The Research on the Impact of the Short Videos' Quality on User Experience

————Take TikTok as An Example

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Abstract. The short videos is a crucial subject for studying the influencing factors of self-media communication power in recent times. The large market share of the media currently occupied by the short videos and the platform construction of the application itself, and play a significant role in the selection operation and continuous use of users. By improving the sense of user experience through video quality, video content can be improved, and communication strategies can be optimized by focusing on user experience. This paper takes the quality of short videos and user experience as the research objects, uses in-depth interviews to analyze audiences' perceptions of the quality of short videos, and extracts their corresponding suggestions. The research results reveal that short video quality can be improved through content innovation, novel topic selection, authentic video feeling, filming format, and enhancing user immersion and interaction. At the same time, attention to platform construction can also make the quality of short videos affect the sense of user experience from different angles and improve the quality of video dissemination.

Keywords: Video Quality, User Experience, Communication Power.

1   Introduction

Looking back at the history of communication, it is not difficult to find that human communication has gone through various forms, such as oral communication, written communication, print communication, and electronic communication. At each stage, the impact of communication varied greatly due to different communication media. In the 20th century, the popularization of mass media such as radio and television brought image narratives into people's lives. With the advent of the Internet in the 21st century, the widespread use of cell phones and other "small screen" devices has

led to the growing popularity of short-form video social networking among major platforms and users. With their features of being concise, interactive, innovative, and so on, short videos are rapidly taking over the consumer market. Since 2016, the short video has been developing rapidly. According to the 49th Statistical Report on Internet Development in China released by the China Internet Network Information Center [1], as of December 2021, the number of short video users in China reached 934 million, accounting for 90.5% of the overall Internet users. The Short videos have become the most popular means of information dissemination and communication nowadays. It has expanded the ways of communication and given users wider access to information through the popularization and transmission of knowledge, the exchange of information, the sharing of life, and the expression of their emotions. Modules such as platform construction and page design facilitate users to obtain information more conveniently.

However, due to a variety of factors, video quality is declining, homogenized videos emerge in an endless stream, and the originality and interaction are not strong; platform auditing and supervision are also not in place; pan-entertainment is serious, and part of the content is relatively vulgar and lacks social value dissemination; the advertising model lacks creativity; the threshold for short video publishers and disseminators is low, and the complete authenticity of the content can not be achieved. This greatly affects the user's experience, thus affecting the healthy development of the entire short video industry. The entertainment nature of media communication is not a problem, but if the media reveals a tendency toward pan-entertainment, it should receive extensive rational attention [2].

The two elements of video quality and user experience play a pivotal role in developing the TikTok platform. They are the two main pillars for the long-term and stable development of TikTok. They are also the theoretical basis for developing and promoting TikTok's communication mode. User experience is a subjective feeling established by users in the process of using products, which is influenced by factors such as individual personal consciousness and emotional state, and each user's experience in different environmental conditions will be different. In the digital age, user participation is indispensable in the torrent of short video development. Therefore, video quality is the core driving force, and increasing the sense of user experience has become an essential development engine for the growth of short videos. Socialist Elihu Katz believes that audiences have specific personal needs and preferences, so the study of psychology leads to the need for mass communication research to consider the audience's motivation to use. The use and gratifications approach was first applied to traditional media for the purpose of analyzing issues such as users' reasons for using traditional media and their willingness to use the media. With the popularization of the Internet, a large number of scholars have proposed five factors influencing media motivation: "cognitive identity choice, content usefulness, emotional satisfaction, content entertainment, and social interaction," through questionnaire research combined with the characteristics of video audiences and conducted in-depth research.

The interactive function of short videos is convenient for mutual communication and sharing. The core of user experience is "experience". Its connotation includes

usability design and user psychological and emotional factors in the interaction process [3]. Sensory attraction, interaction degree, emotional satisfaction, and social recommendation are the key dimensions that user experience should focus on. Therefore, the creators' video titles should cater to users' preferences, enhance the interaction experience and increase users' sense of pleasure when they are watching, position the videos precisely to increase users' loyalty, and interact with users in multiple directions to increase satisfaction. The needs of different types of user groups for short video applications are becoming more diversified, and the sensory experience, interactive behavior experience, and emotional experience of applications are still the primary user experience elements to be considered in the design optimization of short video applications nowadays [4]. The Short videos application has strong functionality and entertainment as a three-dimensional information-bearing method. The user experience design should focus on improving the concentration of user browsing and the user's freedom of choice and provide different users with exclusive data display and rich emotional interaction methods.

