

The Impact of Generative Artificial Intelligence Voiceover Technology on User Viewing Behavioral Intentions for Short Video Film and Television Commentary on Short Video Platforms

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ABSTRACT

With the rapid development of the short video industry and continuous advancements in artificial intelligence technology, the application of generative artificial intelligence (AIGC) in video content creation has become increasingly widespread. Particularly in short videos that provide commentary on films and television, the use of AI-generated synthetic voice-over technology has garnered significant attention. Grounded in the Technology Acceptance Model (TAM), this study investigates whether perceived ease of use, perceived usefulness, perceived enjoyment, and community influence are significant positive factors affecting users' attitudes and behavioral intentions towards watching short videos on these platforms. Additionally, the study examines the impact of user attitudes on behavioral intentions. The findings offer valuable insights for short video platform operators and content creators, and also hold substantial significance for promoting the application of AI technology in the media industry.

Keywords: Technology acceptance model, AI-generated synthetic voice, user behavioral intention, short videos.

INTRODUCTION

In recent years, the user base and usage rate of short video platforms have exhibited explosive growth. Short videos have transcended the boundaries of traditional media, achieving unprecedented levels of influence and ubiquity. The number of short video users surged from 648 million in December 2018 to 1.026 billion by June 2023. Concurrently, the user utilization rate soared from 78.2% to 95.2%, nearly encompassing the entire internet user demographic. In terms of content production, knowledge-based short videos are demonstrating tremendous growth potential. Short videos have gradually supplanted text and images as the primary medium for knowledge dissemination, attracting a large number of knowledge content producers and users to these platforms. For instance, on Douyin, the number of users interested in knowledge-related content has exceeded 250 million; on Bilibili (B-Station), knowledge-based videos account for 44% of the total video views on the platform.

However, despite the rapid rise of short videos capturing widespread attention, current research on users' acceptance of AI-generated content is still insufficient. In particular, the acceptance of AI synthetic voice-overs among users in short videos has not been thoroughly explored, which makes it difficult for us to understand users' true needs and preferences when using short video platforms, thereby limiting the direction for optimizing related content creation. Therefore, exploring users' attitudes and behavioral intentions regarding AI-generated content is of great importance for promoting industry development.

The early development of generative artificial intelligence was primarily confined to the research domain. The product that brought generative AI (AIGC) into the public eye was OpenAI's GPT series models. Since 2018, the GPT series has achieved significant success through the Transformer architecture and large-scale pre-training. GPT-2 and GPT-3 made substantial breakthroughs in natural language generation, finding widespread applications in text generation, dialogue systems, and code generation. In the realm of AI audio generation, DeepMind's 2016 deep neural network model WaveNet marked a significant breakthrough, achieving high-fidelity speech synthesis with natural timbre and smooth intonation, closely approximating human speech. Additionally, OpenAI's neural audio synthesis model Jukebox can generate creative musical works, including melodies, lyrics, and sound effects, through neural audio synthesis technology.

In the field of short video creation, the application of generative artificial intelligence (AIGC) technology now spans multiple aspects from content creation to post-production, gradually assisting or replacing human tasks. AI automation tools can quickly trim and splice video clips during editing, even automatically selecting appropriate shots and angles based on the content. Notably, domestic short video editing software has matured to the point of converting text to speech (including various character voice options) and automatically generating subtitles (including multi-language subtitles) through video and audio

recognition. These generative AI (AIGC) technologies not only significantly reduce the labor costs of current video content creation but also substantially lower the entry barriers for the video content creation industry. Short videos providing commentary on films and television primarily involve film clips and voice-over commentary. Compared to other types of short video content, their form is relatively singular, making the tasks of video and audio content creation, even scriptwriting, more amenable to replacement by generative AI (AIGC) tools.

Based on the above, this study aims to explore short video platform users' attitudes and behavioral intentions towards watching film and television commentary short videos that use AI-generated synthetic voice-overs and to propose constructive suggestions to promote the development and application of this technology.

The results of this study contribute to both theory and practice. Theoretically, the study further explores the Technology Acceptance Model (TAM), extending and deepening it from the perspectives of users' entertainment and social needs, as well as community influence. Besides, by integrating industry reports and data analysis with existing mature scales, a measurement tool was constructed to assess the impact of AI-generated synthetic voice on users' willingness to watch short videos on these platforms, and its validity was confirmed through empirical research. This provides a reference for future research in this field. Practically, given the rapid development and advancement of generative AI (AIGC) technology, short video creation is becoming increasingly intelligent and innovative. Therefore, targeted research on the factors influencing users' behavioral intentions towards watching film and television commentary short videos on these platforms helps to understand whether AI-generated synthetic voice-overs are a significant factor. It also analyzes the deep-seated reasons influencing users' related cognition and final behavioral intentions, and predicts the development of generative AI (AIGC) in assisting and replacing video content creation. Additionally, this study offers practical insights for AIGC service providers to attract users, such as building a content creator community that encourages interaction and sharing among users to enhance the social attributes of the platform, and offering online courses or tutorials to help users improve their skills in using the tools, thereby increasing their loyalty to the platform.

RESEARCH HYPOTHESES

Establishing the Research Model

The attitudes and usage intentions of users towards new technological products can be explained and predicted using various consumer behavior theories. Throughout the development of consumer behavior theories, there has been a progression from the establishment of the Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB) to the supplementation of these theories with the Diffusion of Innovations Theory and the Technology Acceptance Model (TAM). According to research summaries on the Technology Acceptance Model (TAM) in the context of short video content viewing intentions, perceived usefulness and perceived ease of use are factors that influence consumer attitudes. In the process of studying the intentions to use information systems, Heijden (2003) incorporated perceived enjoyment into the Technology Acceptance Model (TAM).

Social influence refers to the degree to which an individual perceives that important others believe they should use a particular system (Venkatesh, 2003). As social beings, individuals' behaviors are always influenced by their peers; when significant others believe they should try a new technology, they are often influenced to use it. In this study, this is reflected in the scenario where family members, colleagues, and friends of short video platform users extensively watch and recommend short videos that use generative artificial intelligence (AIGC) technology for voiceovers in film commentary, thereby encouraging the user to watch them as well.

Integrating the Technology Acceptance Model (TAM) with film commentary short videos, this study primarily explores the usage intentions of short video platform users towards film commentary short videos that use generative artificial intelligence (AIGC) technology for voiceovers, as well as the influencing factors. Based on the Technology Acceptance Model (TAM), this study introduces perceived enjoyment and social influence as new variables to develop the existing Technology Acceptance Model (TAM), aiming to achieve better explanatory power.

