

Emotional Compensation Through "Cloud Dining": A Comparative Study of the Viewing Motivations for Food Videos among College Students under Different Life Circumstances

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Abstract. In the context of the continuous development of online short videos, almost all platforms have increasingly begun to encourage users to record their own lives by taking microfilms and, in doing so, to become professional content producers. Food videos have been seen as an indispensable part of the short video field. Drawing on the framework of the uses and gratifications theory, this paper uses the questionnaire method in order to explore the reasons why a large number of college students choose to watch food videos. The findings confirm that the group's preference for different types of food videos is rooted in their different real-life situations, and that watching such videos serves to complement their emotional needs in meaningful ways. On this basis, this paper puts forward development suggestions for short video platforms and bloggers, suggesting that they enrich video content types and allocate resources more precisely according to viewing preferences, thereby achieving a win-win situation for platforms, creators, and viewers.

Keywords: Uses and gratification theory, substitute satisfaction, affection need, social media use, teenagers

1. Introduction

The 56th "Statistical Report on the Development of China's Internet Network" indicates that internet users had reached 1.123 billion in June 2025 [1]. Most of them belong to the young and middle-aged population, with 26.35% of users aged from 10 to 29. This highly developed information technology is what allows social media content creators to play a powerful role in the digital era. User-Generated Content (UGC) has served as the primary means of spreading online information. A large number of content creators draw inspiration from each aspect of daily life to produce a wide range of works. At the same time, food videos have become an essential category of short videos. In 2021, food-related videos on Bilibili accumulated more than 24 billion views annually, representing a 70% year-on-year increase.

Depending on their key points and structure, food videos generally fall into the following categories: food streaming, restaurant review, cooking tutorials [2], regional cuisine, and travel

dining content. These videos have considerable significance in teenagers' daily lives, as they offer a wide range of food-related information and companionship during leisure time. Food videos possess a powerful connective capacity that can evoke the audience's yearning for specific spaces, such as home, hometown, family, and distant places [3]. While watching such a video, not only can the audience gain visual impact, but they can also fulfill the various emotional and spiritual needs of university students [4]. It can thus be inferred that food-video viewing behaviour is deeply intertwined with the daily life situations of university students.

However, current studies on food video audiences still have limitations in how these audiences are classified. Most studies tend to treat "university student" or "youth group" as a single entity, without attending to differences within these groups that stem from varied living backgrounds. This research takes the blank space as its starting point, comparing diverse "living conditions", analyzing the motivation differences of university students watching food videos under different circumstances, and examining the underlying emotional compensation mechanism.

2. Theory framework

2.1. Uses and gratifications theory

A key contribution of Uses and Gratifications Theory lies in its rejection of the view that audiences passively receive media information. Instead, it emphasizes that audiences possess subjectivity and initiative [5]. Individuals develop their own particular expectations under the influence of specific social environments and psychological factors, which in turn enable them to select media content independently [6]. Media use ultimately serves to satisfy the goals and expectations held by the population [7]. The theoretical founder, Katz and others, divided the needs into five categories: cognitive need, emotional need, personal integration need, social integration need, and tension release need. Building on this, McQuail condensed the framework to four dimensions, namely information, personal identification, integration, social interaction, and entertainment.

Within the existing literature on food videos, some studies have indicated that young people's motivations for viewing such content include information acquisition, positive emotion, pressure control, and the alleviation of homesickness [8]. University students tend to enjoy watching food videos because they gain benefits from acquiring information, regulating emotions, engaging in rich social interactions, recognizing themselves, and obtaining substitute experiences [9]. Silaban and others have verified that the goals of information seeking and entertainment significantly influence the audience's emotional engagement and behavioural intention [10]. Taken together, these studies illustrate that information acquisition and emotional fulfillment function as the core driving forces behind watching food videos.

2.2. Emotional compensation

Emotional compensation refers to a process in which individuals obtain alternative satisfaction through media support when one of their emotional needs cannot be satisfied. The theoretical foundation of this concept can be traced back to Freud, who believed that when the satisfaction of people's desires is impossible, people seek compensation through indirect means such as fantasy and empathy.

Within the field of communication, Emotional Compensation bears a close resemblance to the concepts of "stress relief demand" and "emotion need" in Uses and Gratifications Theory. The former, however, places greater emphasis on the structural relationship of "lack-compensation". In

this view, positive emotions such as satisfaction, happiness, and peace are obtained not because of the interesting content, but because the same deficits are present in the audience's real life. This frame links viewing behaviour to audience-specific living circumstances, thus offering an analytical basis for understanding different viewing motivations among particular audience groups. Wu confirmed this mechanism by showing that audiences use others' viewpoints to compensate for regrets they cannot experience on their own [11].

