

Popular Movie Audience Analysis-Based on Multi-Dimensional

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Abstract: Based on the background of fierce competition and technological innovation in the film industry, this study conducted a multidimensional analysis of movie-watching behaviors, preferences and consumption patterns of audiences of different ages and genders through a questionnaire survey. The results show that women aged 18 to 30 tend to watch movies more frequently, preferring 90–120-minute movies and cinema experiences, while men prefer online platforms and shorter films. The frequency of movies going has declined overall in the 31 to 45 age group, but the gender difference is still significant. The data show that young audiences prefer entertainment films such as romance and comedy, while the elderly tend to in-depth works such as documentaries. Moreover, consumer behavior and social media engagement show double differences between gender and age. The research suggests that film production should adjust film types, release platforms and promotion strategies according to the characteristics of target audiences.

1 INTRODUCTION

In recent years, the competition in the film industry has become more and more fierce, and it has gradually developed towards commercialization. At the same time, due to the continuous progress of scientific and technological means, filmmakers are forced to invest in less cost and use more means to present some fictional scenes that cannot be realized in the real world. For example: Avatar, Alien, Fantasy of PI, and the rapid development of streaming media help movies to have a more sustainable income source, the development of social media makes the promotion of movies easier, the publicity effect is more significant, and the marketing methods of movies become more diversified. Nowadays, watching movies has become an entertainment and leisure activity for audiences under high pressure. At the same time, audiences have more freedom to choose movies. They can choose to watch a movie at any time and in any form. This paper analyzes the choice tendency of different age groups and different genders in terms of film duration, type and viewing mode.

The purpose of this study is to show that the film project should consider the age of the audience, the choice preference of the film type and the consumption habit in the aspects of plot design and marketing activities, to increase the income of the film project.

2 METHODOLOGY-QUESTIONNAIRE

The research method of this study took the form of a questionnaire survey. A well-designed questionnaire helps to standardize the data, and when the questions are clearly structured, rigor can improve the validity of the results. At the same time, the structured characteristics of the questionnaire are helpful for data management to reduce differences (Taherdoost, 2022). In this paper, a total of 78 questionnaires were collected.

This questionnaire is mainly divided into six parts. The first part is the basic information statistics mainly collected age and gender, which is used to analyze the influence of age and gender on movie-watching habits, preference types and consumption behaviors. The second part is movie-watching habits, which aims to understand the interviewees' movie-watching frequency, movie-watching method and time preference. The questions are as follows: monthly movie-watching frequency, major movie-watching platforms (movies, streaming media, TV, etc.), movie length, and main viewing time (day, night, weekend, etc.) The reason for designing this part of the question is that viewing habits can translate audience's movie consumption behavior and trend, and movie duration preference may be related to the change of the modern audience's attention span. The third part is the viewing

preference. The purpose of this part is to analyze the audience's choice preference for film types. Through the analysis of preference behavior, it is helpful to understand the influencing factors of the audience's choice of film type, which is helpful to the formulation of film marketing strategy. At the same time, the selection preference of movie types can be cross analyzed with the basic statistical information to find the preference difference of different types. The fourth part is to study the audience's paying habits and their choice of viewing methods. By understanding consumers' movie consumption habits through this part of the problem, film companies can develop reasonable pricing strategies to achieve more sustainable income. The purpose of the fifth part is to investigate the respondents' willingness to participate in social behaviors for film projects and the influence of social behaviors on audience's movie-watching choices. The reason for designing this part of the problem is that word-of-mouth and social marketing have an increasing influence on the movie box office, and understanding the social activities of the audience can help optimize the publicity strategy and better return on investment. The sixth part is designed for the trend evaluation of the film industry, which can understand the audience's evaluation of the future trend of the film industry. This question can analyze the development trend of the film industry from the feedback of the audience and reflect the audience's confidence in the development of the film industry, so that the film company can better adjust the development strategy.

