

Calling for peace: The Psychological Mechanism of emotional Influence of slow live sleep programs

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Abstract: From the perspective of emotional communication, this study studies the emergence of online live sleeping programs in the post-epidemic era, analyzes the psychological mechanism of online users accepting live sleeping programs, and preliminarily discusses how slow live sleeping programs affect audience emotions and what factors affect emotional transmission. The study found that Internet users' own feelings of stress and loneliness play an important role in their acceptance of live sleeping programs; Feelings of stress and loneliness also affected users' attitudes towards live sleeping programs; anchor's own behavior and various environmental factors affect the audience's emotional perception, and directly affect the audience's body which complete the emotional transmission.

Key words: slow live sleeping program; Emotional transmission; Peripheral theory of emotion; Post-epidemic era

1 Introduction

Since the outbreak of COVID-19 in the world in 2020, the world economy has been seriously affected, and people's production and life have changed as a result. Living at home, studying and working have become normal. In the context of post-epidemic era, live streaming is rapidly developing and gradually becoming an important part of life. With the rapid development of traditional network live, slow broadcast live has arisen in this new ecosystem. "slow" is its prominent quality which is a confrontation between the modern fast-paced life. With the pressure of modern life, users expect a kind of emotional company. And it has absolute advantage for Chinese people in the fight

against the epidemic.

At the beginning of 2021, the epidemic situation repeated, and the epidemic situation appeared in many places across the country. In order to prevent cross-transmission, people's work and life were again restricted, and online learning, office work and entertainment remained the main theme. The field of live streaming continues to develop, and a new type of slow live streaming has emerged: Bilibili short video platform has emerged a large number of sleep bloggers, whose live share sleeping in short videos. We have observed that this type of live streaming has unexpectedly gained a lot of attention, with many netizens staying at home and quietly doing what they are doing while sleeping. Sleeping live broadcasts accompany people in their work and life with the characteristics of "companionate" social interaction, so that people can comfort and call for peace together at home with empathy. And the degree of interdependence is unprecedented.

2 Literature Review

2.1 Review of studies on slow live broadcast and sleep live broadcast

Slow live broadcasting is a new live broadcasting mode derived from the rapid development of network live broadcasting. Scholar Dan Irving (2017) analyzed slow TV from the perspective of narrative mode and believed that slow TV caused problems in the original standard narrative concept. Foreign scholars Gu long and Cui Xisui (2019) analyzed slow broadcast from the perspective of content selection and pointed out audiences' preference in selecting slow broadcast content. Luis Rocha Antunes (2018) made an overall analysis from the perspective of the audience and pointed out that both the communicator and the receiver are indispensable in the communication ecology, from the slow broadcast itself to the audience's "emotional" appeal.

Domestic scholars generally conducted more detailed studies on slow live streaming from the perspective of epidemic, exploration of innovative path and development trend of slow live streaming, and the perspective of "use and satisfaction" of audiences. For example, Wang Xing and Zhan Qinchuan (2021) explored the communication practice and value of slow live broadcast in COVID-19 from the perspective of communication ritual, and believed that slow live broadcast played an important role in the reporting of COVID-19. Guo Jing, Yang Jingyi and Wang Yongyi (2020)

discussed the characteristics and development trend of slow live streaming from three aspects of immersion, interaction and technology, and pointed out that slow live streaming would enter a normal stage in the future. Guo Miao and Ma Wei (2020) analyzed the audience's emotions and reflected on the interactive ceremony of slow live broadcasting. Their research provided reference for the future development direction of slow live broadcasting.

However, through the search of CNKI library, there is no research on online sleeping live broadcast. In addition, although there are abundant researches on slow live broadcast involving many aspects, the emotional communication mechanism of the audience has been neglected.

2.2 Literature review on emotional communication

The study of emotion has been neglected from the early stage in philosophy to the scientific stage after Darwin, after which has been highly concerned by scholars and has become an independent research issue. After James Langer's theory of emotion was put forward, it caused great controversy in the academic world and was criticized by some scholars. Since the rise of cognitive psychology in the West, scholars have deepened their understanding of the relationship between emotion and cognition. Since the 1960s, emotion research has opened a new stage of revival and prosperity, and many research achievements have been made. Domestic emotion research started relatively late, and its research gradually expanded after entering the 21st century.