Based on existing studies, the Emotional Compensation of food video can be classified into four types: homesickness compensation (college students studying in different provinces or municipalities), appetite compensation (economically disadvantaged individuals acquire visual alternative satisfaction through cloud tasting), accompany compensation (individuals living alone treat mukbang vloggers as meal partners), and social compensation (maintaining and expanding social relationships by sharing videos and making comments) [4].

2.3. Research gap

Drawing on related papers and research, it can be easily concluded that existing studies tend to sample young people as a whole group while overlooking internal differences, as life status has not been treated as an analytical variable. Anjani et al. examined the behaviour of watching mukbang videos during solitary eating occasions, yet their study focused on the general food video audience rather than the student population specifically [4]. Similarly, Li and colleagues selected all users who commented on Chengdu food short videos as their sample [8], without distinguishing among audience members' varying living circumstances.

There is no difficulty in finding related researches exist a gap in the research object. For one thing, the classification of customer groups remains insufficient, which means researchers have paid little attention to the audience's life status. For another, previous work has not considered that audience emotional needs may differ because of various life statuses. In addition, it is unclear whether the specific form and effect of emotional compensation change in accordance with different life statuses. These limitations reduce the level of detail in the explanatory power of the Use and Satisfaction Theory.

In this study, "life status" is defined as the daily living conditions of college students. The concept comprises four aspects: first, the distance between school and home; then, the living pattern; third, daily dining circumstances; and fourth, economic condition. University students in different life statuses may have different needs for emotional compensation associated with food-related videos, as there may be significant differences in the types and degree of emotional deficits. This study puts forward several hypotheses: students studying across provinces may prefer to gain emotional comfort through watching local food videos, whereas students living alone are more likely to need the company provided by food streaming videos. Existing studies have limitations in population classification, which causes them to overlook differences in emotional needs arising from different lifestyles.

Based on the above gaps, this paper proposes that attention be directed toward university students across different life statuses. More specifically, the investigation may be organized around the following questions: (1) How do viewing behaviours of college students with different life statuses differ when watching food-related videos? Do their preferences for video types, such as store tours, food streaming, local cuisine, or cooking tutorials, vary? Are there differences in viewing time distribution? (2) Building on existing findings, this research presupposes four types of emotional compensation: homesickness compensation, appetite compensation, accompaniment compensation,

and social compensation. It then attempts to examine how these specific types of emotional compensation vary according to life status.

3. Method

3.1. Research design

At the level of theoretical application, this research uses Uses and Gratifications Theory as a research method. Not only does it work as an explanatory framework, but it also serves as the guideline for data collection and analysis. At the level of concept, this research introduced "life status" as a core comparison dimension. The study subjects were refined from the same "university student" to distinct subgroups, including "students studying across provinces," "students studying within the province," "single residents/off-campus accommodation," and "collective accommodation."

Importantly, a random questionnaire approach was adopted, with university students as the survey target. The plan was to collect questionnaire data from college students at the same university who lived under different conditions. The questions focused on differences in motivations and emotional compensation mechanisms among college students as they watched food videos under various life circumstances. During the data collection period, researchers can directly judge users' life status, such as whether they study across provinces or within the same province, live alone or in group accommodation, and so on, through behavioural data from responses, such as viewing times and follow lists. In this way, the study can horizontally compare and analyze the preferences, behaviours, and scenarios of population groups with different life statuses.

In the questionnaire, the first part attempted to collect demographic statistical information and variables concerning living conditions (students studying both within and outside the province; their mode of residence; daily dining habits; and available living expenses). The second part aimed to measure viewing behaviour (type preference, time period, and bullet comment participation frequency). The third part functioned as the emotional compensation scale, using a five-point Likert scale to measure six dimensions: information acquisition, entertainment and relaxation, homesickness compensation, accompanying compensation, appetite compensation, and social compensation.

Information Acquisition Dimension: For college students, the primary purposes of watching food videos are learning about local specialties, obtaining restaurant information, acquiring cooking skills, and engaging in other practical activities.

Entertainment and Relaxation Dimension: Sharing videos with friends can strengthen friendships through interaction and can also help build relationships with strangers who share similar interests, thus expanding one's social circle.

Homesickness Compensation Dimension: Watching such videos can provide positive emotional feedback by alleviating mental fatigue and tension, thereby inducing relaxation and pleasure.

Accompaniment Compensation Dimension: Viewers with limited material resources can also obtain satisfaction and pleasure by watching videos of others eating or tasting food, as if they were experiencing those moments themselves.

Appetite Compensation Dimension: People watch videos featuring local or traditional dishes from their hometowns as a way to alleviate homesickness.

Social Compensation Dimension: Through food streaming and companion-style videos, individuals can obtain virtual companionship when eating alone, thereby reducing feelings of loneliness.