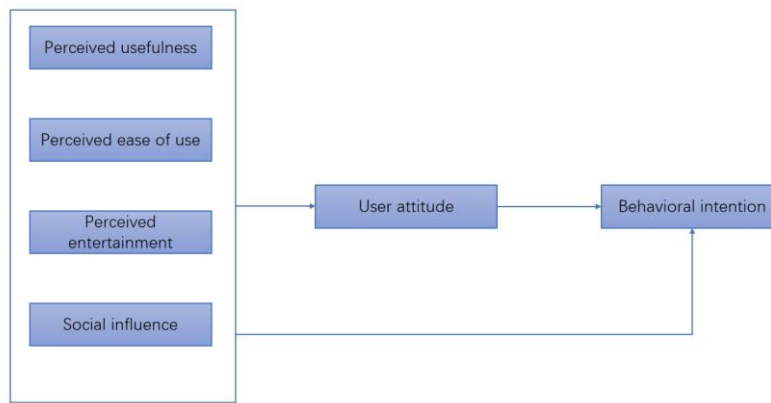


Figure 1: Research model

Defining Variables

Perceived Usefulness

Perceived usefulness refers to the user's subjective evaluation of the potential benefits brought by an information technology system. It reflects the user's subjective assessment of the benefits that the information technology system might provide. Perceived usefulness not only directly affects the user's intention to use but is also influenced by various technical characteristics and other variables. According to Davis (1989), perceived usefulness is considered one of the fundamental determinants affecting users' acceptance and use of information technology. This concept has been further validated and expanded in subsequent research. For example, there is a clear positive correlation between perceived usefulness and users' usage intentions, a relationship that has also been confirmed in long-term follow-up studies (Davis, F.D., Bagozzi, & P.R. Warshaw, 1992). Over time, the understanding and application of the Technology Acceptance Model (TAM) have deepened. The study by Venkatesh et al. (2003) proposed a unified model of technology acceptance and use (UTAUT), which integrates elements from multiple previous models and empirically validates its effectiveness. This indicates that perceived usefulness is not only an important predictor variable but also occupies a central position in different theoretical frameworks.

Adams (1985) pointed out that perceived usefulness is the consumer's subjective judgment of whether new technology can bring positive changes in work or study. The latest studies suggest that perceived usefulness could enhance users' willingness to adopt new technologies, emphasizing its significance in reducing resistance to innovative technology (Yoo, 2021).

Film commentary short videos using generative artificial intelligence (AIGC) technology have shorter production cycles and lower costs, allowing content producers to quickly complete commentary work on films. Compared to human voiceovers, this can seize the initial traffic and significantly increase update frequency. This study defines perceived usefulness as the ability of short video platform users to enhance their viewing efficiency and understanding of the plot when watching film commentary short videos using generative artificial intelligence (AIGC) technology for voiceovers.

Thus, the following hypotheses are proposed:

H1: Perceived usefulness has a positive impact on short video platform users' attitudes towards watching film commentary short videos that use generative artificial intelligence (AIGC) technology for voiceovers.

H2: Perceived usefulness has a positive impact on short video platform users' behavioral intentions to watch film commentary short videos that use generative artificial intelligence (AIGC) technology for voiceovers.

Perceived Ease of Use

The concept of perceived ease of use refers to users' subjective evaluation of the difficulty level in operating an information technology system. According to the Technology Acceptance Model (TAM), perceived ease of use is considered one of the critical factors influencing users' acceptance and utilization of information technology (Davis, F.D., 1989; Patrick Y. K. Chau, 1996). The level of perceived ease of use directly affects users' attitudes towards the system, subsequently influencing their intention to use and actual usage behavior. In early research, perceived ease of use and perceived usefulness were proposed together as fundamental variables to explain users' acceptance and utilization of information technology (Davis, F.D., 1989). Both perceptions are considered important factors in predicting users' acceptance and usage behavior. Through a series of empirical studies, scholars have confirmed that perceived ease of use plays a crucial role in predicting and explaining consumers' decisions to adopt new technological products. Perceived ease of use can not only directly influence consumers' perceived usefulness of technological products but also indirectly affect their overall attitudes, ultimately determining their usage intentions. In recent years, research on perceived ease of use has gradually shifted from single measurement to more complex construction and understanding. For example, a study pointed out that there is a significant correlation between

perceived ease of use and other perceived usability measures, supporting the view of considering perceived ease of use as a form of perceived usability (Urška Lah, James R. Lewis et al., 2020).

The usage threshold of short video platforms and short videos explaining films and television shows is relatively low. Users can even browse video content without registering, and the platform's big data recommendation algorithm almost eliminates the need to search for content of interest. Since the technical threshold is mainly concentrated in the installation and viewing stages of the platform, using generative artificial intelligence (AIGC) technology for dubbing should not negatively impact the difficulty of watching short videos. This study defines perceived ease of use as the degree of difficulty perceived by short video platform users in watching short videos explaining films and television shows that are dubbed using generative artificial intelligence (AIGC) technology.

Thus, the following hypotheses are proposed:

H3: Perceived ease of use has a positive impact on the attitudes of short video platform users towards watching short videos explaining films and television shows that are dubbed using generative artificial intelligence (AIGC) technology.

H4: Perceived ease of use has a positive impact on the behavioral intentions of short video platform users towards watching short videos explaining films and television shows that are dubbed using generative artificial intelligence (AIGC) technology.

Perceived Enjoyment

Perceived enjoyment refers to the pleasure users derive from using a technological product or receiving a service. By providing an enjoyable user experience, perceived enjoyment can significantly enhance users' attitudes and usage intentions, thereby promoting the acceptance and adoption of the technology. When users perceive that a technology provides entertainment value, their attitudes and usage intentions towards the technology become more positive (Yuanfang, S. & Jidong, H., 2009). Perceived enjoyment can increase users' interest in the technology, thereby enhancing its usage frequency and depth. As an intrinsic motivation (Deci, E.L., et al., 1991), perceived enjoyment promotes users' acceptance and usage of the technology. Perceived enjoyment focuses more on users' subjective feelings during the usage process. When a technology can meet users' entertainment needs, users are more likely to view it as an enjoyment rather than a burden, thereby increasing their willingness to use it.

In recent years, the concept of perceived enjoyment has been further expanded to other fields. For example, in the study by Hornbæk & Hertzum (2017), the intersection of the User Experience (UX) model and the Technology Acceptance Model (TAM) was explored, emphasizing the role of perceived enjoyment in shaping human-computer interaction. This study pointed out that the impact of perceived enjoyment on attitudes is stronger than that of perceived usefulness and perceived ease of use, which is significant for understanding how users accept and use information technology. It indicates that perceived enjoyment is not only an independent factor influencing technology acceptance but can also interact with other variables, such as perceived usefulness and perceived ease of use, to jointly affect users' acceptance attitudes and usage intentions.

Perceived enjoyment has now become an important concept widely applied across various fields. Whether in mobile internet, social media, or emerging technologies such as virtual reality, it has been proven to be a key factor influencing users' acceptance and usage of technology. Using generative artificial intelligence (AIGC) technology for dubbing offers choices in various voice characteristics, such as tone, pitch, dialect, and pauses, which traditional human dubbing, limited to one or a few voice actors per account or team, cannot match in terms of novelty. AIGC technology allows for customized dubbing styles based on different types of films and television content, enhancing content matching and creativity. This study defines perceived enjoyment as the extent to which short video platform users perceive that watching short videos explaining films and television shows dubbed using generative artificial intelligence (AIGC) technology can meet various entertainment needs.