Currently, most domestic studies on the quality of short video content focus on analyzing the existing problems. Liu Yang believes that the common problems of the short videos are serious homogenization, and the same video resources lack creativity; pan-entertainment is serious, and part of the content is more vulgar, lack of social value communication; lack of creativity in advertising mode [5]. Li Wen points out that the publisher and disseminator of short video applications have a low threshold of restriction and can not achieve complete authenticity of the disseminated content [6]. Foreign research on the quality of short video content is biased toward the news industry. The early days were more about promoting and disseminating specialized fields by the mainstream media of various institutions. The quality of content is also more oriented to analyzing whether it will have an impact on the authenticity of events in the news industry and so on. For example, Ungerleider and Neal introduced the use of short video social originator Vine, pointing out that the excellent video quality of short video media, with authentic expressions, promotes the positive influence of news and increases the credibility of readers [7].

The research on short video user experience, domestic and foreign research mainly focus on technology and design. The innovation of technology and aesthetic influence prompt platforms to obtain higher audience satisfaction more efficiently, allow users to enhance their self-awareness and identity and allow communicators to empathize by sharing videos and further feel the core of the videos and spread their own emotions. Zhou Yu thinks that self-made short videos cater to the audience from a technical aspect [8], Liu Yiwen and Wu Yunlin compare and analyze the interfaces of short video applications and propose design suggestions [9], Thömmes Katja and Hübner, Ronald predict people through visual balance measurement and curvature regarding the likes of architectural photos on Instagram, it is found that the visual balance presented on the screen is more attractive to users for complex 3D images [10].

This paper will use the literature analysis method and the in-depth interview method in qualitative research to analyze and discuss. To a certain extent, it will further supplement the existing research in China. The paper explains the studies related to

the influence of short video quality and user experience on communication power, respectively, so as to demonstrate the mutual effect and promotion of the two. Using the in-depth interview method in qualitative research in communication, the paper takes the TikTok short video platform as an example, covering the definition of video quality by users and how to improve video quality so as to promote users to watch their favorite videos more efficiently and enhance their sense of user experience.

2   Research method

In terms of research methods, this study mainly focuses on in-depth interviews in qualitative research. The research individuals selected are TikTok users of different ages. The interview outline is used for open interviews, and the case time is about 30 minutes. In this study, a total of 8 TikTok users of different ages were interviewed through Tencent meetings, WeChat voice, and other means. In order to make the sample results more diversified, the age levels of the subjects were divided into 10-20 years old, 21-30 years old, 31-40 years old, and 41-50 years old. Based on the TikTok app platform, the author selects excellent short videos from different partitions by comparing the number of blogger fans, likes and discusses with each interviewee to clarify the definition and preferences of the interviewee for TikTok short videos. The short videos recommended by the interviewees and the short videos this research provide include language and actions. Different feelings such as expressions, etc., judge whether the quality of short videos affects the user experience, understand the factors that affect the video quality, what are the factors that affect the user experience, and how the two affect each other. This study tries to take into account gender, age, and other factors, but there are still certain limitations. The research focuses on understanding the respondents' views on whether video quality affects the user experience, taking into account the respondents' subjective perception of video quality.

3   Research results

3.1   The Basic Information About the Use of TikTok by Respondents

This study mainly counted the time when 8 respondents watched TikTok short videos every day. As shown in Table 1, when using TikTok in each age group, it is generally used for 2 hours at a time. The use state is generally normal and relaxed. The willingness to use it is almost because of boredom, time, curiosity, etc., so the state of use will not affect the reasons and feelings of use.