3.2. Participants and procedure

The data were collected from July 10 to July 15, 2026. The study used random sampling and snowballing by leveraging the snowball effect among friends on WeChat Moments. Among these participants, 4 did not complete the information, or their responses were worthless. Therefore, these participants were excluded from the analysis. Consequently, 81 participants made up the final sample. A total of 77 samples were collected from the experiment, and all analyses were conducted with this data.

In all samples, students studying across provinces occupy 45.45%. Residents in the campus dormitories account for 87.01% of the total population. 66.23% student was Students whose living expenses ranged from 1,000 to 2,000 yuan. The frequency of eating alone is relatively high. This data provides a solid basis for subsequent difference analysis. These students are between 18 and 25 years old, and the average age is 20.7 years. The males take the 51.2%, and female is 47.4%. Among them, the sophomore is the highest proportion (44.8%), followed by the junior with 38.4%. The proportion of senior students is 10.2%. The freshman and postgraduate accounts for the lowest percentage at only 2.5%.

3.3. Questionnaire

The questionnaire used in this study was divided into two sections. The first section gathered basic information from each respondent, including age, location, and monthly income, which served as the basis for grouping participants in the subsequent analyses. In the second section, a five-point Likert scale ranging from 1 to 5 (where 0 = no impact and 5 = significant impact) was used to assess the influence of respondents' living conditions on their motivation for watching food videos. At the same time, when the questions concerned emotional compensation, the six classifications mentioned earlier were adopted, with at least two items for each category. An average score exceeding 3 on the emotional compensation dimension was interpreted as supporting the expected assumption: that one purpose of watching food videos is to fulfill a need for emotional satisfaction in real life. In the present research, the scale's Cronbach's α reached 0.94.

To verify the validity of the experimental data, Cronbach's alpha coefficient was calculated separately for each dimension. The values obtained were: the entertainment dimension $\alpha = 0.786$, the homesickness compensation dimension $\alpha = 0.749$, the companionship compensation dimension $\alpha = 0.701$, and the social compensation dimension $\alpha = 0.731$. The reliability of these dimensions is acceptable. This indicates excellent overall reliability and strong data validity.

A correlation analysis based on existing experimental data was conducted. The results of this analysis show a significant positive correlation among all motivational dimensions, indicating that stronger overall viewing motivations correspond to stronger motivations in various dimensions such as information acquisition, emotional satisfaction, and compensatory needs.

4. Results

After grouping the scale items by the six motivation types, the average scores for each item and each dimension were calculated. Results are shown in Table 1.

All motivation types received high scores, ranked from highest to lowest as: information acquisition, social compensation, emotional satisfaction, appetite compensation, homesickness compensation, and companionship compensation.

Table 1. Average

dimensions	item	average score	dimensional average score
information acquisition	Q14/Q15/Q16	4.06/3.96/4.22	4.08
entertainment and relaxation	Q17/Q18/Q19/Q33/Q34	4.10/4.00/4.03/3.91/3.88	3.98
homesickness compensation	Q20/Q21/Q22/Q23	4.25/ 4.01/3.62/3.91	3.95
accompanying compensation	Q24/Q25	4.06/3.52	3.79
appetite compensation	Q26/Q27/Q28/Q29	4.03/3.84/4.05/3.90	3.96
social compensation	Q30/Q31/Q32	3.79/4.18/3.92	3.96

Students were divided into two groups: those studying within the province (n=42) and those studying across provinces (n=35). Scores for the homesickness compensation (Q20–Q23) and companionship compensation (Q24–Q25) dimensions were calculated, followed by a t-test analysis.

Table 2. Validity test

dimensions	students within the province (mean ± standard deviation)	students across the province (mean ± standard deviation)	t-value	p-value
homesickness compensation	3.68 ± 0.92	4.26 ± 0.81	2.91	0.005
companionship compensation	3.81 ± 0.95	3.76 ± 0.97	0.23	0.819

Results shown in Table 2 highlight that the homesickness compensation scores of students studying across provinces are significantly higher than those of students within the same province. However, no significant difference was observed in the amount of companionship compensation.

A Spearman rank correlation analysis was performed between monthly living expenses and appetite compensation scores (Q26–Q29). The correlation coefficient was $r = -0.24$, $p = 0.036$ (<0.05), showing a significant negative correlation. In other words, the lower the living expenses students have, the stronger their motivation for appetite compensation becomes. This phenomenon illustrates that limited economic conditions urged them to seek alternative satisfaction through food videos.

5. Discussion

This study carries significant theoretical and practical implications for understanding the short video selection preferences of university student groups.