Thus, the following hypotheses are proposed:

H5: Perceived enjoyment has a positive impact on the attitudes of short video platform users towards watching short videos explaining films and television shows that are dubbed using generative artificial intelligence (AIGC) technology.

H6: Perceived enjoyment has a positive impact on the behavioral intentions of short video platform users towards watching short videos explaining films and television shows that are dubbed using generative artificial intelligence (AIGC) technology.

Community influence

The concept of social influence primarily involves the impact of the opinions, attitudes, and behaviors of surrounding individuals on an individual's decision-making process. This influence can manifest in various ways, including but not limited to social norms, peer pressure, group identification, and the social networks of information technology users. The significance of social influence within the Technology Acceptance Model (TAM) has been widely recognized. The original TAM model emphasized the direct effects of perceived usefulness and perceived ease of use on users' acceptance and utilization of information systems (Davis, F.D., 1989). However, as research progressed, scholars began to realize that, in addition to these individual-level factors, social influence is also an indispensable factor. For instance, Davis et al. pointed out that the

traditional TAM model failed to adequately consider the role of social influence, thus suggesting its inclusion in the model (Malhotra, Y. & Galletta, D., 1999). Recently, Victorovich et al. (2020) discuss how social influence actively promotes museum restoration projects, illustrating its impact on people's attitudes and behaviors.

When more and more people around an individual choose to watch such video content, factors such as trust, conformity, and imitation may lead the individual to also attempt to watch similar video content. This study defines community influence as the impact of social group factors on short video platform users' decisions to watch short videos explaining films and television shows that are dubbed using generative artificial intelligence (AIGC) technology.

Therefore, the following hypotheses are proposed:

H7: Community influence has a positive impact on the attitudes of short video platform users towards watching short videos explaining films and television shows that are dubbed using generative artificial intelligence (AIGC) technology.

H8: Community influence has a positive impact on the behavioral intentions of short video platform users towards watching short videos explaining films and television shows that are dubbed using generative artificial intelligence (AIGC) technology.

User Attitude and Behavioral Intention

Attitude refers to an individual's overall evaluation and cognition of a specific object, behavior, or idea, reflecting the individual's psychological feelings and behavioral tendencies (Brown, J.S., Kotler, B.P. & Mitchell, W.A., 1994). Through the guidance of intention, an individual's attitude can be transformed into concrete behavioral decisions, thereby achieving the transition from psychology to behavior.

In the Technology Acceptance Model (TAM), user attitude is defined as the user's perception or feeling towards using a specific technology. It is a multidimensional and dynamically changing concept influenced by personal beliefs, perceptions, and external environments, playing a crucial role in the process of user acceptance and utilization of information technology. User attitude acts as a mediating role in the technology acceptance process. Research has shown that user attitudes towards information technology partially mediate the effects of perceived usefulness and perceived ease of use on usage intention (Davis, F.D., Bagozzi, & P.R. Warshaw, 1992). This indicates that users' positive or negative attitudes towards technology will influence their evaluation of the technology's perceived value and ease of use, thereby affecting their usage intentions.

Behavioral intention in the Technology Acceptance Model (TAM) is regarded as the likelihood of users actually using the technology, based on a comprehensive judgment of user attitudes and other factors. Behavioral intention is considered an important indicator for predicting whether users will adopt new technology, as it reflects the users' genuine inclination to take action. Studies have found a significant positive correlation between behavioral intention and actual usage behavior, indicating that users with high behavioral intention are more likely to start using new technology (Davis, F.D., Bagozzi, & P.R. Warshaw, 1992).

In this study, user attitude is defined as the positive or negative evaluation held by short video platform users towards short videos explaining films and television shows that are dubbed using generative artificial intelligence (AIGC) technology. Behavioral intention is defined as the likelihood that short video platform users are willing to use or continue watching short videos explaining films and television shows that are dubbed using generative artificial intelligence (AIGC) technology.

Therefore, the following hypothesis is proposed:

H9: User attitude has a positive impact on the behavioral intention of short video platform users towards watching short videos explaining films and television shows that are dubbed using generative artificial intelligence (AIGC) technology.

Research Model

This study is based on the Technology Acceptance Model (TAM) as its theoretical foundation, incorporating "perceived enjoyment" and "community influence" as additional independent variables, and utilizing "user attitude" as a mediating variable. Consequently, the research model is constructed as shown in Figure 2.

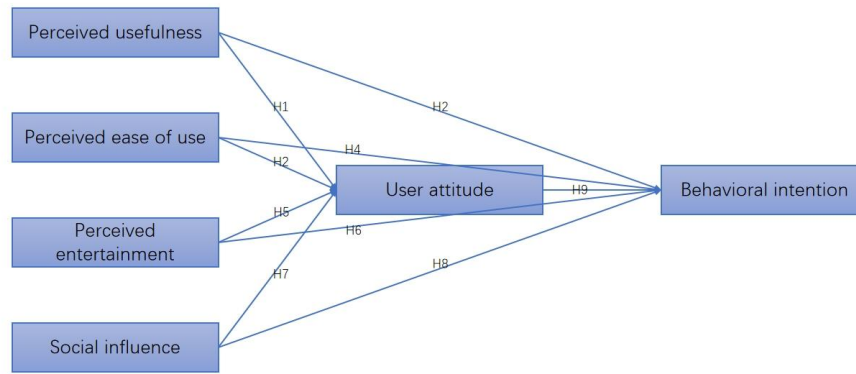


Figure 2: Research Model and Assumptions

METHODS

In the questionnaire design, the questionnaire was formed by using the existing mature scale and supplementing and modifying it with the characteristics of the short videos dubbed with generative artificial intelligence (AIGC) technology. In this study, a total of 237 questionnaires were distributed from April to May 2024, and 228 questionnaires were valid, among which 9 people chose "No" when answering the question of "Have you watched short videos dubbed with AI for film and television narration? The validity rate of the questionnaire reaches 96.2%.

In terms of gender, the proportion of women in the sample was 61.4%, more than 60%, and the proportion of men was 38.60%. In terms of education, the proportion of master's degree is the highest, more than 60%, with 144 people. In terms of age distribution, the majority of the sample is concentrated in the age group of "18-30", with a total of 164 persons, or 71.93%.

From the point of view of the frequency of watching movie and TV narrated short videos dubbed by AI every week, more than 40% of the samples are "irregular". In terms of the average time spent watching AI-dubbed movie and TV narrated short videos per day, more than 80% of the samples were "5-30 minutes". In terms of interaction, "like" has the highest response rate and popularity, and is the most popular interaction method among the samples. In terms of the fidelity of the current AIGC dubbing, the samples preferred that there is still a gap between AIGC dubbing and real-life dubbing.

The basic information of the complete sample is shown in the table.

