

Research on the Influence of Knowledge-based Paid Live Streaming on User's Self-education

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Abstract: With the rapid growth of digital media platforms and the surging popularity of live streaming, individuals now have unprecedented access to a vast array of educational content presented by experts in various fields. This emergence of knowledge-based paid live streaming as a novel learning approach has completely transformed traditional learning models, offering convenient and interactive learning experiences. This article delves into the extent to which knowledge-based paid live streaming influences self-education. The literature review section provides an overview of the background, current state, and context of knowledge-based paid live streaming, as well as the latest research findings in the field of self-education. To gauge the willingness and ability of participants to engage in self-education, as well as their viewing habits regarding knowledge-based paid live streaming, a questionnaire survey was employed as the research methodology. By examining the impact of knowledge-based paid live streaming on self-education, this study aims to shed light on the transformative potential of this innovative learning method. The findings will contribute to a deeper understanding of the role of digital media platforms and live streaming in facilitating self-education and empowering individuals to acquire knowledge conveniently and interactively.

Keywords: Knowledge payment, livestreaming, self-education, self-regulation

1. Introduction

The "2018 China Online Livestreaming Market Operation and Business Model Change Monitoring Report" shows that the knowledge-paying group among consumers will reach 200 million by 2020 [1]. Knowledge payment is an emerging content payment model that involves not only the charging of knowledge but also the use and dissemination of knowledge. Such data show that the market for live streaming combined with education is developing rapidly and becoming a popular learning method. According to Dunn, it is important to use instructional strategies to address different learning styles. For example, visual learners may benefit from visual aids, diagrams, or videos, while auditory learners may prefer lectures, discussions, or audio recordings. Kinesthetic learners may benefit from hands-on activities, role-playing, or physical demonstrations. Furthermore, teachers need to be flexible and rely on factors like students' interests, abilities, and cultural backgrounds. Knowledge-based paid live streaming as a burgeoning learning method that combines visual and interactive elements may be suitable for certain learners. Researchers claimed that according to self-determination theory, individuals are more likely to engage in self-determined behavior and

experience greater well-being when their needs are related [2]. Relatedness refers to the need for social connections and a sense of belonging. Knowledge-based paid live streaming specifically discusses knowledge in a certain field, can gather learners with the same interest to communicate with each other, and creates a learning atmosphere with pertinence and a sense of belonging that meets the needs of relatedness. Additionally, a study stated that the influence of self-efficacy on learning is that support and encouragement in the learning environment can improve learners' sense of self-efficacy and thus promote self-education [3]. Consequently, this research hypothesizes that knowledge-based paid live streaming can positively influence learners' self-educational willingness and capacity. Through the method of a questionnaire survey, the situation of users watching paid live broadcasts of knowledge and their self-education level were explored to study the impact of paid live broadcasts of knowledge on users' self-education level.

2. Literature review

Today, live streaming has become a trend, and knowledge-based paid live streaming has also followed the trend and become one of the most mainstream learning methods for learners. According to social learning theory, when consumers watch a live broadcast and see that the speaker has mastered a certain skill or knowledge proficiently, they will also have a yearning for knowledge in fields that they are interested in [4].

By consulting the literature, the author learned a lot of theories related to self-education. The first is the philosophical basis for self-education. According to the researchers, if education is to be effective, it is far from enough to rely solely on teachers or external educational conditions and must rely on the subjective efforts of the educational subject [5]. It is necessary to adhere to the dialectical relationship between external and internal factors and stimulate learners' active and autonomous characteristics. The second is the psychological basis of self-education. According to Maslow's hierarchy of needs, self-actualization is identified as the highest level of need. Maslow revealed that people's needs are the internal motivation of self-education. The higher the level of learners' needs, the more urgent and conscious they are of self-education. The third is the pedagogical foundation of self-education. According to Suhomlinski's self-education theory, only the education that can stimulate learners to carry out self-education is real education [6].

