

อิทธิพลของแรงจูงใจ การมีส่วนร่วมของผู้ใช้ คุณลักษณะของแอปพลิเคชัน
และลักษณะบุคลิกภาพ ที่มีผลต่อความพึงพอใจของผู้ใช้แอปพลิเคชัน

CCTV Sport ในประเทศจีน

Influence of Motivation, User Engagement, Application Features and
Personality Traits Affecting to Gratification of Users
in CCTV Sport Application in China

วันที่รับบทความ: 8 กุมภาพันธ์ 2569/ วันที่แก้ไขบทความ: 28 มีนาคม 2569/ วันที่ตอบรับบทความ: 30 มีนาคม 2569

Qin Rui¹ and Katekanok Chumpradit²

Abstract

The research aims to investigate motivation, user engagement, application features, and personality traits associated with the use of the CCTV Sports App, as well as to examine their influence on user gratification. A quantitative cross-sectional survey design was employed using a structured questionnaire administered to 406 respondents aged 18 years and above in Sichuan Province, China, all of whom had prior experience using the application. Data were analyzed using descriptive statistics, correlation analysis, and multiple regression analysis.

The findings reveal that users demonstrate consistent engagement with digital sports media, with overall levels of motivation, user engagement, application features, and personality traits rated relatively high. The results of multiple regression analysis indicate that motivation, application features, personality traits, and user engagement significantly predict user gratification, collectively explaining 86.4% of the variance. Among these predictors, motivation emerged as the strongest determinant of gratification, followed by application features and personality traits, while user engagement showed a smaller but still significant effect. The findings provide both theoretical and practical implications for sports media organizations and application developers in enhancing application design, promoting user engagement, and sustaining long-term user gratification.

Keywords: CCTV Sports Application, User Gratification, Uses and Gratifications Theory, User Engagement, Application Features

¹ Doctoral Student in the Communication Arts Program, Faculty of Management Science, Chiang Rai Rajabhat University, Thailand

² Associate Professor, Faculty of Management Science, Chiang Rai Rajabhat University, Thailand

*Corresponding author; Email address: ricky_crru@outlook.co.th

บทคัดย่อ

การวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาปัจจัยด้านแรงจูงใจ การมีส่วนร่วมของผู้ใช้ คุณลักษณะของแอปพลิเคชัน และลักษณะบุคลิกภาพที่เกี่ยวข้องกับการใช้งานแอปพลิเคชัน CCTV Sports ตลอดจนวิเคราะห์อิทธิพลของปัจจัยดังกล่าวที่มีต่อความพึงพอใจของผู้ใช้ การวิจัยนี้ใช้ระเบียบวิธีวิจัยเชิงปริมาณ แบบการสำรวจภาคตัดขวาง โดยใช้แบบสอบถามเป็นเครื่องมือในการเก็บรวบรวมข้อมูลจากกลุ่มตัวอย่างจำนวน 406 คน ที่มีอายุ 18 ปีขึ้นไป ในมณฑลเสฉวน สาธารณรัฐประชาชนจีน ซึ่งล้วนมีประสบการณ์การใช้งานแอปพลิเคชันดังกล่าว และทำการวิเคราะห์ข้อมูลด้วยสถิติเชิงพรรณนา การวิเคราะห์สหสัมพันธ์ และการวิเคราะห์ถดถอยพหุคูณ

ผลการศึกษาพบว่า ผู้ใช้มีระดับการมีส่วนร่วมกับสื่อกีฬาดี้อย่างสม่ำเสมอ โดยภาพรวมของแรงจูงใจ การมีส่วนร่วมของผู้ใช้ คุณลักษณะของแอปพลิเคชัน และลักษณะบุคลิกภาพ อยู่ในระดับค่อนข้างสูง ผลการวิเคราะห์ถดถอยพหุคูณชี้ให้เห็นว่า แรงจูงใจ คุณลักษณะของแอปพลิเคชัน ลักษณะบุคลิกภาพ และการมีส่วนร่วมของผู้ใช้ สามารถพยากรณ์ความพึงพอใจของผู้ใช้ได้อย่างมีนัยสำคัญทางสถิติ โดยสามารถร่วมกันอธิบายความแปรปรวนของความพึงพอใจได้ร้อยละ 86.4 ทั้งนี้ แรงจูงใจเป็นปัจจัยที่มีอิทธิพลสูงสุด รองลงมาคือคุณลักษณะของแอปพลิเคชันและลักษณะบุคลิกภาพ ขณะที่การมีส่วนร่วมของผู้ใช้มีอิทธิพลน้อยกว่า แต่ยังคงมีนัยสำคัญทางสถิติ ผลการศึกษานี้ให้ข้อค้นพบทั้งในเชิงทฤษฎีและเชิงปฏิบัติสำหรับองค์กรสื่อกีฬาและผู้พัฒนาแอปพลิเคชัน ในการพัฒนาการออกแบบแอปพลิเคชัน การส่งเสริมการมีส่วนร่วมของผู้ใช้ และการสร้างความพึงพอใจของผู้ใช้ในระยะยาว