3 RESULTS

3.1 Viewing Behavior

In the 18 to 30 age group, as shown in Figure 1, female moviegoers are more frequent, with 61.4% of women watching 13 movies per month, compared to 57.14% of men who watch one to three times per month. As shown in Figure 2, women preferred longer films, with 70.18% choosing films between 90 and 120 minutes. Men were more likely to watch films of 90 to 120 minutes, accounting for 71.43%. As shown in Figure 3, in terms of viewing platforms, men prefer online video platforms (57.14%), while women prefer theaters (52.63%). As shown in Figure 4, in terms of viewing time, both men and women focus on evening and weekend, but men's choices are more dispersed, and women prefer weekend (35.09%) and evening (33.33%). Overall, female audiences show a higher frequency, longer film duration and cinema

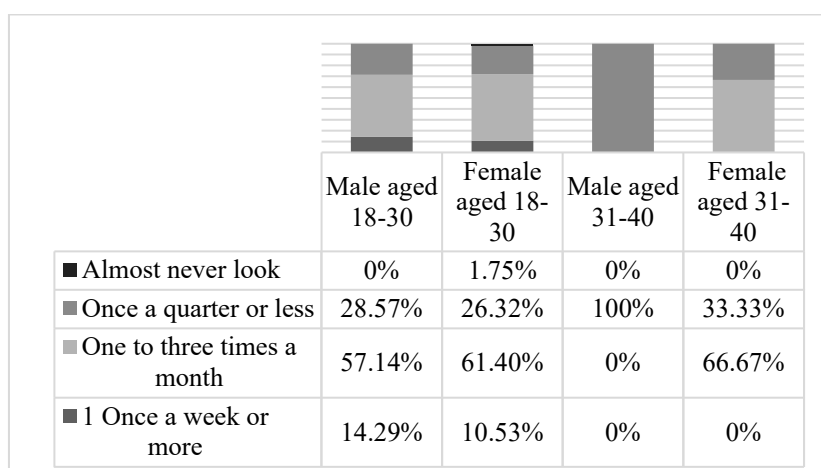
preference, while men prefer online platforms and shorter films.

As shown in Figure 1, in the 31 to 45 age group, male and female moviegoers generally went to the movies less frequently. All men choose once a quarter or less, while 66.67% of women watch 13 times a month, 33.33% choose less frequency, indicating that women still maintain a certain frequency of watching movies. As shown in Figure 2, in terms of platform selection, men's preferences are more balanced, 50% choose movie theaters and online video platforms, and women all choose movie theaters, indicating that women prefer theater experience. As shown in Figure 3, in terms of film length, 50% of men and 66.67% of women choose 90-120 minutes, which is more balanced. In terms of viewing time, both male and female viewers tend to watch movies in the evening and on weekends, showing relatively consistent viewing time preferences.

Overall, young female viewers are more likely to use online video platforms, while young men maintain a more balanced choice between movie theaters and online video platforms. The frequency of viewing is higher among younger women, especially in the 18 to 30 age group, with women viewing significantly more movies per month than men. In the group over the age of 31, both men and women, the frequency of watching movies is generally decreased, especially men, significantly lower than women. Women are more inclined to watch movies of 90 to 120 minutes, and they have higher emotional involvement in watching movies, which leads them to have a higher frequency of watching movies and a preference for longer movies. At the same time, women are more inclined to watch movies in theaters, which can provide more rich sensory services, which also conforms to the trend of women's behavioral preference (Rathnayaka et al., 2021a). Men, on the other hand, are less emotionally demanding and tend to choose shorter or more flexible viewing behaviors (Sahu et al., 2022).

