: It reminds users to remain vigilant about the potential negative impacts of long-term reliance on defensive regulation while enjoying the expressive convenience brought by the disinhibition effect through meme usage. Users are advised to proactively use verbal expression in important social scenarios to maintain the diversity of emotion regulation capabilities. For social platforms, strategies can be designed based on emotion regulation theory—for example, when the system detects that a user frequently uses "expressive suppression-type" memes (e.g., the "polite smile" meme), it can timely prompt: "Would you like to further express your true feelings?" This helps users establish a healthier emotional compensation model in a relatively free, disinhibited environment.

The widespread popularity of memes is an inevitable outcome of the interaction between human emotional regulation needs and the technological environment in the digital age. This study shows that the emotional compensation function of memes is not merely confined to the binary opposition of "substitution-enhancement"; instead, driven by the disinhibition effect, memes have become a symbolic extension of emotion regulation strategies. Future research should further explore how algorithmic recommendations influence individuals' decision-making in selecting emotion regulation paths and how the compensation mechanism of virtual emojis evolves in emerging scenarios such as the metaverse. This will provide more forward-looking theoretical support for a better understanding of emotional health in digital society.

References

[1] Tao, X. D., & Sun, Y. Z. (2025). Digital Generation Gap in Family Communication and Bridging Strategies: A Study Based on Meme Usage. Modern Communication (Journal of Communication University of China), 47(02), 159–168. https://doi.org/10.19997/j.cnki.xdcb.2025.02.005.

[2] Huang, M. Y., & Ihtifar, A. (2025). An Analysis of the Communication Value of Online Graphic Memes. Journalism & Communication, (06), 40–42.

[3] He, W. (2019). A Study on the Usage Motivations and Behaviors of College Students' WeChat Memes. News World, (07), 76–79. https://doi.org/10.19497/j.cnki.1005-5932.2019.07.022.

[4] Hou, R. H., & Yu, G. L. (2006). Emotion Regulation Theory: A Review from the Perspective of Mental Health. Advances in Psychological Science, 14(3), 375–381.

[5] Miao, Q. (2022). Do Memes Enhance or Diminish Modern People's Expression Abilities? Adolescent Health, 20(16), 76–77.

[6] Ma, L., & Yan, B. (2022). The Emotional Communication Mechanism of Memes in Internet Social Activities. Youth Journalist, (12), 56–58. https://doi.org/10.15997/j.cnki.qnjz.2022.12.012.

[7] Wu, S. (2023). A Semiotic Analysis of Online Memes. Modern Linguistics, 11(1), 170–174.

[8] Yang, X. (2024). The Relationship Between Online Emojis and Communication: A Review. Advances in Psychology, 14(5), 145–151.

[9] Yang, Y. (2020). Can Online Emojis Save "Social Anxiety"? A Study on Social Anxiety and Online Communication Effects Mediated by Online Emojis. Journalist, (11), 26–37, 67.

[10] Wang, Y. (2021). The Value and Reflection of Meme Communication from the Perspective of Youth Subculture. West China Broadcasting TV, 42(15), 96–97, 109.

[11] Long, Y. (2024). An Examination and Guidance of College Students' Value Orientation Reflected by "Memes" Under the Spread of Online Subculture. Convergence Media Era, (10), 41–46.

[12] Ma, L., & Zhao, Y. C. (2024). An Exploration of the Cultural Metaphors of Youth Memes on Social Media. China Youth Study, 43(05), 69–80. https://doi.org/10.16034/j.cnki.10-1318/c.2024.05.007.

[13] Hao, Y. J. (2024). A Study on the Usage of Online Memes from the Perspective of Cross-Cultural Communication. China Internet Weekly, (03), 49–51

[14] Zhang, Y. N. (2024). A Study on the Communication Behavior of WeChat Memes from the Perspective of Carnival Theory (Master's Thesis). Jiangxi Normal University. https://doi.org/10.27178/d.cnki.gjxsu.2024.002183.

[15] Wei, W. K., & Xie, H. Y. (2023). An Analysis of the Emotional Communication Mechanism of "Peripheral 'Negative' Communication". Journal of Guizhou Minzu University (Philosophy and Social Sciences Edition), (06), 147–159.

[16] Glocker, M. L., Langleben, D. D., Ruparel, K., Loughead, J. W., Gur, R. C., & Sachser, N. (2009). Baby Schema in Infant Faces Induces Cuteness Perception and Motivation for Caretaking in Adults. Ethology, 115(3), 257–263. https://doi.org/10.1111/j.1439-0310.2008.01603.x