However, so far, no matter at home or abroad, most of the emotional topics in the academic field still appear in the fields of psychology, politics, philosophy and aesthetics. Emotional research in the field of communication is still in its infancy, and there are few academic papers that bring emotional communication into the current popular field of live broadcasting practice. However, for the incomplete research on emotional communication in live broadcasting, it is necessary to sort out the theories of other disciplines to support this research, especially the theoretical research on emotional communication in the field of communication, whether to provide suggestions for the construction of emotional communication theories or to explore the application of emotional communication in practice. Therefore, this study will focus on sorting out scholars' studies on emotional communication from the perspective of communication. In the foreign language literature library of CNKI, literatures

about emotional communication generally include cognitive perspective, medical perspective and cultural perspective, etc., but they have no direct impact on emotional communication in this paper, so they will not be sorted out here.

Domestic scholars' studies conclude the perspective from communication of emotional communication theory is relatively rich. Zhao Yunze, Liu Zhen (2020) using the aspect of journalism and communication of emotional communication related concept, principle to review and comb, mood spread in journalism and communication perspective from the "hidden" to secure the release of course, found that mood spread principle is to "spread by word of mouth", "social sharing theory" and "theory of emotional contagion," And the theory of emotional communication should become a new focus in the study of journalism and communication. Sui Yan and Li Yan (2012), starting from the subject of communication, pointed out that infectivity, accumulation and guidance are the characteristics of emotions, and group communication is one of the important forces to create social opinions, which urges individual emotions to become public opinions. Zhu Tian, Ma Chao (2018) respectively conduct the research from public opinion in related research study including psychology, computer science. They found that emotional disclosure and transfer not only is the embodiment of the level of consciousness psychology attitude, but also through social cognitive and behavioral mapped out. Yu Guoming and other professors (2019) investigated the influence of emotional expression in news texts on individual cognitive activities through experimental methods, and proposed that the existing news text production mode should be improved by actively taking advantage of the easy dissemination of emotional information.

To sum up, the research on emotion in the academic circle is mainly concentrated in the field of psychology and sociology. The research results studied by domestic scholars focus on emotion communication in the field of communication involving concepts and principles, communication subjects, communication process, communication effects and other aspects. But in combination with practical application of the live webcast on emotional communication to build, there have been no more thorough research to the theory of emotional communication, and there are no study conducted from the angle of psychological impact mechanism of slow live television study. Therefore there is no doubt of the user's psychological mechanism when they watch live sleeping program's.

3 Research Methods

3.1 Questions and assumptions

Based on the review of above research, this paper will start from the theory of emotional communication and focus on the following research questions: What is the psychological mechanism of Internet users accepting live sleeping broadcast? How do live sleeping programs affect the audience's emotions through live broadcast? What factors will affect the emotional transmission of sleep broadcast to the audience? This paper tries to answer the above questions by using the methods of audience survey and interview.

Based on the above questions, the corresponding hypotheses are proposed as followed:

H1: The more pressure network users have, the more receptive they are to sleeping live broadcast

H2: The more lonely Internet users feel, the more receptive they are to sleeping live broadcast

In the questionnaire, the loneliness degree of network users was reduced to the actual loneliness degree and psychological loneliness degree. The actual loneliness degree in the questionnaire was converted into personal living situation and daily social frequency, and the psychological loneliness degree was measured by self-evaluation. The acceptance of sleeping live broadcast is concretized into the frequency of viewers watching live broadcast, the length of a single viewing, and their attitude toward live broadcast.

3.2 Questionnaire survey

This study adopts questionnaire survey to verify the hypothesis, and the corresponding research object is the network viewing group of sleeping live broadcast. In terms of sampling methods, firstly, we decided to distribute questionnaires in some sleeping communities on the network platform and in the comment section of sleeping live broadcast. Secondly, we randomly selected 10 communities or live broadcast rooms

from the network platform and distributed the questionnaire with 7.5% sampling error and 95% confidence interval. In the end, 216 questionnaires were collected, among which 10 invalid questionnaires were removed through screening, and 206 valid questionnaires were finally obtained.