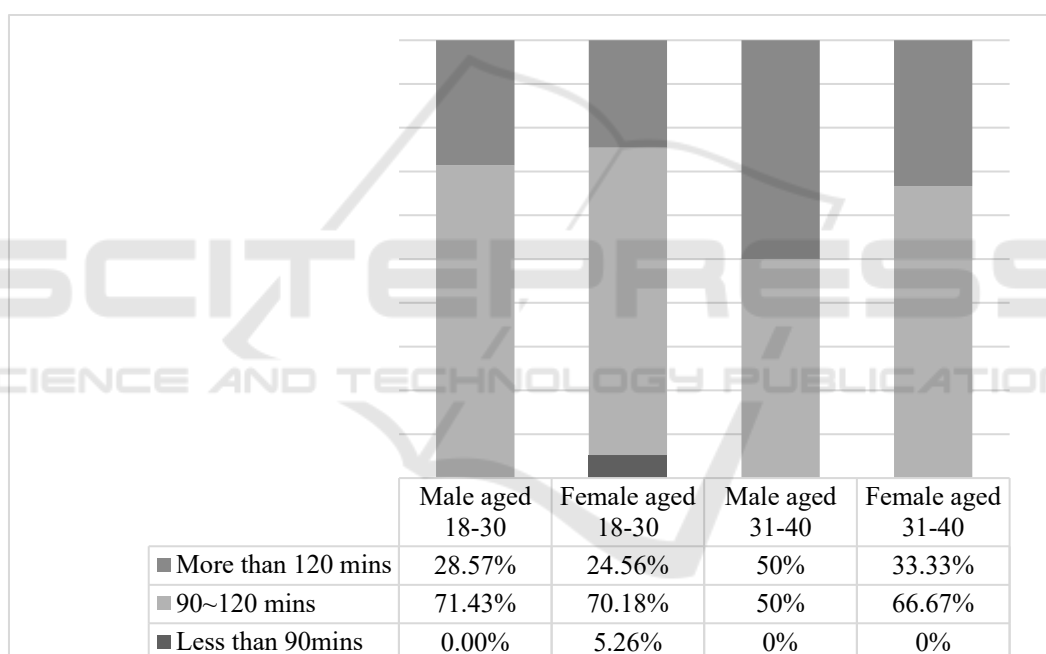
3.2 Preferences

As shown in Figure 5, in the 18 to 30 age group, female viewers prefer romantic films and comedies, 73.68% and 85.96% respectively, while men prefer action films and comedies, but the proportion is slightly lower. As shown in Figure 6, women pay more attention to story and word of mouth/rating when choosing a film, 45.61% and 31.58% respectively, while men pay less attention to story, only 28.57%. As shown in Figure 7, in terms of film sources, 50% of respondents said they had no preference for local or foreign films, indicating a



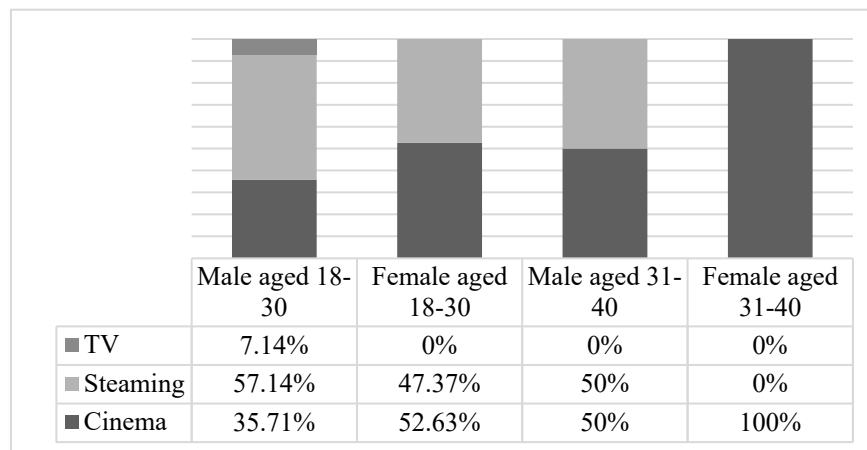
Alt Text for the figure: This figure reflects the distribution of viewing frequency of men and women in four age groups.

Figure 1. Monthly viewing frequency.



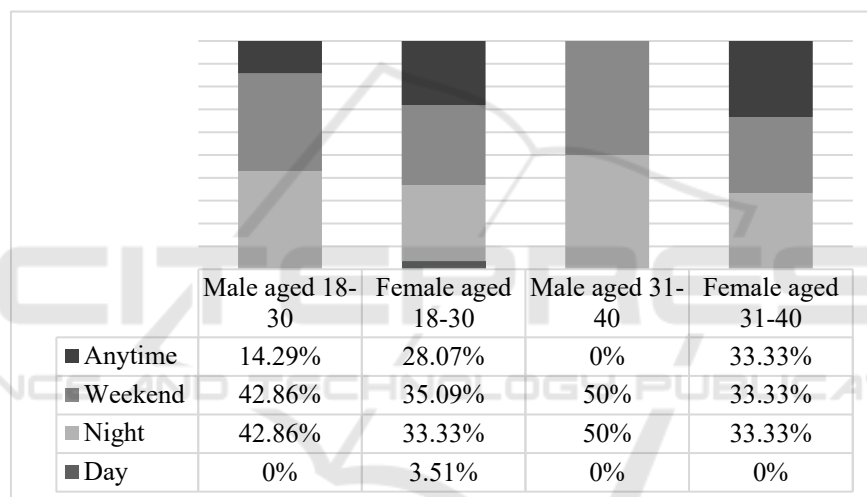
Alt Text for the figure: This figure reflects the distribution of viewing time of men and women in four age groups.