คำสำคัญ: แอปพลิเคชัน CCTV Sports ความพึงพอใจของผู้ใช้ ทฤษฎีการใช้และความพึงพอใจ การมีส่วนร่วมของผู้ใช้ คุณลักษณะแอปพลิเคชัน

Introduction

China Central Television (CCTV) is one of the most influential national media organizations in China, playing a central role in news dissemination, cultural promotion, and international communication. As the country's national broadcaster established in 1958, CCTV has long served as an authoritative media institution with substantial domestic and global influence (Zhao, 2008). Beyond its traditional broadcasting function, CCTV has increasingly positioned itself as a key actor in China's evolving digital media landscape, particularly in the field of sports communication.

With the rapid advancement of digital technologies and mobile internet usage, traditional television media have undergone significant transformation to meet audiences' growing demand for convenient, real-time, and personalized content access. Media organizations worldwide, including those in China, have expanded into digital platforms to remain competitive and responsive to changing consumption behaviors (Keane & Flew, 2019). In this context, CCTV launched the online CCTV Sports Channel in 2013, marking an important step toward digital transformation in sports media communication. The subsequent development of the CCTV Sports App in 2015

further extended this strategy by enabling mobile access to live sports broadcasts, news updates, and interactive content.

The CCTV Sports App reflects broader shifts in sports media consumption characterized by increased mobility, immediacy, and user interactivity. Mobile sports applications provide audiences with flexible access to live events, personalized content recommendations, and opportunities for social interaction, thereby enhancing user engagement and media gratification (Sundar & Limperos, 2013; Kim & Sundar, 2016). Features such as live streaming, data visualization, and social media integration have transformed sports viewing into a more participatory and individualized experience, contributing to the growing importance of mobile sports platforms in contemporary media environments.

Despite increasing academic interest in digital sports media, existing studies have largely focused on theoretical perspectives or general media trends rather than empirical analysis of specific sports applications and user experiences. Research examining how users engage with particular sports media platforms, what motivates their usage, and how gratification is derived remains relatively limited. Understanding these aspects is essential for advancing theoretical knowledge in digital media studies and for informing the practical development of sports media applications. Such insights can support improved application design, enhanced user engagement, and more effective communication strategies within the rapidly evolving landscape of digital sports media.

Research Objectives

1. To examine the levels of motivation, user engagement, application features, personality traits, and user gratification in the CCTV Sports Application.
2. To examine the influence of motivation, user engagement, application features, and personality traits on user gratification in the CCTV Sports Application.

Literature Review

Previous studies in digital media have highlighted the importance of user-centered perspectives in understanding media consumption behavior, particularly in relation to how users actively select media to satisfy their needs (Katz et al., 1973). In digital environments, users have greater autonomy in choosing content across multiple platforms, particularly mobile applications and online media (Sundar & Limperos, 2013).

In the context of sports media applications, these perspectives help explain how users interact with mobile platforms to obtain real-time information, entertainment, and social interaction. Mobile sports applications offer convenience, personalization, and interactivity, which align with users' evolving expectations in digital media consumption.

These factors contribute to user engagement and gratification, making them important constructs for examining user behavior in sports media platforms.

User Motivation in Digital Sports Media Use

User motivation is a central concept in media consumption research and has been identified as a key predictor of media usage patterns and gratification (Rubin, 1984). In digital sports media contexts, motivations typically include information seeking, entertainment, emotional enjoyment, social interaction, and convenience. The ability to access live sports events, real-time updates, and personalized content has significantly transformed how audiences consume sports media.