Although many scholars are studying knowledge-based paid live streaming and self-education, there are few studies on the influence of knowledge-based live streaming on consumers' self-education willingness and ability. My purpose is to fill the gap in this field.

The study of the "Impact of knowledge-based paid live streaming on self-education" holds significant academic and societal implications. From an academic perspective, this research sheds light on the disruptive influence of knowledge-based paid live streaming on traditional self-education models, providing a deeper understanding of emerging educational formats. It also enables the evaluation of educational effectiveness, including knowledge acquisition, skill enhancement, and motivation, offering empirical evidence for educational research. Additionally, the study explores the impact of knowledge-based paid live streaming on educational equity and inclusivity, addressing disparities in accessing educational resources among different groups and informing equitable education policies.

On a societal level, paid live streaming contributes to education accessibility and the concept of lifelong learning, providing convenient and flexible learning opportunities for individuals. This promotes the overall knowledge and skill levels of society [7]. Moreover, it plays a role in career development and entrepreneurial opportunities by enabling individuals to acquire specialized knowledge and skills, enhancing their competitiveness in the job market, and creating more employment and entrepreneurial prospects. Furthermore, paid live streaming facilitates the

preservation and promotion of traditional culture, arts, and other domains, fostering cultural diversity and cross-cultural exchanges.

In conclusion, the study of "knowledge-based paid live streaming on self-education" has both academic and societal significance. It provides valuable insights for educational reforms and social development, addressing the changing landscape of education and its broader implications for individuals and society.

3. Research design

In this study, the target population consists of individuals who are actively engaged in online social organizations in a specific field and student communities on university campuses. These individuals are likely to have a strong interest in self-education and are potential consumers of knowledge-based, paid live-streaming content. To assess the participants' viewing status of knowledge-based paid live streaming and their willingness and ability to educate themselves, a questionnaire survey was conducted. The questionnaire was designed using a five-point scale, allowing participants to choose from options such as "strongly agree, agree, not sure, disagree, and strongly disagree" for the multiple-choice questions. This approach enables the quantification of participants' responses, providing a more objective analysis of their attitudes and behaviors. The designed questionnaires were distributed to the target population through online platforms and university channels. Stratified sampling based on age and gender was not employed in this study, as the focus was on capturing a diverse range of perspectives and experiences within the target population.

After collecting the questionnaire responses, the data was analyzed using the Statistical Package for the Social Sciences (SPSS). A correlation analysis was conducted to examine the relationships between different variables, such as the participants' viewing frequency and duration of knowledge-based paid live streaming and their willingness and ability to educate themselves. This analysis will yield correlation coefficients, indicating the strength and direction of the relationships between the variables under investigation.

The content of the questionnaire is divided into two directions. On the one hand, it is used to evaluate the user's self-educational ability. Four questions are used to test the participant's self-education intention, and four questions are used to test the participant's self-education ability. On the other hand, it is used to evaluate the situation of users watching paid live broadcasts of knowledge, including the frequency, length, and type of viewing.

The purpose of this questionnaire is to quantitatively evaluate participants' knowledge of paid live broadcast viewing status and self-education willingness and ability, according to the "User Survey Questionnaire of Educational Short Video Knowledge Paid Content Platform" [8] and the "Self-education Status Quota Questionnaire for College Students" adapted [9]. When collecting answers, the study used an anonymous questionnaire to ensure the personal privacy and information security of the participants.

4. Results

Table 1: Variable correlation data

Pearson correlation	total self-education test score	total self-education willingness score	total self-education ability score	single viewing time	weekly viewin-g time	Understan ding degree	viewing frequency	gen - der	age
	1	.724**	.898**	.150	.081	.210	-.006	-.038	-.168

Table 1: (continued).

total self-education willingness score		1	.358**	.105	-.001	.138	-.188	-.201	-.118
total self-education ability score			1	.123	.103	.198	.103	.078	-.134
single viewing time				1	.467**	-.085	.175	.032	.015
weekly viewing time					1	.066	.285*	.119	-.013
Understanding degree						1	.215	.369*	-.021
viewing frequency							1	.215	.204
gender								1	.377*
age									1

In Table 1, * represents a significant correlation, and ** represents a very significant correlation.