Figure 2. Choice of film duration.



Alt Text for the figure: This figure reflects the distribution of viewing channels for men and women in four age groups.

Figure 3. Choice of viewing platform.



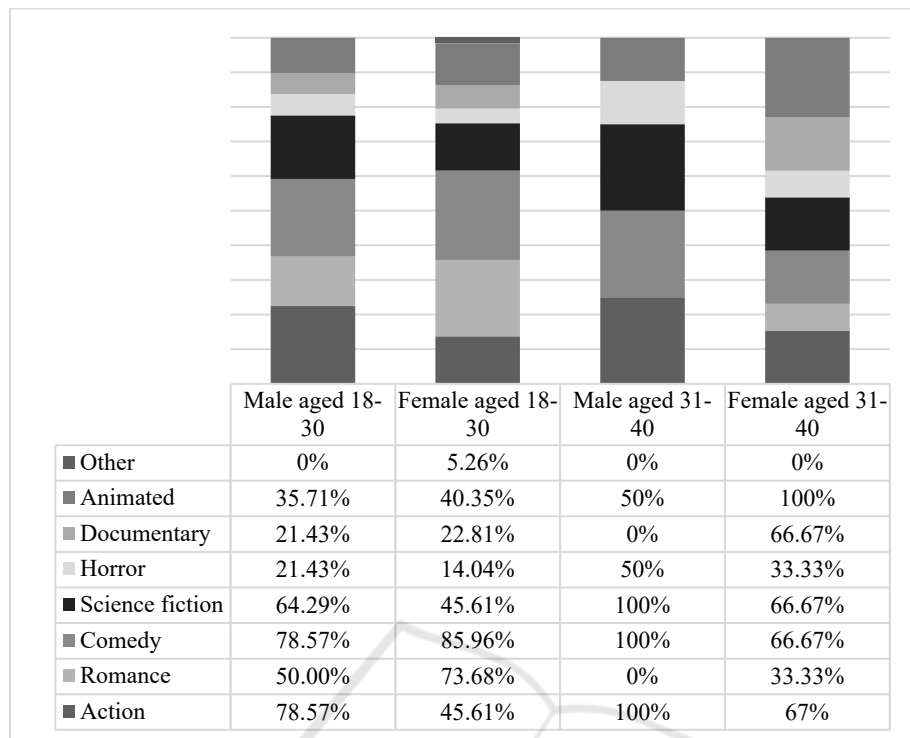
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Figure 4. Choice of viewing period.

more relaxed choice. As shown in Figure 8, women are more likely to get information about movies through social media, with more than 85 percent choosing social media compared to 78.57 percent of men. In terms of viewing locations, women prefer to watch at home, while men maintain a more balanced choice between the cinema and home.

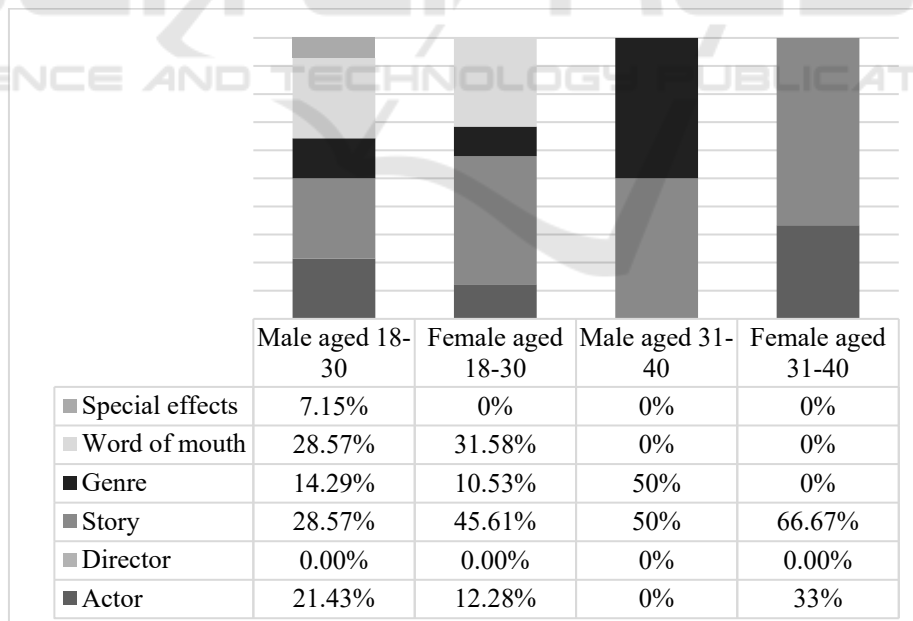
In the 31 to 45 age group, as shown in Figure 5, male respondents have a significant preference for action movies and comedies, especially action movies, with a choice rate of 100 percent. Women prefer documentaries, indicating that as they age, they tend to choose films with more depth and realism. As shown in Figure 6, both men (50%) and women (66.67%) attach less importance to the story. As shown in Figure 7, in terms of film sources, men