Table 1: Basic information about the sample

name (of a thing)	options (as in computer software settings)	Frequency	Percentage (%)
distinguishing between the sexes	male	88	38.60
	daughter	140	61.40
educational attainment	specialized training school	16	7.02
	undergraduate (adjective)	64	28.07
	bachelor's degree	144	63.16
	doctoral	4	1.75
(a person's) age	18-30 years	164	71.93
	31-40 years	52	22.81
	41-50 years	12	5.26
Monthly disposable income	Less than 2,000	20	8.77
	2001-5000	88	38.60
	5001-8000	24	10.53

name (of a thing)	options (as in computer software settings)	Frequency	Percentage (%)
	8001-10000	56	24.56
	10,000 or more	40	17.54
Frequency of watching AI-dubbed short videos of movie and TV commentaries per week	Every day.	60	26.32
	3-5 times	48	21.05
	1-2 times	12	5.26
	fluid	108	47.37
Average length of time spent watching AI-dubbed short videos in the movie and TV commentary category per day	5-30 minutes	192	84.21
	30 minutes - 1 hour	20	8.77
	1-2 hours	8	3.51
	2-3 hours	4	1.75
	More than 3 hours	4	1.75
It is considered that the current AI voice-overs are almost indistinguishable, real or fake, from the effects of real human voice-overs.	Strongly disagree.	52	22.81
	disagree	48	21.05
	general	60	26.32
	agree with	36	15.79
	couldn't agree more	32	14.04

Measures

The questionnaire used a 5-point Likert scale of 1-5 indicating "strongly disagree" - "strongly agree".

Table 2: Variable Indicators, Questionnaire Design and Scale Sources

Research variables	Measurement issues	Scale source
Perceived usefulness	1. Watching short videos of movie and TV commentaries using AI dubbing can improve viewing efficiency and save time on watching dramas. 2. Watching short videos that use AI dubbing for movie and TV commentaries can improve the viewing effect. (e.g. choosing your favorite movie or TV drama) 3. Watching movie and TV narrated short videos using AI dubbing is more convenient than watching dramas in a traditional way. 4. In general, it is useful to watch short videos of movie and TV commentaries using AI dubbing.	Davis (1989) Shin (2009) Moon & Kim (2001)
Perceived ease of use	1. Watching or learning to watch short videos of movie and TV commentaries using AI dubbing is easy. 2. Master the operation of watching short videos of movie and TV commentaries using AI dubbing without a lot of effort. 3. It is easy to install and use apps that allow you to watch short videos of movie and TV commentaries using AI dubbing. (e.g. Jitterbug, Shutterbug, B-station, etc.) 4. In general, it is not difficult to watch short videos of movie and TV commentaries using AI dubbing.	Davis (1989) Shin (2009)
Perceived entertainment	1. I think it's very interesting to watch short videos of movie and TV commentaries using AI dubbing. 2. I think watching short videos of movie and TV commentaries using AI dubbing stimulates my curiosity. 3. Watching short videos of movie and TV commentaries using AI dubbing gives me pleasure. 4. Watching short videos of movie and TV commentaries using AI dubbing doesn't make me feel nervous.	Taylr & Todd (1995)

Social influence	1. People around me are watching short videos of movie and TV commentaries using AI dubbing, which will motivate me to watch them as well. 2. Other people who have influenced me have recommended that I watch short videos of movie and TV commentaries that use AI dubbing, and I will try to watch them. 3. It is a trend to watch movie and TV narrated videos with AI dubbing, and I will watch movie and TV narrated videos with AI dubbing in order to catch up with the trend.	Venkatesh (2003)
User attitude	1. I think it's a good idea to watch short videos of movie and TV commentaries that use AI dubbing. 2. I am interested in watching short videos of movie and TV commentaries using AI dubbing. 3. Overall, I have a positive opinion of watching short videos of movie and TV commentaries using AI dubbing.	Venkatesh & Davis (2000) Moon & Kim (2009)
Behavioral intention	1. I am interested in watching short videos of movie and TV commentaries using AI dubbing. 2. In the future, I would like to frequently watch short videos of movie and TV commentaries using AI dubbing. 3. I would recommend watching short videos using AI dubbing for movie and TV commentaries to friends and family. 4. I am willing to interact (like, comment, forward, etc.) with short videos of movie and TV commentaries that use AI dubbing.	Venkatesh & Davis (2000) Moon & Kim (2001)

Control Variables

According to the survey of the audience group of short videos of film and television narration, it is understood that the age of this group is mainly middle-aged and young people, with a high degree of dependence on smart terminals and networks, so the questionnaire is mainly distributed and disseminated through social media APPs, with chat groups, social platforms and so on as the main focus. The questionnaire of this study is mainly divided into two major parts, the first part is the survey of sample statistical characteristics, in addition to gender, age, education, occupation, monthly disposable income and other conventional sample statistical issues, but also includes the survey of subjective feelings about the fidelity of the current generative artificial intelligence (AIGC) speech synthesis technology. The second part is a survey on the measurement of scalar indicators in this study.

This study used SPSS and AMOS software to statistically and analytically analyze the sample of questionnaires collected. It includes descriptive analysis, reliability and validity analysis, correlation analysis, and regression analysis.

RESULTS

Descriptive Statistical Analysis

As can be seen from Table 3, the respondents have the highest average value of perceived ease of use for short videos of film and television narration dubbed using generative artificial intelligence (AIGC) technology, which is 4.175, indicating that the respondents have a very high evaluation of the ease of use of this type of short videos, and they generally believe that the operation of short video platforms is simple and easy in terms of installing and using the platforms, and searching for and watching related content.

The mean value of community influence is 3.082, which is a low value, indicating that the respondents' behavior of choosing to watch such short videos is not significantly influenced by the surrounding crowd.

The mean values of Perceived Usefulness and Perceived Entertainment are close to each other, 3.531 and 3.553 respectively, indicating that this type of short videos can well fulfill the respondents' needs for catching up and and entertainment.

The mean values of user attitude and behavioral willingness are over 3, indicating that respondents have a more positive attitude towards such short videos and a higher willingness to use them.

Table 3: Statistics on sample base indicators

name (of a thing)	Sample size	minimum value	maximum values	Average	Median
Perceived Ease of Use	228	2.250	5.000	4.175	4.000
Perceived Entertainment	228	1.000	5.000	3.553	3.750
Perceived usefulness	228	1.000	5.000	3.531	3.750

name (of a thing)	Sample size	minimum value	maximum values	Average	Median
User attitude	228	1.000	5.000	3.503	3.333
Willingness to act	228	1.000	5.000	3.268	3.250
Social influence	228	1.000	5.000	3.082	3.000

Reliability Analysis

Since the research of this study uses Likert scale, the reliability of the questionnaire results is generally analyzed by taking the Cronbach alpha coefficient method. The value of Cronbach alpha coefficient is between 0-1. Generally speaking, if this value is higher than 0.8, it means that the reliability is high; if this value is between 0.7 and 0.8, it means that the reliability is good; if this value is between 0.6 and 0.7, it means that the reliability is acceptable; if this value is less than 0.6, it means that the reliability is not good, and the questionnaire needs to be re-corrected and re-issued. As shown in the table below, the overall reliability of the questionnaire was first analyzed in this study, and the Cronbach α coefficient of the questionnaire in this study is 0.926, and the Cronbach α coefficient of each variable is higher than 0.8, which indicates that the reliability of this questionnaire is very good.