Research indicates that convenience and accessibility are major motivations driving the use of mobile sports applications. Users value the flexibility to access sports content anytime and anywhere through mobile devices. Additionally, emotional motivations such as excitement, relaxation, and enjoyment play an important role in sustaining continued use of sports media platforms. Social motivations, including interaction with other sports fans and sharing content, further reinforce user engagement and long-term platform loyalty.

User Engagement in Mobile Media Platforms

User engagement refers to the degree of cognitive, emotional, and behavioral involvement users have with media platforms (Brodie et al., 2011). In digital environments, engagement is often reflected through frequency of use, interaction with content, participation in platform activities, and social sharing behaviors. High engagement levels are associated with increased user gratification, loyalty, and sustained media consumption.

Interactive features in mobile applications, such as commenting systems, live chats, social sharing functions, and personalized recommendations, enhance user participation and foster a sense of community among users. Studies have shown that interactivity significantly strengthens users' connection with digital media platforms, leading to higher levels of gratification and continued usage intention (Kim & Sundar, 2016). In sports media applications specifically, engagement is often driven by live event participation, social discussion, and personalized sports content.

Application Features and User Experience

Technological features of mobile applications play a crucial role in shaping user experience and gratification. Features such as personalized content recommendations, real-time updates, interactive interfaces, and integration with social media platforms enhance usability and perceived value (Sundar & Limperos, 2013). These features allow users to customize their media experience according to personal preferences and interests.

In sports media applications, personalized content recommendation systems enable users to follow favorite teams, athletes, and competitions more efficiently. Interactivity also enhances user experience by facilitating communication and participation in sports-related discussions. Moreover, seamless integration with social media platforms expands the reach

of sports content and encourages user-generated content sharing. These technological affordances contribute significantly to user gratification and platform loyalty.

Personality Traits and Media Consumption

Individual personality traits have been found to influence media preferences, engagement patterns, and user gratification. The Big Five personality framework—comprising openness, conscientiousness, extraversion, agreeableness, and emotional stability—has been widely used to examine individual differences in media behavior (McCrae & Costa, 1999). Personality characteristics may shape how users interact with digital platforms and derive gratification from media consumption.

For instance, individuals high in openness may seek diverse sports content and new media experiences, while extraverted users may engage more actively in social interaction and content sharing. Conscientious users may prefer structured and informative sports content, whereas emotionally stable users may use sports media for relaxation and entertainment. Understanding personality factors provides deeper insight into variations in user engagement and gratification with mobile sports applications.

User Gratification in Digital Sports Media

User gratification is a critical outcome variable in media research, reflecting the extent to which media consumption fulfills user expectations and needs. In digital sports media contexts, gratification is influenced by multiple factors, including motivation, engagement, technological features, and individual characteristics. High gratification levels are associated with continued usage, positive user experience, and long-term platform loyalty.

Research suggests that motivation and perceived usefulness significantly affect gratification with mobile media platforms. Interactive features, personalized content, and social engagement opportunities also enhance users' overall experience. In sports media applications, gratification often arises from timely access to sports information, quality live streaming, and opportunities for social interaction with other fans. Therefore, examining the combined influence of motivational, technological, and psychological factors is essential for understanding user gratification in digital sports media environments.

Research Hypotheses

H1: Motivation has a significant positive influence on user gratification in the CCTV Sports Application.

H2: User engagement has a significant positive influence on user gratification in the CCTV Sports Application.

H3: Application features have a significant positive influence on user gratification in the CCTV Sports Application.

H4: Personality traits have a significant positive influence on user gratification in the CCTV Sports Application.

Research Methodology

Research Design and Population

This study employed a quantitative research design to examine factors influencing user gratification with the CCTV Sports App. Data were collected using a structured questionnaire administered to individuals aged 18 years and above residing in Sichuan Province, China, who had prior experience using the CCTV Sports App.

The target population comprised four generational groups: Generation Z (1997–2012), Generation Y or Millennials (1981–1996), Generation X (1965–1980), and Baby Boomers (1946–1964). According to the Sichuan Provincial Bureau of Statistics (2021), approximately 4.738 million residents in Sichuan Province had experience using the CCTV Sports App. The sample size was determined using Yamane's (1973) formula with a 0.05 margin of error, resulting in a required sample of 400 respondents.

Participants were selected using purposive convenience sampling. Only respondents who had used the CCTV Sports App within the past year were included to ensure relevance to the research objectives.