Table 1. TikTok platform usage (day)

Age	Usage time	Usage status	Reasons or Feelings
10-20	1h<x>4-5h	Relaxed and Pleasant	Boring;Kill time
21-30	3h	Relaxed	Fun;Curious
31-40	2h	Calm	Boring;have nothing to do
41-50	x>30min	Normal	Nothing to do;Kill time

3.2   Main Findings

The study asked respondents questions about video quality and user experience. By sorting out the results of the study, it was found that the type of watching videos will vary according to their preference, but after watching the video, they will relieve a certain amount of stress and feel very happy (Table 2 for details). For problems such as video content, every age group generally has doubts about the authenticity of the video they watch, and the criteria for judging video quality will also vary according to the type they like. Some of the respondents clearly pointed out that the essence of the TikTok short video app is an entertainment platform. In order to attract investment and drainage, some short videos are highly entertaining, and the authenticity is not so important. However, there are special cases, such as videos released by TikTok accounts of official media such as People's Daily, which generally have high trust and authenticity. Respondents generally mentioned four aspects: homogenization, novel shooting, truth and reliability in the dissemination of knowledge, and resonance for influencing factors (Table 3 for details). This is consistent with the assertion of most scholars on the factors affecting video quality.

In response to the existence of TikTok bloggers among the respondents, the author asks the corresponding question of whether the dissemination will be increased by improving video quality, such as video content and video editing, and the blogger answers: "I got a positive answer, but because the audience has different preferences and cannot judge in depth by themselves, I will also buy "Tik +" to obtain official traffic through the operation mechanism of TikTok's official platform."

Table 2. Type of video preference and emotional state

Age	Video type	Whether are relaxed or emotional?
10-20	personal hobbies are related, games, TV commentary	Get completely relaxed when watching
21-30	Some star-chasing videos, entertainment information	Very happy to watch
31-40	Family-related, life-related	Have fun and feel stress-free when watching
41-50	Official account, emotional, current affairs new	Understand current affairs news

Table 3. Views on TikTok video content

Age	Authenticity	Like type	Factors affecting video quality
10-20	Half-true and half-false	Interesting, novel	Resonates with yourself
21-30	Depend on video type	Beauty vlog organize videos	Useful homogenization cooking commentary movie
31-40	Can't guarantee	Pets, knowledge popularization	Novel (shooting techniques, scripts, copy writing, etc); The authenticity of the dissemination of popular science knowledge
41-50	80% are fake	Funny, travel,news	Real, reliable and novel

During the interview, through the investigation of the reasons for the rise of TikTok short videos, the author found that the construction of the TikTok platform itself

is also very important. From the perspective of users, many respondents believed that the beautiful pages and convenient operation of the platform itself were more attractive and affected the use experience, and also raised questions about the platform to protect privacy and security, and some concerns were raised (Tables 3 and 4 for details).

Table 4. Insights on the reasons for the rise of TikTok

Age	Insight
10-20	To meet the entertainment needs of the younger generation, the whole platform is relatively efficient, the cost of joining is low, and the market share is high.
20-30	The popularity of smart phones, the attraction of celebrity internet celebrities, endless content, full of creativity.
30-40	Willing to see beautiful things, society seeks high approval.
40-50	Easy to use and fast propagation speed.

Table 5. The Evaluation of the use of the TikTok platform

Age	Interface operation	Security and privacy	Functions want to join
10-20	Easy to use	more trusted	Comment search
21-30	Easy to use	more trusted	Video automatic playback
31-40	Easy to use	more trusted	Not available at present
41-50	Easy to use	more trusted	Adjusting video progress

The improvement of short video quality combines the audience's experience under a multi-level dimension, and the targeted display platform's functions can enhance the communication effect (Tables 5 for details). Through the research content of short video quality and user experience, this paper finds that the research of predecessors mostly focuses on the analysis of the communication factors affecting TikTok short videos, including video quality and user experience, and does not deeply investigate that video quality is the main influencing factor for user experience. Based on this, the author deepens the research and puts forward the purpose of the research. It is found that video quality affects the user experience, and the improvement of video quality is conducive to the enhancement of user experience. However, there are problems with video quality, similar to previous research results. The development of short videos affects everyone more or less. Video quality, as the core competitiveness that mainly affects the user experience, its advantages and disadvantages greatly affect the development process of short videos. Fundamentally strengthening video quality is conducive to the more efficient development of short video creators and platforms. Through the innovation of the form of video content, unique topic selection, a real expression of emotions, and other conditions, it stimulates the resonance of users, promotes short videos to be more standardized, and serves multiple users. In addition, there are some limitations to this study. First of all, only 8 samples were selected for analysis in this paper, which means that the selected samples are single and unique, and only describe the relevant characteristics of TikTok users under certain conditions. Subsequent research can explore the relationship between it and short video quality and user experience from the perspective of platform construction. Through the above research, anal-

ysis and outlook, this paper look forward to enlightenment to TikTok creators and platforms and provide more help for follow-up research.