Data collection, collation and analysis were completed on June 30, 2021. The questionnaire contained 12 questions and was distributed online.

3.3 In-depth interview method

3.3.1 Making interview outline

The interview questions are divided into three parts.

The first part, it mainly involves the basic information of the interviewees, including their age, work or study situation, living situation and so on.

The second part, the research questions were interview questions. It includes the frequency and feelings of watching the live sleep broadcast, what situations can make your mood more stable, and whether the behavior of the host will affect your mood.

The third part, preparation mainly involves problems that may dig deeply.

In the process of interviews and research, researchers tried their best to avoid the four ethical issues and deviant behaviors emphasized by scholar al-an Bryman: (1) Damage to study participants; (2) Not using informed consent documents or materials; (3) Violating the privacy of study participants; (4) Deceiving study participants. In addition, if the interviewees have any questions or dissatisfaction during the interview, they can keep silent or quit during the interview. The interview materials that the interviewees declared they did not want to make public were not included and cited in this study.

3.3.2 Selection of interviewees

This study conducted a 10-minute semi-structured in-depth interview with 15 interviewees who like to watch live sleep broadcasts. The interviews began in June 2021 and ended in July 2021. The interviewees first included friends and relatives, and then collected more research samples through classmates. According to the maximum sampling principle of qualitative research method, when the 15th respondent is

recruited, all the interview content is enough to answer the research questions, and the sample collection is due. The respondents are different in age, occupation, education level, living environment and other aspects, with low degree of homogeneity.

The interviews were conducted by one-on-one and face-to-face or online interviews happening at the same time, mainly with open and closed topics. The interview results were compiled into a verbatim draft with a total of 10,000 words, and the processing process of the interview content was completed by myself. The basic information of the interviewees is shown in Table 1.

Table 1 Basic information of interviewees

respondents	gender	age	identity	Living situa- tion	The interview form
Xiao yan	female	25	students	Living alone	interview
Duck duck	male	22	students	2 people living together	Network video
Qiu qiu	female	31	An office work- er	2 people living together	The phone
Jackson	male	23	An office work- er	Living alone	Network video
Xiao fan	male	28	An office work- er	Living alone	interview
Gromit	female	18	students	Four people living together	The phone
Old xu	male	36	An office work- er	Living alone	Network video
Sheep sheep	male	21	students	Living alone	Network video
Hailey	female	22	students	Living alone	interview
Wang le ba	male	24	An office work- er	Three people live together	interview
Xiao bai	male	29	An office work- er	Living alone	Network video
Da ya	female	33	An office work- er	2 people living together	The phone
vivi	female	23	students	Three people live together	Network video
bro	male	27	An office work- er	Living alone	The phone
Hao	male	24	An office work- er	Three people live together	interview

4 Research Findings

4.1 Sample Profile

According to the 216 collected data, more than half of them are male, 57.28% of them are 20-30 years old, and more than 62% of them are office workers. From the perspective of understanding of sleeping live broadcast, most of the samples have watched sleep live broadcast (87.8%), of which, more than 38% watch 10-30 minutes of live broadcast every day, and the majority of people like sleeping live broadcast (63.59%).

4.2 Hypothesis Verification

According to the questionnaire settings, "loneliness coefficient" and "stress coefficient" were set. The higher the score, the less stress and loneliness. The loneliness coefficient and pressure coefficient of samples are shown in Table 2.

Table 2 Basic situation of stress and loneliness

The name of the	Sample size	The minimum value	The maximum	The average	The standard deviation	The median
The pressure coefficient	206	2.000	10.000	3.660	1.789	3.000
Lonely coefficient	206	3.000	13.000	6.869	2.459	6.000

The data in Table 2 show that the samples showed high stress and moderate loneliness. Taking the pressure of Internet users as the independent variable, and the acceptance of sleeping live TV as the dependent variable. Due to the acceptance can be operationalized as the time of watching the live broadcast, the correlation analysis between the pressure coefficient and the time of watching the live broadcast is carried out, and the results show (see table 3), Internet users' sense of pressure has a significant impact on their acceptance of live sleeping broadcast, and there is a strong positive correlation (pressure coefficient is 0.444, $P < 0.01^{***}$). Hypothesis 1: The stronger the pressure of network users, the higher the acceptance of sleeping live broadcast, which is

true.