Research Instruments

The research instrument was a structured questionnaire developed based on relevant literature and the Uses and Gratifications theoretical framework. The questionnaire consisted of sections measuring demographic characteristics, user motivation, user engagement, application features, personality traits, and user gratification with the CCTV Sports App. All items were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Content validity was assessed using the Index of Item–Objective Congruence (IOC). The evaluation was conducted by three experts in communication studies. The results indicated satisfactory content validity, with an overall IOC value of 0.922 and individual item scores ranging from 0.67 to 1.00, exceeding the acceptable criterion of 0.50.

A pilot test was conducted prior to the main data collection to assess the reliability of the instrument. The pre-test sample consisted of 32 respondents representing the four generational groups. Items that did not meet reliability standards during the pilot test were revised or removed accordingly. Internal consistency reliability was examined using Cronbach's alpha coefficient. According to George and Mallery (2010), values above 0.70 indicate acceptable reliability. The analysis yielded a Cronbach's alpha value of 0.995 across 149 items, indicating excellent internal consistency and confirming the suitability of the instrument for the main study.

Data Collection

Data were collected through a questionnaire survey administered to respondents across Sichuan Province. Participants were recruited from different geographic areas and generational groups. Each generation contributed approximately 100 completed questionnaires, resulting in a total of 400 valid responses. All respondents had prior experience using the CCTV Sports App.

Data Analysis

After data collection in August 2023, all responses were coded and analyzed using statistical software. Both descriptive and inferential statistical analyses were conducted. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were used to summarize demographic characteristics and levels of motivation, engagement, application features, personality traits, and user gratification. Inferential statistical analyses included independent sample t-tests and one-way analysis of variance (ANOVA) to examine differences across demographic groups.

Pearson's product-moment correlation analysis was conducted to examine relationships among key variables. Multiple regression analysis was employed to assess the predictive effects of demographic characteristics, motivation, user engagement, application features, and personality traits on user gratification with the CCTV Sports App. The level of statistical significance was set at 0.05.

Research Results

1. User Characteristics, Motivations, and Engagement with the CCTV Sports Application

The findings indicate that CCTV Sports App users represent a diverse demographic profile while demonstrating consistent engagement with sports-related digital media. The gender distribution was almost evenly balanced between male and female respondents, suggesting that the application appeals broadly across genders. The age distribution covered four generational groups ranging from 18 to 77 years old, including Generation Z, Millennials, Generation X, and Baby Boomers. This generational diversity indicates that the application is not limited to younger audiences but also attracts middle-aged and older users. In terms of educational background, most respondents held at least a college or bachelor's degree, reflecting a relatively well-educated user base. Occupational data further showed that government or state-owned enterprise employees, students, and private-sector employees constituted the largest user groups, indicating that the application attracts both working professionals and younger users in education.

Regarding usage patterns, more than half of the respondents reported using the CCTV Sports App on a daily basis, with most users spending between 10 and 60 minutes per day on the platform. These findings suggest that the application has a stable and active user base. Regular access to sports information, live events, and related content appears

to be a key factor supporting continuous engagement. Overall, the demographic characteristics and usage patterns indicate that CCTV Sports App users are diverse across age, education, and occupation but share a common interest in sports media consumption through digital platforms.

With respect to motivational factors, users demonstrated a generally high level of motivation to use the CCTV Sports App, with mean scores across motivational dimensions averaging approximately 3.7. Convenience emerged as one of the most prominent motivations, as users valued the ability to access sports news, event information, and scores quickly and easily. Information-related motivations, including information search and information sharing, were also strongly recognized, suggesting that the app serves as an important channel for obtaining timely sports information and facilitating communication among sports enthusiasts. Emotional motivations such as relaxation, entertainment, and emotional engagement were similarly evident, indicating that the app functions not only as an information source but also as a form of leisure and emotional enjoyment. Social motivations, including communication and relationship-building, further highlight the interactive nature of sports media consumption in digital environments.

User engagement levels were consistently high across multiple indicators. Respondents reported active participation in application activities, frequent interaction with sports content, and a strong intention to continue using the app. Engagement-related aspects such as content sharing, participation in events, and sustained usage reflect users' involvement with both the platform and the broader sports community. The relatively consistent standard deviation values across engagement indicators suggest that these perceptions are widely shared among users, reinforcing the view that the application effectively supports ongoing user involvement.