prefer foreign films (50%), while women are more likely to watch local films (66.67%). Social media use is higher in this age group, but overall engagement is lower, indicating that this group pays less attention to film reviews than younger people. When it comes to viewing locations, men prefer theatrical movies, while women are more likely to watch them at home.



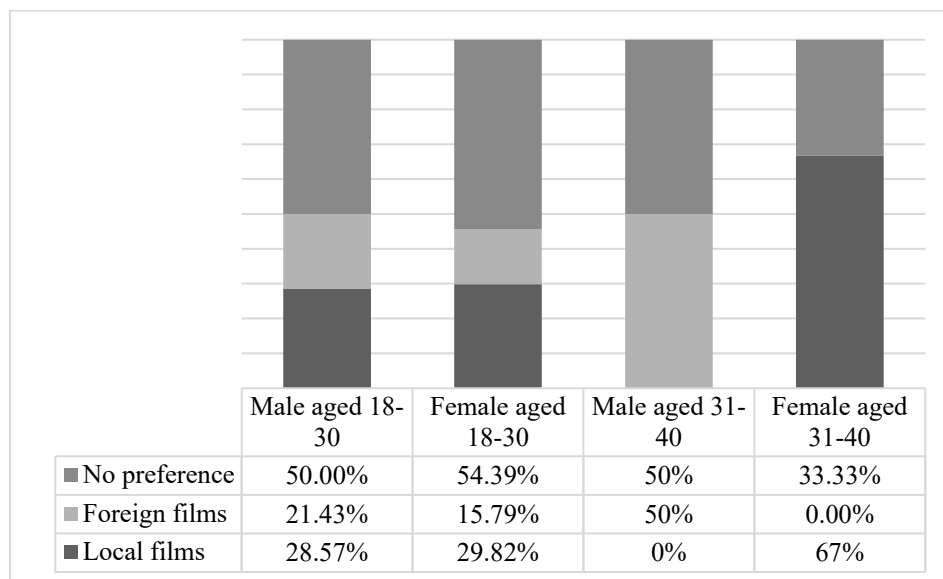
Alt Text for the figure: This picture reflects the distribution of the types of TV dramas watched by men and women in four age groups.

Figure 5. Choice of viewing type.



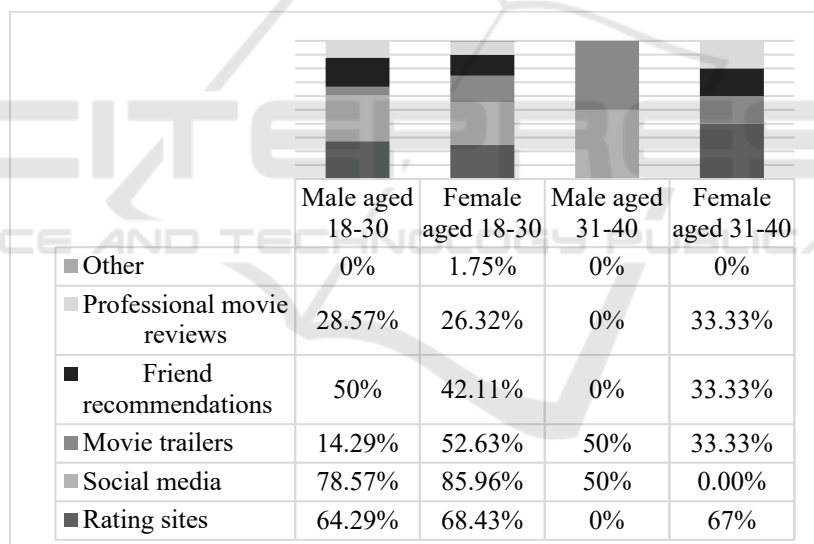
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Figure 6. Factors influencing film selection.