Table 3 Analysis table of relationship between pressure coefficient and program acceptability

	5. When do you watch live sleep broadcasts each time?
The pressure coefficient	0.444 * *
* $p < 0.05$ ** $p < 0.01$	

Taking the loneliness of web users as independent variables, and taking the acceptance of sleeping live TV as the dependent variable, the acceptance is operationalized as the time of watching the live program, and the correlation analysis is carried out on the loneliness coefficient and the time of watching the live broadcast. The results show (see table 4), loneliness of Internet users to accept the extent of the sleeping live also has a significant impact, and also show a strong positive correlation (loneliness coefficient 0.488, $P < 0.01^{***}$), which is consistent with expectations. Therefore, hypothesis 2 is also true: The more lonely Internet users are, the more receptive they are to sleeping live broadcast.

Table 4 Analysis table of the relationship between loneliness coefficient and program acceptance

	5. When do you watch live sleep broadcasts each time?
Lonely coefficient	0.488 * *
* $p < 0.05$ ** $p < 0.01$	

Respectively in addition, when the network user's pressure, loneliness as independent variables, and the network user's attitude toward sleeping live TV as a dependent variable, the correlation analysis of the stress, loneliness and user's attitude toward sleeping live is carried out, as shown in table 5, the result also show a strong positive correlation (pressure coefficient is 0.481, lonely coefficient is 0.565, $P < 0.01^{***}$), indicating that the feeling of pressure and loneliness are also important factors affecting the audience's attitude towards sleeping broadcast.

Table 5 Analysis of the relationship between pressure, loneliness and program attitude

	6. What is your attitude towards live sleep broadcasting?
Lonely coefficient	0.565 * *
The pressure coefficient	0.481 * *
* p<0.05 ** p<0.01	

In conclusion, as expected, there is a significant and positive correlation between Internet users' sense of pressure and loneliness and their acceptance of sleeping live broadcast. In other words, the stronger the Internet users' sense of pressure, the higher their acceptance of sleeping live broadcast. The more lonely Internet users are, the more receptive they are to live sleeping broadcasting. At the same time, Internet users' feelings of pressure and loneliness also affect their attitudes towards sleeping live programs. When users' feelings of pressure and loneliness is stronger, their attitudes towards sleeping live programs tend to be more positive.

4.3 Interview Results

4.3.1 Emotional changes caused by physiological activities

In response to the question "How do live sleeping programs affect audience's emotions through live broadcast?" "What are the factors that affect the emotional transmission of sleep broadcast to the audience?" "When conducting further in-depth interviews and trying to get answers, it is found that the sleep anchor's own behavior will directly affect the body of the audience, causing physical changes in the body of the network users, and then causing emotional changes. Several interviewees stated :

"I will be affected by the anchor's breathing rhythm, not consciously follow the rhythm of the host to breathe, and then I followed slowly calmed down"/" I don't feel very tense when I watch the anchor's relaxed state"/" watching live can clearly feel the slowdown of my heartbeat, and after the heart rate is low, I don't seem to be so anxious "

It can be seen the viewer's emotions can to varying degrees be affected by the

behavior of the host, as James Langer's theory of emotion pointed out that when an emotional stimuli effects on our senses, it immediately will cause some changes in the body, provoked a nerve impulse, which is spread to the central nervous system to generate feelings. The same is true for the emotional transmission of sleep live broadcasts .When users watch the live broadcast, they will be affected by the behavior of the host, so as to change their physiological behavior,. This kind of physiological actions are consistent with the behavior of the anchor, thus caused by the physiological behavior of a series of emotionswill alsoconsistent with the emotions conveyed by the anchor , The final expression is that the viewer's mood is affected by the live ing program.