In terms of application features, respondents expressed strong recognition of several key functionalities of the CCTV Sports App. Personalized content recommendations received particularly positive evaluations, indicating that users appreciate tailored sports content aligned with their interests. Social media integration was also rated highly, suggesting that connectivity with broader social networks enhances user interaction and participation. Interactive features of the app were similarly recognized as important contributors to user experience, supporting engagement, communication, and participation in sports-related discussions. Overall, these features appear to play a significant role in shaping user perceptions of the application and facilitating sustained usage.

The analysis of personality traits, based on the Big Five dimensions, revealed moderate to high mean scores across openness, conscientiousness, extraversion, agreeableness, and emotional stability. These findings suggest that individual personality characteristics may influence how users interact with sports media applications. For example, openness and extraversion may encourage users to explore diverse sports

content and participate in social interactions, while conscientiousness and emotional stability may relate to consistent and purposeful media use. Although personality traits were not examined as causal factors in this objective, the results indicate their potential relevance in understanding variations in user experience and gratification.

Overall, the findings suggest that demographic characteristics, user motivation, engagement, application features, personality traits, and gratification are closely associated with the use of the CCTV Sports App. Users generally reported favorable perceptions across all measured dimensions, reflecting high levels of acceptance and gratification with the application. These results indicate that both individual characteristics and technological features contribute to the sustained use and positive evaluation of mobile sports media platforms.

2. Prediction of User Gratification with the CCTV Sports Application

To address Objective 2, multiple regression analysis was conducted to examine the predictive influence of motivation, user engagement, application features, and personality traits on user gratification with the CCTV Sports Application. Prior to regression analysis, key statistical assumptions—including linearity, normality of residuals, and multicollinearity—were examined. The diagnostic results indicated that all assumptions were satisfactorily met, supporting the appropriateness of multiple regression analysis for this dataset.

Table 1 Multiple Regression Coefficients Predicting User Gratification with the CCTV Sports Application

Predictor	Gratification in CCTV Sport Application (Y)			t	p	VIF
	b	SE	β			
Intercept	.075	.076		3.31	.001*	
Motivation (X_1)	.318	.048	.318	6.574	.001*	6.92
User Engagement (X_2)	.175	.046	.181	3.795	.001*	6.74
CCTV Sport Application Feature (X_3)	.281	.047	.267	5.938	.001*	5.98
Personality (X_4)	.200	.049	.205	4.078	.001*	7.45
Adjusted R^2 = .863; R^2 = .864; Durbin-Watson = 2.13. $p < .05$.						

As shown in Table 1, the final regression model demonstrated strong explanatory power, accounting for 86.4% of the variance in user gratification (R^2 = .864; Adjusted R^2 = .863, $p < .001$). This high level of explained variance suggests that the selected predictors collectively provide a robust explanation of user gratification in the context of mobile

sports media consumption. The Durbin–Watson statistic (2.13) further indicated no significant autocorrelation in residuals, supporting the reliability of the regression model.

Among the predictors, motivation (X1) emerged as the strongest determinant of user gratification ($\beta = .318, p < .001$). This finding indicates that psychological and functional motivations—such as convenience in accessing sports information, emotional enjoyment, information seeking, entertainment value, and opportunities for social interaction—play a central role in shaping user gratification. This result aligns with the Uses and Gratifications theoretical perspective, which posits that media users actively select platforms that best fulfill their informational, emotional, and social needs. In the context of sports applications, users appear to prioritize the ability to quickly access relevant content and experience emotional engagement with sports events.

Application features (X3) were identified as the second most influential predictor ($\beta = .267, p < .001$). Features such as personalized content recommendations, interactive functionalities, live streaming capabilities, and integration with social media platforms significantly enhance user gratification. This finding highlights the importance of technological design and user-centered platform development in contemporary digital media environments. Effective application features not only facilitate access to sports content but also enhance the immersive and interactive experience of users, thereby increasing overall gratification.

Personality traits (X4) also showed a significant positive influence on user gratification ($\beta = .205, p < .001$). This suggests that individual differences—particularly those reflected in the Big Five personality dimensions—affect how users perceive, engage with, and evaluate sports media applications. For example, individuals with higher openness or extraversion may be more inclined toward interactive features and social sharing, while those with higher conscientiousness may value structured information and reliability of content. These findings reinforce the notion that media gratification is not solely determined by technological factors but also by users' psychological characteristics.