The data indicate that emotional compensation is one of the primary reasons college students watch food-related videos. The motivation of information acquisition and entertainment also occupies a very important place. However, social compensation, appetite compensation, homesickness compensation, and companionship compensation are all recognized as well. "Cloud

dining" serves not only as a means to access food-related information or seek entertainment, but also as a crucial way for college students to cope with excessive real-life pressures, alleviate childhood nostalgia, and strengthen their attachment to their hometowns. Emotional compensation emphasizes the structural relationship of "deletion-compensation": the audience seeks psychological compensation through media consumption due to a real-life deficiency. Besides, differences in living conditions significantly influence the type and intensity of emotional compensation motivation. On the one hand, Local/Regional Cuisine videos offer an effective way for students studying across provinces or living away from home to alleviate homesickness. Such videos display familiar food flavours, local traditional language, and cultural symbols relevant to that group. On the other hand, in food streaming companion videos, the chewing sound of the actual eating process and daily conversations create a sense of presence through "virtual dining" together, especially for individuals who live alone or often eat alone. For this reason, watching such videos can alleviate loneliness caused by a lack of real-life social interaction. These two types of videos respond to different emotional deficiencies according to various living conditions, reflecting the pertinency of the compensation mechanism. Lastly, food videos show a notable social conversion effect: 72.73% of respondents choose to share food videos with friends or post them on social media platforms. This suggests that food videos are not merely personal entertainment content, but also a tool for expressing personal interests and maintaining social relationships. Moreover, the comment sections of food videos have become another avenue for social compensation, where users can express their feelings and seek resonance, thereby reducing the scarcity of social interaction. In summary, the social compensation mechanism of food videos operates through multiple channels, including sharing, bullet-screen interactions, and discussions in the comment section.

Theoretically, the study first extends the application of media usage motivation theory to the context of food videos. This research also proves the applicability of the Use and Satisfaction Theory in short video consumption and expands the theoretical boundaries of research on food video audiences. Notably, this research deepens the understanding of the media consumption behaviours among college students. Focusing on a university student group and exploring the diversity of viewing motivations for food videos, this research offers a new perspective for understanding the youth's media consumption habits and behavioural logic.

Accordingly, several suggestions can be offered for short video platforms and creators in future practice. To begin with, food video content creation should meet diverse needs and enhance content adaptability. Authors may create content that combines informational and emotional value by addressing the core needs of college students. For example, they could continue producing informational content such as food restaurant reviews, cooking tutorials, and introductions to specialty dishes, while at the same time recommending hometown delicacies or dormitory food. In this way, videos can adapt to various life statuses of students. Short video platforms, on the other hand, should optimize content recommendations and operational strategies specifically for college students. Tailored recommendation systems should be developed based on students' varying motivations. If a student has low living expenses, for instance, the algorithm should give priority to high-value food options and simple meals available in dormitories. Platforms can also create a more socially interactive environment around food videos to satisfy university students' need for social fulfillment, thereby enhancing user retention and platform engagement. Last but not least, guide college students to develop healthy dietary and lifestyle habits through food-related videos. Universities and relevant institutions can fully utilize the influence of food videos to convey healthy dietary concepts and a positive lifestyle attitude. Also, provides emotional companionship and

psychological support for groups facing challenging living conditions through video content, demonstrating the positive social value of such videos.

6. Conclusion

At first, this research broadens the application dimension of the Use and Satisfaction Theory in short video research. It classifies college students based on their "life status"; therefore, this study ensures the audience has different needs because of their diverse living conditions. Then, food videos give a helpful hand for them to meet the need for emotion and feeling. Refine the explanatory power of the Use and Satisfaction Theory at the audience subdivision level.

Secondly, it is proven that viewing food videos exerts a vital influence on the emotional compensation mechanism. Real-life conditions such as the long distance from home, lack of social activity, and economic limitations give rise to the need for nostalgia compensation, companionship compensation, social compensation, and appetite compensation. This finding connects viewing behaviour to the audience's specific living environment and provides an analytical basis for understanding their motivations.

Thirdly, the study extends existing international academic findings concerning "Food-streaming" and "virtual dining together". Earlier research has indicated that eating alone is the primary context for watching food-streaming videos, since many viewers treat the video as an "eating companion". The data obtained in this research further validate such findings. In addition, this study subdivides general viewers into Chinese college students.

However, the study is not without limitations. To begin with, the conclusion lacks universality because of insufficient samples. Some partial difference tests are short of effect. In future research, people could increase the sample size to enhance statistical power. Besides, this research employs a cross-sectional design, and the time for data collection is very short. It didn't track how emotional compensation effects change with time. Last but not least, this study didn't involve any horizontal comparison. If other kinds of short videos could be added to this research and compared with food-related videos to investigate whether other videos would produce the same emotional compensation effect, this study would be more powerful and comprehensive.

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