4.3.2 Environmental atmosphere affects emotional perception

Interviewees were not equally affected by emotions when they watch live broadcast. During the interview, it was also found that differences in live broadcast environment and anchor style woundstrongly affect audience's emotional perception.For example, some interviewees said:

"I like the lights of the studio to be a little darker, or that kind of warm light, too dazzling incandescent light can make it's hard for me to feel comfortable and relaxed"/" anchor, try not to keep talking ,if he chats, I will be in a more excited state, and it will be difficult to calm down, "/" It's okay to play some soothing pure music, when playing pop songsI feel a bit noisy, and I'm still irritable and anxious."

These differences in the environment and atmosphere of the live broadcast are important factors that affect the audience's emotional perception.This is because when users watch live broadcast, not only the anchors' own behaviors will affect the audience, but all the factors in the live broadcast will affect the audience's audio-visual senses, causing different degrees of physiological changes in the audience, and finally, affectingthe generation of emotions.This shows that the anchors' sleeping and snoring behaviors, as well as various environmental factors in the live broadcast, will be directly perceived by the audiovisual senses of the audience and applied to their own bodies, so that the viewer's heart rate slow down and breathing soothing, so as to feel a "peaceful" mood, which is not sleepy but calm.

5 Conclusion and Reflection

5.1 Sleep anchors reduce stress and provide companionship is especially important

This study through the audience survey method and interview method studied sleeping live TV, trying to answer psychological mechanism of online users accepting sleeping live broadcasts. Through the study it is found stress and loneliness in the process of network users accepting sleeping live TV play an important role, namely the stronger the network user's stress and loneliness, the higher acceptance of sleeping live TV. The reason behind this is likely to be that the viewer is not looking at the screen all the time, but getting "immersive" companionship while working or studying to satisfy their need for emotional companionship. And when the user's life pressure becomes greater, they feel anxious and tired; Or when the social frequency is low, feeling lonely, this need will increase, and thus desire to get this emotional company in the sleeping live program to reduce their own stress and loneliness. When users meet their emotional needs in the live broadcast room, they will be more willing to watch and rely on live broadcast, and their acceptance of live sleeping will be higher, forming a virtuous cycle. This virtuous cycle will increase the user viscosity of the live broadcast room. Therefore, whether the sleep anchor can provide the audience with enough sense of company to comfort the users' anxiety and loneliness is the primary consideration when they conduct sleeping live broadcast and expand and consolidate the user base.

5.2 Good atmosphere and live environment enhance audience's emotional perception

At the same time, all the comprehensive environmental factors such as the behavior of the sleeping host, the lighting and sound in the broadcast room will affect the audience's emotional perception. When users watch live broadcast, all the things and sounds in the picture will directly affect the audience's audio-visual senses, causing changes in the viewer's body and thus producing emotions consistent with the emotional atmosphere they perceive. Therefore, in order to convey such "peaceful" emotions to the audience to the greatest extent and effectively relieve their sense of pressure and loneliness, the live sleeping programs should not only focus on the anchors themselves

and only achieve "immersive" companionship, but also take into account all the environmental factors that affect the emotional perception of the audience.

5.3 Provide diversified ways of decompression and companionship to avoid monotonic ways of lowering blood pressure

In addition, Internet users' own sense of pressure and loneliness will also affect their attitude towards sleeping broadcast. In other words, the more stressed and lonely the users are, the more positive their attitude towards the live sleeping programs will be. In the process of research, it is found that more and more young people, mostly between 20 and 30 years old, like to watch sleeping live broadcast, and even some teenagers under 20 years old also like to watch sleep live broadcast because of pressure and other reasons. We are currently in the period of social transition, and the uneven distribution of resources, class consolidation, post-epidemic era and other reasons, have led to the general life pressure of the contemporary youth group. Especially for new graduates, "graduation is unemployed" is quite common, the number of people taking postgraduate and civil service exams has increased significantly year by year, and faced with increasing stress "lie flat and tanking" "small-town swot" to solve the problem such as self-deprecating network subculture is also emerge in endlessly. How to solve the current difficulties faced by the group, in today's society should attach importance to the problem.