4   Discussion

The development of media fusion has created favorable conditions for the development of short video platforms such as TikTok. People participate step by step by watching short videos to posting short videos, prompting the short video platform to form a close relationship with users. As a product in the context of new media, short video quality and user experience have become the top priority in short video research.

In this paper, aiming at video quality and user experience, through literature review, it is understood that the video quality and user experience of TikTok short videos in the current environment are two separate individuals. This article examines the TikTok usage, interests, and hobbies of TikTok users of different ages, as well as their feelings on video quality and platform use. Through in-depth interviews, it is found that among the factors affecting user experience, 75% of respondents believe that video is Quality, and 25% believe that platform construction is. The conclusion is that TikTok video quality affects user experience. That is, improving video quality is conducive to the improvement of user experience; secondly, platform construction will also affect users' experience of use, but the impact is minor than video quality. Around the above dimensions, this chapter discusses from the perspective of video quality, user experience, and other aspects.

4.1   Video Quality

Quality is an important entry point to studying the dissemination of TikTok short videos, and it is also a topic that can not be ignored. Based on the different types of videos that other age groups alike, the Quality of videos is affected by multiple factors, and the essence of video quality is how to improve communication power, increase traffic, attention, and love. Through research and analysis, the author proposes the following improvement ideas for the refinement of the problems—homogenization, shooting methods, dissemination content, and whether there is resonance:

4.1.1. Video Content Innovation and Topic Selection Novelty.
If creators want to catch the audience's attention, they need the richness and credibility of video content. The same type of videos emerges in an endless stream. To avoid serious homogeneity, TikTok creators should focus on content innovation, select more representative themes that spread mainstream values, write scripts, and use novel shooting techniques to choose different types of videos. The entry point lets the audience shine, actively spread the video, and continue to pay attention to the account. For example, during the survey, respondents mentioned that the video "How old did you find out that fairy tales are deceptive" was released by musical actor Chen

Huanzi on January 8, 2022. The video is based on the content of Grimm's fairy tale "Snow White." Novel titles make audiences want to click and watch when they haven't seen the content. Improve content depth by satisfying audience curiosity Using the performance of musicals, lovely melody, and moving singing voices, the audience can feel the charm of musicals on the TikTok short video platform for the first time. As a musical actor, Chen Huanzi used his advantages to create content. The video adapted from a classic story promotes the musical and allows the audience to learn more about it and even fall in love with it.

4.1.2. Video Experience Authenticity and Emotional Resonance.

In the information age, creators want their videos to be remembered, and the videos they create must be real so that the audience can genuinely achieve a particular resonance and empathy at the emotional level. For example, during the survey, respondents mentioned the New Year's video "Inner Monologue during the Chinese New Year" released by Papi sauce the Chinese New Year. This video allows the audience to clearly understand the content of the video through funny jokes and easy acting skills and inspires people to watch the creation. It is also an enjoyable New Year's story. Papi sauce's foothold conveys the Chinese people's different psychological states during the New Year. The actual scene allows the audience to substitute, "immersed in the scene easily". What the audience wants to watch, what they like to watch, and how to express it authentically and not artificially may be the first things that creators need to consider when creating videos. The excellent videos also mentioned by the interviewees are from the videos released by Fang Qi kiki during the Spring Festival. The video starts from the first shot, real-life trivia, using the wandering children back home to buy Chinese New Year gifts for their parents, catch the train, and meet each other. A series of changes in actions and scenes, such as the tension of the film and the emotion when seeing the parents, reflects the recorded feelings and is conveyed to the audience to arouse the audience's natural resonance.