It can be seen from the data in the form that the evaluation indicator "I have a certain understanding of paid knowledge live broadcasting" is related to gender. This is an unexpected finding. This finding shows that there is a significant difference between men and women in their understanding of paid knowledge from live broadcasts. The full score for this criterion is 5 points, with the average score for women being 3.61 points and the average score for men being 4.19 points. In addition, the correlation between single viewing time and weekly viewing time is high. Participants who stay longer on pay-per-knowledge live broadcasts tend to watch longer hours per week. It shows that most participants who have watched for a long time prefer and are accustomed to learning by watching paid live broadcasts of knowledge. Significant differences in age and gender among participants can also be seen in the form. This may be because among the communities where the study distributed the questionnaire, there are more women in student communities on university campuses, and there are more men in communities organized by social organizations. The study did not consider this issue before issuing the questionnaire, resulting in a sample that was not random enough. It will make improvements to this issue in the next study.

Next, The participants were divided into two groups based on their weekly viewing time for T-text. The division standard was the median of the 54 answers, which was 61 minutes. Among them, 30 people watched for less than 61 minutes per week, and 24 people watched for more than 61 minutes per week. The bar chart below compares the two groups of participants: Comparing the data in the figure, it is significant that there is no obvious difference in the average score of the self-education test between participants who watch paid knowledge live broadcasts for a long time every week and those who watch paid knowledge live broadcasts for a short time every week.

5. Discussion

"Understanding of knowledge-based paid live streaming" is significantly related to gender but not significantly related to age. This may be related to the difference in learning styles between men and women. According to a study, males are more likely to use audiovisual learning methods, such as

watching videos, images, and presentations, because of their superior visual-spatial abilities [10]. Learning methods such as paid knowledge live broadcasts integrate videos, images, and presentations, which can provide more visual information and may better help male learners understand and remember learning content. This may be one of the reasons why men in the study are more familiar with learning methods such as knowledge-based paid live streaming. In addition, according to social role theory, society's expectations and role divisions for men and women in different fields will affect their interests and preferences. In traditional social concepts, women are expected to focus more on appearance, fashion, and areas of life, and therefore may be more inclined to watch content related to these areas [11]. Therefore, when using functions with a live broadcast platform, most women may choose to stay longer in the live broadcast room with content related to beauty and skincare product sales, beauty skills teaching, etc. According to the 2022 beauty short video and live broadcast e-commerce report, female consumers account for 89% of all consumers. This may also be one of the reasons why women know less about paid knowledge from live broadcasts.

6. Conclusion

Based on the results obtained using questionnaire research methods, the conclusion is that paid live streaming of knowledge has no significant impact on self-education. This study collected data from 54 participants and conducted a detailed analysis of their viewing status of paid knowledge live broadcasts, willingness, and ability for self-education to understand the potential impact of paid knowledge live broadcasts on self-education.

First, it is found that there is no significant correlation between participants' learning time on the knowledge-based paid live-streaming platform and their self-education level. Although the paid knowledge live broadcast platform provides rich learning resources and opportunities, participants did not show a higher willingness to educate themselves or a more positive attitude towards learning. Secondly, there was no significant correlation between participants' knowledge of paid-for-knowledge live-streaming platforms and their self-education levels. This shows that although the knowledge-paid live broadcast platform may provide high-quality educational content, it does not have a direct positive impact on participants' self-education.

In summary, our research results show that knowledge-based paid live streaming has no significant impact on self-education. However, it should be noted that this conclusion may be affected by the limitations of the research method and sample limitations. In terms of research methods, it may be necessary to conduct purposeful observations of participants with different qualities or educational levels. Regarding the sample, it may be necessary to adopt stratified sampling according to gender and age and expand the sample size to further explore the impact of knowledge-based paid live streaming on self-education.

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