Although user engagement (X2) was statistically significant, it demonstrated the comparatively weakest predictive effect ($\beta = .181, p < .001$). This suggests that while active participation, frequency of use, interaction with content, and continued platform engagement are important, they may function more as outcomes of gratification rather than primary drivers of it. In other words, engagement appears to be closely linked with underlying motivations and perceived application quality rather than independently shaping gratification levels.

Overall, the findings confirm that motivation, application features, personality traits, and user engagement jointly and significantly predict user gratification with the CCTV Sports Application. Motivation remains the most critical factor, followed by technological functionality and individual personality characteristics, while user engagement plays a

supportive but still meaningful role. These results provide strong empirical support for the predictive validity of the proposed model and contribute to a deeper understanding of how psychological, technological, and behavioral factors interact to shape user gratification in mobile sports media contexts. The findings may offer practical implications for application developers, media organizations, and sports communication practitioners seeking to enhance user experience and sustain long-term audience engagement in digital sports platforms.

Research Discussion

The findings of this study provide empirical evidence for understanding user behavior in digital sports media environments. The results indicate that mobile sports applications function not only as information sources but also as interactive platforms that support user engagement, emotional involvement, and social connectivity. These findings are consistent with previous studies emphasizing the importance of user-centered media consumption in digital environments (Katz et al., 1973; Sundar & Limperos, 2013).

The study demonstrates that user motivation plays a significant role in shaping gratification with the CCTV Sports Application. This finding is consistent with previous studies in digital media research, which indicate that motivations such as convenience, entertainment, and information seeking play a critical role in influencing user behavior and satisfaction in online media platforms (Rubin, 1984; Kim & Sundar, 2016). The prominence of motivation as the strongest predictor in this study further reinforces the importance of psychological drivers in shaping user experiences in mobile sports applications. Convenience, information seeking, emotional enjoyment, and social interaction emerged as key motivational drivers, which aligns with previous research suggesting that digital media users prioritize accessibility, immediacy, and personalization (Rubin, 1984; Kim & Sundar, 2016). The ability to access live sports events, real-time updates, and personalized content contributes substantially to users' perceived gratification. These findings reinforce the importance of understanding psychological motivations when designing digital sports media platforms.

User engagement was also found to have a significant positive relationship with user gratification. This result is in line with prior research suggesting that user engagement enhances user experience and strengthens users' connection with digital media platforms (Brodie et al., 2011). However, the relatively lower predictive strength of engagement in this study may indicate that engagement functions more as a supporting factor rather than a primary determinant of user gratification in the context of sports media applications. Engagement behaviors such as frequent platform usage, participation in interactive activities, and content sharing reflect users' cognitive and emotional involvement with the application. This finding is consistent with previous research indicating that interactivity

enhances user experience and strengthens users' connection with digital media platforms (Brodie et al., 2011). In sports media contexts, engagement is closely linked to community participation, live event interaction, and personalized content consumption.

Application features represent another important determinant of user gratification. The findings are consistent with earlier studies emphasizing the importance of technological features, such as personalization and interactivity, in enhancing user satisfaction and media experiences (Sundar & Limperos, 2013). This study extends previous research by demonstrating that application features remain a key determinant of user gratification specifically within mobile sports media platforms. Features such as personalized content recommendations, social media integration, and interactive functionalities significantly contribute to positive user experiences. These technological affordances enhance usability, facilitate communication, and enable tailored media consumption, which are critical factors influencing user gratification in digital media environments (Sundar & Limperos, 2013).

In addition, personality traits were found to influence user gratification with the CCTV Sports Application. This finding contributes to the existing literature by highlighting the role of personality traits in shaping user gratification, an area that has received relatively less attention in studies of digital sports media. It suggests that individual differences should be considered alongside technological and motivational factors in understanding user behavior. The results suggest that individual differences, as conceptualized by the Big Five personality framework, shape how users interact with sports media platforms. For instance, openness and extraversion may encourage exploration of diverse sports content and social interaction, while emotional stability may influence media use for relaxation and stress relief (McCrae & Costa, 1999). This finding underscores the importance of considering psychological diversity in digital media design and audience analysis.

Overall, the study confirms that motivation, user engagement, application features, and personality traits collectively influence user gratification in digital sports media platforms. This study contributes to the literature by providing empirical evidence on the combined effects of psychological and technological factors in mobile sports media environments. The strong predictive power of these variables suggests that both technological and psychological factors must be considered in developing effective sports media applications. These findings provide practical implications for media organizations and application developers in enhancing user experience, promoting engagement, and sustaining long-term user gratification.