This study puts forward the idea that the emotions of live sleeping programs will affect users' psychology and give users a kind of emotional companionship, which reflects the development of live sleeping programs in emotional communication. On the other hand, it also provides a new direction for the development of sleeping live streaming in the context of post-epidemic China.

However, it is worth noting that this study also found that some of the livestreaming content under the banner of slow livestreaming is meaningless and does not convey positive and effective emotional value, but just blindly "perfunctory live streaming" to attract traffic, gifts and eyeball. Due to its low production cost and quick profits, such low-quality so-called "slow live streaming" is constantly flooding into network platforms. In the long run, bad money will drive out good money, which is worth vigilance and reflection. At the same time, the mental health problems of contemporary adolescents should be concerned and valued by the society, and solved through

education and social help, rather than relying solely on online platforms.

However, due to the reasons of funding and time, the overall sample size and the balanced distribution of samples have been affected to some extent, and there are still many deficiencies in data collection and other aspects.

Reference

- [1] Guo Qingguang. (2001). *Communication Courses*. Beijing: China Renmin University Press.(in Chinese)
- [2] Nicholas Negroponte. (1997). *Digital Survival* . Haikou: Hainan Press.
- [3] Randall Collins(2014).*Interaction Ritual Chains*.Princeton University Press.
- [4] Yi Y. (2020). **Research on Emotional Factors in communication mechanism**. People's Daily Publishing House.(in Chinese)
- [5] Dan Irving.(2017).Eighteen hours of salmon: On the narrativity of slow TV. *Frontiers of Narrative Studies*(2).
- [6] Gorong, Hee-soo Choi. (2019). Analysis on the Reasons for the Success of Content from the Case of Non-drama Content -- A Case Study of Norway & LT; Slow television & gt; The case is the center. Proceedings of the Comprehensive Academic Congress of the Korean Cultural Information Society, 73-74.
- [7] Luis rocha antunes. (2018). *Slow TV: The Experiential and Multisensory Documentary*. Springer International Publishing.
- [8] Wang Xing & Zhan Qinchuan.(2021). Research on slow Live Broadcast from the perspective of communication ceremony -- taking the slow live broadcast of "Leishenshan" and "Huoshenshan" of Yang Video as an example. *Publishing Wide Angle* (03),85-87.
- [9] Guo Jing, Yang Jingyi & Wang Yongyi.(2021). Immersion, Interaction and Technology: Characteristics and development trend of "Slow Live broadcast" in the era of mobile communication. *Taizhou university journal* (01), (in Chinese)
- [10] Guo Miao & Ma Wei.(2020). Analysis of "Slow Live Broadcast" from the perspective of interactive ritual chain. *Journalism and Writing*. (06),97-100.(in Chinese)
- [11] Zhao Yunze & Liu Zhen.(2020). Emotional Communication: Concepts, Principles and Status in Journalism and Communication Studies. *Friends of the Editor* (01),51-57.

- [12] Sui Yan & Li Yan.(2012). On the Social Communication of Individual Emotions in the Age of Group Communication. Modern Communication. *Journal of Communication University of China*. (12),10-15.(in Chinese)
- [13] Zhu Tian & Ma Chao.(2018). A new approach to the study of Internet emotion Communication. *Modern Communication.Journal of Communication University of China*. (06),139-144.(in Chinese)
- [14] Yu Guoming, Qian Fei, Chen Yao, Xiu Li-Chao & Yang Ya.(2019). The Mechanism of "Post-Truth" : The Communication Effect of Emotional Text -- Based on the paradigm of EEG technology. *Journal of xi 'an jiaotong university (social science edition)* (4), 73-78 + 2. (in Chinese)
- [15] Wang Zi Iraq. (2021). Under the perspective of diffusion of innovation slow live transmission of empathy research. (in Chinese)
- [16] Zhou Siyao. (2021). Emotional trill new crown in the short video information formation and propagation mechanism. (in Chinese)
- [17] severe snow. (2021). Electricity live in emotional communication studies. (in Chinese)
- [18] Derek Iv. (2020). The network public opinion transmission mechanism of the public mood in the study.