Table 4: Overall reliability analysis results

name (of a thing)	Cronbach's alpha coefficient
Perceived usefulness	0.926
Perceived Ease of Use	
Perceived Entertainment	
Social influence	
User attitude	
Willingness to act	

Table 5: Results of reliability analysis for each variable

name (of a thing)	Cronbach's alpha coefficient
Perceived usefulness	0.909
Perceived Ease of Use	0.898
Perceived Entertainment	0.911
Social influence	0.929
User attitude	0.901
Willingness to act	0.933

Validity Analysis

In the validity analysis of this study, firstly, KMO and Bartlett spherical test were performed on the question items. Table 6 shows the results of the overall validity analysis of this questionnaire. The overall KMO value is 0.89, and the KMO values of the six variables are higher than 0.8, and the significance is less than 0.05, indicating that the data of this questionnaire is suitable for factor analysis. Additionally, a discriminant validity test was conducted, with results presented in Tables 7. The AVE square root values for each variable are above 0.8 and greater than the absolute maximum value of the inter-factor correlation coefficients, which clearly reflects their respective characteristics.

Table 6: Overall KMO and Bartlett's test results of the questionnaire

KMO value	0.890
Bartlett Sphericity Check	approximate chi-square (math.) 1226.744
	Degrees of freedom df 15

	Significance p-value	0.000
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Table 7: Discriminant Validity: Pearson Correlation and AVE Square Root Values

	Perceived usefulness	Perceived ease of use	Perceived entertainment	Social influence	User attitude	Willingness to act
Perceived usefulness	0.847					
Perceived ease of use	0.424	0.841				
Perceived entertainment	0.738	0.492	0.865			
Social influence	0.700	0.320	0.764	0.908		
User attitude	0.827	0.463	0.837	0.769	0.872	
Willingness to act	0.820	0.381	0.798	0.795	0.784	0.862

Perceived Usefulness Validity Analysis

As shown in Table 8, the common degree values corresponding to all the questions are higher than 0.4, indicating that the question information can be extracted effectively. In addition, the KMO value is 0.810, which is greater than 0.6, and the data can be effectively extracted information. Based on this, the factor analysis of the four questions under perceived usefulness showed that a total of one factor was obtained, and the variance explained by this one factor was 78.635%>50%. It means that the information of the questions can be extracted effectively.

In summary, the data results for the question on perceived usefulness are consistent with the original intent of the scale design, and the questionnaire has good validity and is suitable for subsequent analyses.

Table 8: Perceived usefulness validity analysis results

sports event	Factor loading	Commonality (common factor variance)
	Factor 1	
The practical significance of watching AI-dubbed movie and TV narrated short videos for you - Watching AI-dubbed movie and TV narrated short videos can improve the efficiency of watching and save the time of watching dramas.	0.912	0.832
Watching AI-dubbed short videos of movie and TV commentaries can enhance movie and TV drama viewing.	0.857	0.735
Watching AI-dubbed short videos of movie and TV commentaries is more convenient than the traditional way of watching dramas.	0.879	0.773
Overall, it is useful to watch short videos of movie and TV commentaries dubbed by AI.	0.897	0.805
Cumulative variance explained	78.635%	-
KMO value	0.810	-
Barthelle's Spherical Value	623.078	-
Degrees of freedom df	6	-
Significance p-value	0.000	-

Perceived Ease of Use Validity Analysis

As shown in Table 9, the common degree values corresponding to all the questions are higher than 0.4, indicating that the question information can be extracted effectively. In addition, the KMO value is 0.756, which is greater than 0.6, and the data can be effectively extracted information. On this basis, the factor analysis of the four questions under perceived ease of use showed that a total of one factor was obtained, and the variance explained by this one factor was 77.010%>50%. It means that the information content of the questions can be extracted effectively.

In summary, the data results for the question on perceived ease of use are consistent with the original intent of the scale design, and the questionnaire has good validity and is suitable for subsequent analyses.

Table 9: Perceived ease of use validity analysis results

sports event	Factor loading coefficients	commonality (Common factor variance)
	Factor 1	
How easy it is for you to watch short videos of movie and TV commentaries dubbed by AI - Watching or searching to watch short videos of movie and TV commentaries dubbed by AI is easy.	0.893	0.798
It doesn't take a lot of effort to watch AI-dubbed short videos of movie and TV commentaries in action.	0.829	0.687
The installation and use of apps related to short videos that can watch movie and TV commentaries dubbed by AI is simple. (e.g. Jitterbug, Shutterbug, B Station, etc.)	0.876	0.768
Overall, it's not difficult to watch short videos of movie and TV commentaries dubbed by AI.	0.910	0.828
Cumulative variance explained	77.010%	-
KMO value	0.756	-
Barthelle's Spherical Value	611.820	-
Degrees of freedom df	6	-
Significance p-value	0.000	-

Perceived Entertainment Validity Analysis

As shown in Table 10, all the questions correspond to a common degree value higher than 0.4, indicating that the question information can be extracted effectively. In addition, the KMO value is 0.780, which is greater than 0.6, and the data can be effectively extracted information. On this basis, the factor analysis of the four questions under perceived ease of use showed that a total of one factor was obtained, and the variance explained by this one factor was 79.309%>50%. It means that the information of the questions can be extracted effectively.

In summary, the data results for the question on perceived entertainment are consistent with the original intent of the scale design, and the questionnaire has good validity and is suitable for subsequent analyses.

Table 10: Results of perceived entertainment validity analysis

Sports event	Factor loading coefficients	Commonality (common factor variance)
	Factor 1	
Watching AI-dubbed short videos of movie and TV commentaries for your entertainment - I think it is very entertaining to watch short videos of movie and TV commentaries dubbed by AI.	0.949	0.900
I think watching short videos of AI-voiced movie and TV commentaries stimulates my curiosity.	0.901	0.811
Watching short videos of movie and TV commentaries dubbed by AI gives me pleasure.	0.949	0.901
Watching AI-dubbed short videos of movie and TV commentaries doesn't make me nervous.	0.748	0.560
Cumulative variance explained	79.309%	-
KMO value	0.780	-
Barthelle's Spherical Value	815.816	-
Degrees of freedom df	6	-
Significance p-value	0.000	-

Social Influence Validity Analysis

As shown in Table 11, all the questions correspond to a common degree value higher than 0.4, indicating that the question information can be effectively extracted. In addition, the KMO value is 0.740, which is greater than 0.6, and the data can be effectively extracted information. On this basis, the factor analysis of the four questions under perceived ease of use showed

that a total of one factor was obtained, and the variance explained by this one factor was 87.686%>50%. It means that the information of the questions can be extracted effectively.