4.1.3. Video Cover Title and Visual Effects.

Whether the video can be promoted or not is related to the high number of likes and collections and the form. For example, the writing of the cover and the title's sense of purpose will affect the video's quality and playback volume. First of all, the production of the cover should be beautifully produced and cover straightforward content. For example, people can choose representative characters or pictures in the video, so the audience strongly desires to watch. Secondly, according to the style of the video content, select the appropriate background, text, color, etc., and enhance the visual connection with the audience through the change of fonts and the warm and fantastic combination of colors. Finally, the novelty of the title, and the length of the title, should be highly generalized through the survey of collecting excellent short videos on TikTok. It is found that video titles with high likes often have two characteristics: (1) Use the audience's curiosity and use the method of comparison to compare two different things, as above. The musical actor Chen Huanzi mentioned in the article released the video "How old did you find out that fairy tales are deceptive" on

January 8, 2022. Her title is to use contrast to form an impact between fairy tales and deceit, making the audience curious and want to click to watch. (2) The title covers the content, such as Fang Qi kiki's video "If the desire to enter Tibet is as hot as a galaxy, then Linzhi must be your ideal in the world". This title covers the time, place, and theme so the audience can appreciate the video. The content is straightforward and clear, and the willingness to watch it is apparent.

4.2   User Experience

User experience is the best performance for users to experience video, and it is also the critical research object of this paper. The user's happiness, anger, sadness, and joy represent his love for the video, whether he is satisfied or not, and whether it meets the requirements. Based on different age and video types, the author proposes the following improvement ideas for user experience:

4.2.1. Enhance User Immersion Experience.
   The viewing experience of short videos is the most important in the user experience. By creating an immersive experience, the audience can experience the video content visually and audibly. For example, it can simplify the page design, display video content on full screen as much as possible, reduce the pop-up of unnecessary information such as advertisements, and reduce too many complicated operation gestures, which is convenient for multiple age groups to use. It can also innovate the push mechanism to maintain the freshness of the content at all times, reduce the audience watching videos with serious homogeneity and nothing new on their homepage, and can display the video content to the maximum extent with the help of new situations and new dynamic effects such as AR and VR, which can improve the user's sense of immersion and realism.

4.2.2. Focus on User Interaction Experience.
   First of all, using various interactive forms, creators can "shoot and share." People can use the platform to increase multiple shooting methods, simplify the shooting process, and quickly turn audiences into creators. Secondly, the likes and comment feedback of works should be handled in more detail, the function of commenting should be improved, and the mechanism of clicking favorites should be more efficient to make the audience feel convenient and happy. Finally, the convenience of sharing can be improved, the exposure of creators can be increased, and users can be guided to share videos. For example, when a user watches a video more than three times, the interface prompts to like and favorite. When the user watches a video five times, the interface pops up, share the icon to spread the excellent short video more efficiently.

4.3   Platform Construction

By analyzing the respondents' responses, the author learned that the audience has high standards for the security and privacy protection of the platform. Therefore, the page

design should be strengthened in constructing the platform to improve the user's sense of immersion and interaction. At the same time, the platform should also standardize the partition ratio, increase the crackdown on nasty videos, improve the security performance, encourage creators and users to use the platform more efficiently, and expand the dissemination of the forum. In terms of performance settings, the platform should also continue consolidating its technical applications and set up various functions based on audience demands, such as comment search, automatic continuous video playback, and more precise settings for video progress bars. Regarding platform construction and equipment functions, it provides users with a convenient and practical sense of use.

5   Conclusion

The improvement of the Quality of short videos combined with the audience's sense of experience under the multi-level dimension can target the platform's function to enhance the communication effect. By studying the research content of short video quality and user experience, combined with a literature review, it is found that most previous researches focus on analyzing the communication factors affecting TikTok short videos, among which communication factors include video quality and user experience, etc. Investigating video quality is a major influencing factor for user experience issues. Based on this, the author deepens the research, puts forward the study's purpose, and finds that the video quality affects the user experience. The improvement of the video quality is conducive to the enhancement of the user experience. However, there is a problem with video quality, similar to previous studies' results. The development of short videos affects everyone more or less. Video quality is the core competitiveness that most affects user experience. Its pros and cons significantly affect the outcome of short videos. Fundamentally strengthening video quality will help more efficient development of quick video creators and platforms. Through the innovation of video content form, the unique selection of topics, the true expression of emotions, and other conditions, it can stimulate the resonance of users, promote short videos to be more standardized, and serve more diverse users. In addition, this study has some limitations. First of all, this paper only selects eight samples for analysis, which means that the selected samples are unique and unique and only depict the relevant characteristics of TikTok users under certain conditions. Follow-up research can start from the perspective of platform construction and explore its relationship with short video quality and user experience. Through the above research analysis and outlook, this research hope to enlighten the creators and platforms of TikTok and provide more help for the follow-up research.

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