Research Limitations

This study employed purposive convenience sampling, which may limit the generalizability of the findings, as the sample may not fully represent the broader population of users. In addition, the data were collected from respondents in Sichuan

Province, China, which may reflect specific regional characteristics. Therefore, the findings should be interpreted with caution. Future research is recommended to use probability sampling and more diverse populations to enhance generalizability.

Research Recommendation

1. Recommendations for Further Research

This study examined factors influencing user gratification with the CCTV Sports App, focusing on motivation, user engagement, application features, and personality traits. However, due to limitations in time and geographic scope, future research could explore additional factors such as data privacy, service quality, and users' technological adaptability, which may further affect user gratification. Moreover, comparative studies across different regions, age groups, or sports media platforms are recommended to enhance the generalizability of the findings and deepen theoretical understanding of user gratification in digital sports media contexts.

2. Practical Implications for the CCTV Sports Application Platform

The findings suggest that enhancing user motivation should be a key priority for the CCTV Sports Application. Platform developers should focus on improving convenience, accessibility, and timely delivery of sports content, as these factors strongly influence user gratification. Providing real-time updates, personalized notifications, and easy navigation can further support users' needs for efficiency and immediacy.

In addition, application features should be continuously improved, particularly in terms of personalized content recommendations, interactive functions, and integration with social media platforms. These features can enhance user experience and increase engagement by allowing users to interact, share content, and participate in sports-related discussions.

Given the influence of personality traits, the platform may also consider offering customizable user interfaces and content options that cater to different user preferences and behavioral patterns. For example, users with high social orientation may prefer interactive and community-based features, while others may prioritize informational or entertainment content.

Furthermore, although user engagement showed a relatively smaller effect, it remains an important supporting factor. Therefore, strategies such as gamification, reward systems, and interactive campaigns can be implemented to encourage continuous participation and strengthen long-term user engagement.

Overall, adopting a user-centered approach that integrates motivational, technological, and individual factors can help enhance user gratification and support the sustainable development of the CCTV Sports Application.

References

- Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *Journal of Service Research*, 14(3), 252–271. <https://doi.org/10.1177/1094670511411703>
- Deuze, M. (2021). Media use as experience: A qualitative approach to media theory. *Media and Communication*, 9(1), 7–16. <https://doi.org/10.17645/mac.v9i1.3526>
- George, D., & Mallery, P. (2010). *SPSS for Windows step by step: A simple guide and reference* (10th ed.). Pearson Education.
- Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *Public Opinion Quarterly*, 37(4), 509–523. <https://doi.org/10.1086/268109>
- Keane, M., & Flew, T. (2019). China’s digital media industries: Market growth, state control, and global ambitions. *Media, Culture & Society*, 41(6), 742–756. <https://doi.org/10.1177/0163443718823148>
- Kim, J., & Sundar, S. S. (2016). Mobile persuasion: Can screen size and presentation mode make a difference to trust? *Human Communication Research*, 42(1), 45–70. <https://doi.org/10.1111/hcre.12064>
- McCrae, R. R., & Costa, P. T. (1999). A five-factor theory of personality. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 139–153). Guilford Press.
- Rowe, D., & Xu, X. (2019). Sport, media, and China’s global ambitions. *International Journal of Sport Communication*, 12(1), 1–7. <https://doi.org/10.1123/ijsc.2019-0010>
- Rubin, A. M. (1984). Ritualized and instrumental television viewing. *Journal of Communication*, 34(3), 67–77. <https://doi.org/10.1111/j.1460-2466.1984.tb02174.x>
- Sundar, S. S., & Limperos, A. M. (2013). Uses and gratifications of social media: A review of recent studies. *Journal of Computer-Mediated Communication*, 18(4), 504–525. <https://doi.org/10.1111/jcc4.12017>
- Wohn, D. Y., Freeman, G., & McLaughlin, C. (2016). Explaining viewers’ emotional, instrumental, and financial support for live streamers. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (pp. 474–485). ACM. <https://doi.org/10.1145/2858036.2858386>
- Zhao, Y. (2008). *Communication in China: Political economy, power, and conflict*. Rowman & Littlefield.
- Zhao, Y. (2012). Understanding China’s media system in a world historical context. *International Communication Gazette*, 74(1), 1–14. <https://doi.org/10.1177/1748048511426997>