In summary, the data results for the question on social influence are consistent with the original intent of the scale design, and the questionnaire has good validity and is suitable for subsequent analyses.

Table 11: Results of social influence validity analysis

Sports event	Factor loading coefficients	Commonality (common factor variance)
	Factor 1	
Influence of community factors on your viewing of AI dubbed movie and TV narration videos - The fact that people around you are watching AI dubbed movie and TV narration videos will motivate me to watch them as well.	0.952	0.906
Other people who have influenced me have recommended that I watch short videos of AI-voiced movie and TV commentaries, which I will try to watch.	0.906	0.820
Watching AI-dubbed short videos of movie and TV commentaries is a trend, and to keep up with the trend I'll be watching AI-dubbed short videos of movie and TV commentaries.	0.951	0.905
Cumulative variance explained	87.686%	-
KMO value	0.740	-
Barthelle's Spherical Value	584.919	-
Degrees of freedom df	3	-
Significance p-value	0.000	-

User Attitude Validity Analysis

As shown in Table 12, all the questions correspond to a common degree value higher than 0.4, indicating that the question information can be extracted effectively. In addition, the KMO value is 0.721, which is greater than 0.6, and the data can be effectively extracted information. On this basis, the factor analysis of the four questions under perceived ease of use showed that a total of one factor was obtained, and the variance explained by this one factor was 83.477%>50%. It means that the information of the questions can be extracted effectively.

In summary, the data results for the question on user attitude are consistent with the original intent of the scale design, and the questionnaire has good validity and is suitable for subsequent analyses.

Table 12: Results of user attitude validity analysis

Sports event	Factor loading coefficients	Commonality (common factor variance)
	Factor 1	
Your attitude towards watching short videos of movie and TV commentaries dubbed by AI - I think it's a good idea to watch short videos of movie and TV commentaries dubbed by AI.	0.903	0.816
I'm interested in watching short videos of movie and TV commentaries dubbed by AI.	0.943	0.889
Overall, I have a positive opinion of watching AI-dubbed short videos of movie and TV commentaries.	0.894	0.799
Cumulative variance explained	83.477%	-
KMO value	0.721	-
Barthelle's Spherical Value	444.302	-
Degrees of freedom df	3	-
Significance p-value	0.000	-

Behavioral Intention Validity Analysis

As shown in Table 13, all the questions correspond to a common degree value higher than 0.4, indicating that the question information can be extracted effectively. In addition, the KMO value is 0.784, which is greater than 0.6, and the data can be effectively extracted information. Based on this, the factor analysis of the four questions under perceived ease of use showed that a total of one factor was obtained, and the variance explained by this one factor was 83.585%>50%. It means that the amount of information of the questions can be extracted effectively.

In summary, the data results for the question on behavioral intentions are consistent with the original intent of the scale design, and the questionnaire has good validity and is suitable for subsequent analyses.

Table 13: Results of the validity analysis of behavioral intentions

Sports event	Factor loading coefficients	Commonality (common factor variance)
	Factor 1	
Your willingness to watch AI-dubbed short videos of movie and TV commentaries - I am interested in watching AI-dubbed short videos of movie and TV commentaries.	0.928	0.861
In the future, I'd like to watch short videos of AI-voiced movie and TV commentaries on a regular basis.	0.949	0.901
I would recommend to friends and family to watch short videos of movie and TV commentaries dubbed by AI.	0.895	0.801
I'm willing to interact (like, comment retweet, etc.) with AI-voiced short videos of movie and TV commentaries	0.883	0.780
Cumulative variance explained %	83.585%	-
KMO value	0.784	-
Barthelle's Spherical Value	877.798	-
Degrees of freedom df	6	-
Significance p-value	0.000	-

Correlation Analysis

After verifying the reliability and validity of the questionnaire, the reliability of the data is guaranteed and then the correlation analysis of the data begins. Correlation analysis is mainly to analyse the correlation between variables and express it in quantitative form. In this study, Pearson correlation analysis was used to verify the correlation between the variables; the larger the Pearson correlation coefficient, the stronger the relationship between the variables.

Generally speaking, a correlation coefficient of 0.8 and above is considered a high positive correlation, while a correlation coefficient of 0.4-0.8 is considered a medium positive correlation, and a correlation coefficient of less than 0.4 is considered a low positive correlation. This study uses this as a criterion to conduct experiments and discuss the correlations of perceived usefulness, perceived usefulness, perceived entertainment, community influence, user attitude, and behavioural intention. See Table 14 for details.

Table 14: Pearson Matrix

	Social influence	Perceived Entertainment	Perceived Ease of Use	Perceived usefulness	Willingness to act	User attitude
Social influence	1					
Perceived Entertainment	0.765**	1				
Perceived Ease of Use	0.325**	0.489**	1			
Perceived usefulness	0.701**	0.737**	0.420**	1		
Willingness to act	0.787**	0.778**	0.398**	0.799**	1	
user attitude	0.770**	0.872**	0.461**	0.826**	0.859**	1
Note: ** p<0.01						

As shown in Table 14, the correlation coefficients between community influence, behavioral intention, and user attitude are 0.787, 0.770, and the correlation coefficients are greater than 0, which means that there is a positive correlation between community influence, behavioral intention, and user attitude.

The correlation coefficients between the two items of perceived entertainment, behavioral intention, and user attitude are all significant, with correlation coefficients of 0.778 and 0.872, and the correlation coefficients are all greater than 0, which means that there is a positive correlation between the two items of perceived entertainment, behavioral intention, and user attitude.

The correlation coefficients between perceived ease of use, behavioral intention, and user attitude are all significant, with correlation coefficients of 0.398 and 0.461, and the correlation coefficients are greater than 0, which means that there is a positive correlation between perceived ease of use, behavioral intention, and user attitude.

The correlation coefficients between perceived usefulness, willingness to act, and user attitudes are 0.799, 0.826, and the correlation coefficients are greater than 0, which means that there is a positive correlation between perceived usefulness, willingness to act, and user attitudes.

In summary, there is a significant positive correlation between the variables, which preliminarily validates the hypotheses made above.

Regression Analysis

Linear regression analysis I

Community Influence, Perceived Entertainment, Perceived Ease of Use, and Perceived Usefulness were used as independent variables, and User Attitude was used as the dependent variable for linear regression analysis.

Table 15: One of the summary tables of the linear regression analysis

Results of linear regression analysis (n=228)							
	Non-standardized coefficient		Standardized coefficient	t	p	covariance diagnosis	
	B	Standard Error	Beta			VIF	Tolerance
a constant (math.)	0.021	0.165	-	0.128	0.898	-	-
social influence	0.113	0.038	0.133	3.018	0.003**	2.725	0.367
Perceived Entertainment	0.498	0.049	0.493	10.123	0.000**	3.304	0.303
Perceived Ease of Use	0.037	0.045	0.025	0.818	0.414	1.349	0.741
Perceived usefulness	0.342	0.040	0.359	8.522	0.000**	2.476	0.404
R ²	0.840						
Adjustment R ²	0.837						
F	F (4,223)=293.177,p=0.000						
D-W value	2.067						
Dependent variable: user attitudes							
* p<0.05 ** p<0.01							

As can be seen from Table 15: The regression coefficient value of community influence is 0.113 ($t=3.018$, $p=0.003<0.01$), which means that community influence will have a significant positive influence relationship on user attitude. Hypothesis H7: Community influence has a positive effect on user attitudes of short video platform users who watch short videos dubbed using generative artificial intelligence (AIGC) technology for movie and television narration, holds.

The regression coefficient value of perceived entertainment is 0.498 ($t=10.123$, $p=0.000<0.01$), which implies that perceived entertainment will have a significant positive influence relationship on users' attitudes. Hypothesis H5: Perceived Entertainment has a positive effect on the attitude of users of short video platforms to watch short videos dubbed using generative Artificial Intelligence (AIGC) technology for movie and television narration, holds.

The regression coefficient value of perceived ease of use is 0.037 ($t=0.818$, $p=0.414>0.05$), which implies that perceived ease of use does not have an influential relationship on user attitudes. Hypothesis H3: Perceived ease of use has a positive effect on the attitudes of users of short video platforms who watch short videos dubbed using generative artificial intelligence (AIGC) technology in the film and television narration category is not valid.

The regression coefficient value of perceived usefulness is 0.342 ($t=8.522$, $p=0.000<0.01$), which implies that perceived usefulness will have a significant positive influence relationship on user attitude. Hypothesis H1: Perceived usefulness has a positive effect on the attitude of users of short video platforms to watch short videos dubbed using generative artificial intelligence (AIGC) technology in the film and television narration category, holds.

To summarize the analysis: community influence, perceived entertainment, and perceived usefulness have a significant positive relationship on user attitude. But Perceived Ease of Use does not affect the user attitude.

Linear Regression Analysis II

A linear regression analysis was conducted with community influence, perceived entertainment, perceived ease of use, and perceived usefulness as independent variables and behavioral intention as the dependent variable.

Table 16: Summary table bis of linear regression analysis

Results of linear regression analysis (n=228)							
	Non-standardized coefficient		Standardized coefficient	t	p	covariance diagnosis	
	B	Standard Error	Beta			VIF	Tolerance
a constant (math.)	-0.224	0.229	-	-0.976	0.330	-	-
social influence	0.320	0.052	0.334	6.152	0.000**	2.725	0.367
Perceived Entertainment	0.258	0.068	0.226	3.773	0.000**	3.304	0.303
Perceived Ease of Use	0.023	0.062	0.014	0.368	0.713	1.349	0.741
Perceived usefulness	0.423	0.056	0.392	7.573	0.000**	2.476	0.404
R ²	0.758						
Adjustment R ²	0.754						
F	F (4,223)=174.779,p=0.000						
D-W value	2.061						
Dependent Variable: Behavioral Intentions							
* p<0.05 ** p<0.01							

As can be seen from Table 16: the regression coefficient value of community influence is 0.320 ($t=6.152$, $p=0.000<0.01$), which means that community influence will have a significant positive influence relationship on behavioral intention. Hypothesis H8: Community influence has a positive effect on behavioral intention of users of short video platforms to watch short videos of film and television narration dubbed using generative artificial intelligence (AIGC) technology, holds.

The regression coefficient value of perceived entertainment is 0.258 ($t=3.773$, $p=0.000<0.01$), which means that perceived entertainment will have a significant positive influence relationship on behavioral intention. Hypothesis H6: Perceived entertainment has a positive effect on behavioral intention of users of short video platforms to watch short videos of film and television narration dubbed using generative artificial intelligence (AIGC) technology, holds.

The regression coefficient value of perceived ease of use is 0.023 ($t=0.368$, $p=0.713>0.05$), which means that perceived ease of use does not have an influential relationship on behavioral intention. Hypothesis H4: Perceived ease of use has a positive effect on behavioral intention of users of short video platforms to watch short videos in the film and television narration category dubbed using generative artificial intelligence (AIGC) technology is not valid.

The regression coefficient value of perceived usefulness is 0.423 ($t=7.573$, $p=0.000<0.01$), which means that perceived usefulness will have a significant positive influence relationship on behavioral intention. Hypothesis H2: Perceived usefulness

has a positive effect on behavioral intention of users of short video platforms to watch short videos of film and television narration dubbed using generative artificial intelligence (AIGC) technology, holds.

To summarize the analysis: community influence, perceived amusement, and perceived usefulness have a significant positive relationship on behavioral intention. Perceived ease of use, however, does not have an effect on behavioral intention.

Linear regression analysis III

Linear regression analysis was conducted with user attitude as the independent variable and behavioral intention as the dependent variable.

Table 17: Summary Table 3 of linear regression analysis

Results of linear regression analysis (n=228)							
	Non-standardized coefficient		Standardized coefficient	t	p	Covariance diagnosis	
	B	Standard Error	Beta			VIF	Tolerance
Constant (math.)	-0.127	0.141	-	-0.899	0.369	-	-
User attitude	0.969	0.038	0.859	25.170	0.000**	1.000	1.000
R ²	0.737						
Adjustment R ²	0.736						
F	F (1,226)=633.549,p=0.000						
D-W value	2.239						
Dependent Variable: Behavioral Intentions							
* p<0.05 ** p<0.01							

As can be seen from Table 17: The regression coefficient value of user attitude is 0.969 (t=25.170, p=0.000<0.01), which means that user attitude will have a significant positive influence relationship on behavioral intention. Hypothesis H9: User attitude has a positive effect on behavioral intention of users of short video platforms to watch short videos of film and television narration dubbed by generative artificial intelligence (AIGC) technology, holds.

Results of Hypothesis Testing

Table 18: Results of hypothesis testing analysis

Suppose that...	Test results
H1: Perceived usefulness has a positive effect on user attitudes towards watching short videos in the movie and television narration category dubbed using generative artificial intelligence (AIGC) techniques by users of short video platforms.	set up
H2: Perceived usefulness has a positive effect on the behavioral intention of users of short video platforms to watch short videos in the film and television narration category dubbed using generative artificial intelligence (AIGC) techniques.	set up
H3: Perceived ease of use has a positive effect on user attitudes towards watching short videos in the movie and TV narration category dubbed using generative artificial intelligence (AIGC) techniques by users of short video platforms.	untenable
H4: Perceived ease of use has a positive effect on the behavioral intention of users of short video platforms to watch short videos in the film and television narration category dubbed using generative artificial intelligence (AIGC) techniques.	untenable
H5: Perceived entertainment has a positive effect on user attitudes towards watching short videos in the movie and television narration category dubbed using generative artificial intelligence (AIGC) techniques by users of short video platforms.	set up
H6: Perceived entertainment has a positive effect on the behavioral intention of users of short video platforms to watch movie and television narrated short videos dubbed using generative artificial intelligence (AIGC) techniques.	set up
H7: Community influence has a positive effect on user attitudes towards watching short videos in the movie and	set up

television narration category dubbed using generative artificial intelligence (AIGC) technology by users of short video platforms.	
H8: Community influence has a positive effect on the behavioral intention of users of short video platforms to watch short videos in the film and television narration category dubbed using generative artificial intelligence (AIGC) technology.	set up
H9: User attitude has a positive effect on the behavioral intention of users of short video platforms to watch short videos in the film and television narration category dubbed by generative artificial intelligence (AIGC) technology.	set up

CONCLUSION AND DISCUSSION

Through empirical analysis, this study delves into the impact of perceived usefulness, perceived ease of use, perceived enjoyment, and community influence on short video platform users' attitudes and behavioral intentions towards watching film and television commentary short videos dubbed using generative artificial intelligence (AIGC) technology.

Perceived usefulness has a positive impact on user attitudes and behavioral intentions, revealing users' high attention to the value and practicality of information. In the digital age, the vast flow of information and fragmented leisure time make users more stringent in their information selection. They tend to choose content that provides practical help and useful information. Film and television commentary short videos dubbed with generative artificial intelligence (AIGC) technology attract users' attention with their unique interpretive perspectives and easy-to-understand commentary styles. These videos not only provide simple explanations of films and television shows but also delve into hidden plotlines, character relationships, creative backgrounds, and social and cultural impacts, thus offering users a wealth of knowledge and information. Therefore, when users perceive the usefulness of such videos, their attitudes naturally become positive, leading to a strong intention to watch.

The positive impact of perceived enjoyment on user attitudes and behavioral intentions is also noteworthy. In the current societal environment, with increasing work and life pressures, people's demand for entertainment to relax and relieve stress is growing. Film and television commentary short videos dubbed with generative artificial intelligence (AIGC) technology, characterized by humorous commentary styles and creative content presentation, provide users with a relaxing and enjoyable viewing experience. This entertainment value not only enhances user stickiness to the short video platform but also stimulates some users' willingness to share and disseminate the videos. When users are attracted by the entertainment value of the videos, they are more likely to recommend such videos to friends and family, further expanding the influence and user base of this type of short video.

The positive impact of community influence on user attitudes and behavioral intentions highlights the importance of word-of-mouth communication in the social media era. In today's society, people's consumption decisions are increasingly influenced by those around them. When users find that more and more people in their social circles are paying attention to and sharing film and television commentary short videos dubbed with generative artificial intelligence (AIGC) technology, they are likely to be influenced by this community effect, leading to curiosity and a desire to explore. This community influence not only affects users' intention to watch but may also translate into actual viewing behavior, even prompting users to actively participate in the creation and sharing of short videos.

Compared to the aforementioned influencing factors, the impact of perceived ease of use on user attitudes and behavioral intentions was not significantly validated in this study. This may be related to the special nature of film and television commentary short videos dubbed with generative artificial intelligence (AIGC) technology. Unlike other short video activities that require complex operations or professional skills, such videos do not require users to perform many operations or possess specific skills during the viewing process. Therefore, even if users encounter some difficulties during use, it will not significantly affect their viewing experience. This finding suggests that in promoting film and television commentary short videos dubbed with generative artificial intelligence (AIGC) technology, more emphasis should be placed on content usefulness and entertainment value rather than overly stressing the ease of use of the technology.

User attitude has a positive impact on viewing behavioral intentions. Attitude is an important predictor of behavior; when users hold a positive attitude towards film and television commentary short videos dubbed with generative artificial intelligence (AIGC) technology, they are more likely to translate this attitude into actual viewing behavior. This conclusion provides valuable insights for the operation and promotion of short video platforms: by continuously optimizing content quality, enhancing user experience, and strengthening community interaction, platforms can cultivate users' positive attitudes, thereby promoting viewing behavior and platform loyalty.

In summary, this study, through empirical analysis, reveals the significant impact of perceived usefulness, perceived enjoyment, community influence, and user attitudes on short video platform users' attitudes and behavioral intentions towards watching film and television commentary short videos dubbed with generative artificial intelligence (AIGC) technology. These findings not only help us to deeply understand users' viewing motivations and behavioral patterns but also provide useful references for the creation and operation of film and television commentary short videos and the development direction of generative artificial intelligence (AIGC) voice technology. In the future, with the continuous advancement of artificial intelligence

technology and the increasingly diversified needs of short video platform users, how to combine these influencing factors to create more attractive and influential short video content remains a topic worthy of in-depth exploration.

Theoretical Implications

Based on the aforementioned research conclusions, it is recommended that future academic studies further explore the specific mechanisms through which perceived usefulness and perceived enjoyment influence different types of short video content, as well as how these factors jointly affect user attitudes and behavioral intentions. Given the significance of community influence, research could focus on the information dissemination mechanisms on social media platforms and how community effects can enhance user acceptance and willingness to share specific types of short videos. Although perceived ease of use did not have a significant impact in this study, its influence might be considerable in other types of short videos that require user interaction; thus, it warrants further investigation.

Practical Implications

For practical applications, we recommend that short video platforms, when promoting film and television commentary short videos dubbed with generative artificial intelligence (AIGC) technology, should emphasize the usefulness and entertainment value of the content. Specifically, platforms can delve into the stories behind film and television works, providing exclusive interpretations and in-depth analyses to meet users' needs for useful information. Additionally, attention should be paid to the diversity and innovation of commentary styles, incorporating contemporary cultural elements to create a relaxed and enjoyable viewing experience. Furthermore, leveraging the community effects of social media platforms, platforms can collaborate with influencers and key opinion leaders (KOLs) to expand the reach and influence of short videos. Although perceived ease of use has a limited impact on the viewing experience, ensuring the platform's stability and ease of use is still essential for maintaining user satisfaction and loyalty.

Limitations and Future Study

Despite efforts to ensure the scientific rigor and validity of this study by covering different age and occupational groups, the sample size was constrained by time and resource limitations. The questionnaire collection period was from March to May 2024, resulting in 228 valid responses after screening, with the primary distribution channel being the WeChat platform, leading to a relatively homogeneous sample group. These limitations may have influenced the study's conclusions to some extent. To enhance the generalizability and accuracy of future research, it is advisable to consider expanding the sample size, distribution channels, and duration of the study, thereby providing a more comprehensive reflection of the target population's characteristics and trends.

Future research could further focus on the innovations and developments in generative artificial intelligence (AIGC) technology, particularly in areas such as voice synthesis, natural language processing, and emotion recognition. As these technologies continue to advance, film and television commentary short videos dubbed with AIGC technology will be able to convey information more naturally, vividly, and accurately, thereby enhancing the user viewing experience. By utilizing user profiling and big data analysis, researchers can more accurately grasp users' viewing habits, interests, and emotional needs, enabling the recommendation of content that better aligns with user preferences. Additionally, future studies could examine the acceptance and reactions of users from different countries and regions towards film and television commentary short videos dubbed with AIGC technology. Comparative analyses of user needs and viewing habits across different cultural backgrounds could provide valuable insights for the international development of short video platforms.

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