Alt Text for the figure: This picture reflects the distribution of film and television sources watched by men and women in four age groups.

Figure 7. Film source region.



Alt Text for the figure: This picture reflects the distribution of channels for men and women in four age groups to watch movies and TV.

Figure 8. Understanding channel of film evaluation.

Overall, young respondents preferred more entertaining films, while as they grew older, their preferences shifted to more in-depth films, and gender differences were more obvious in different age groups. Story is the most important factor in all age groups, but especially in younger age groups. Young people have less preference for specific films, while the gender difference of the elderly is more prominent in the choice of local and foreign films, with men

preferring foreign films and women preferring local films. Younger women used more varied approaches to getting film reviews, while older respondents were more aloof. Younger audiences prefer to watch movies at home, while middle-aged men are more interested in cinema. Social media is an important factor influencing the film selection of young audiences, especially female audiences are more dependent on social media for information (Rubin et

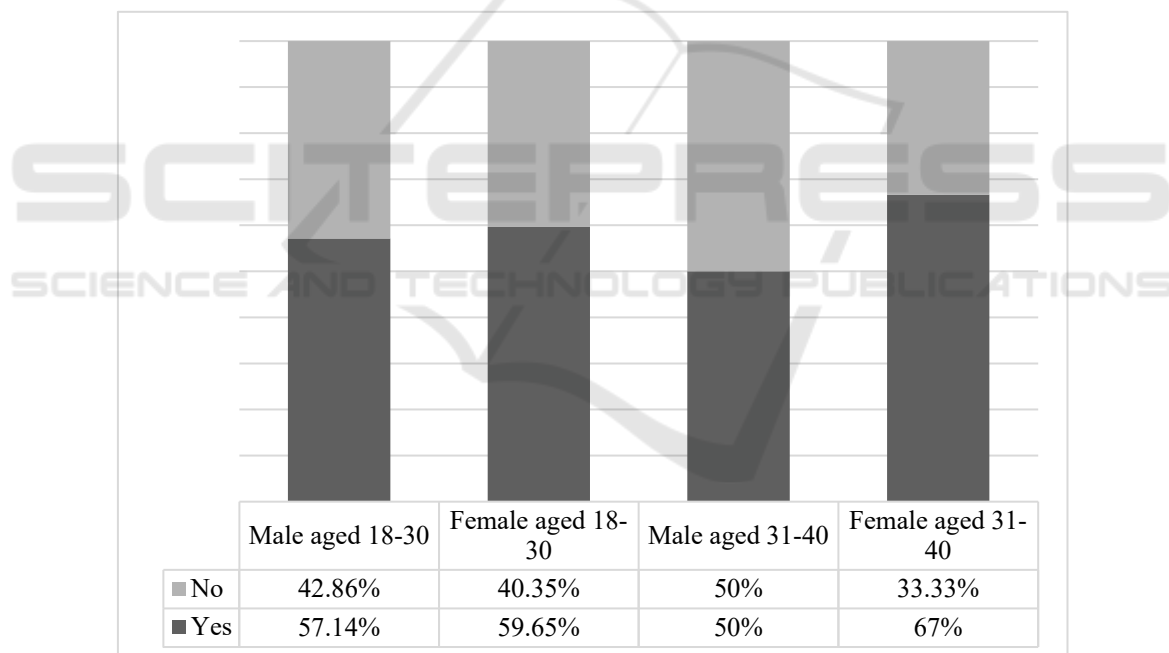
al., 2022). Young women prefer romantic movies and comedies, while men prefer action movies. At the same time, the audience's preference for film types of changes with the growth of age. The young audience is more inclined to entertaining movies, while the old audience is more inclined to documentaries and more in-depth movies. Young audiences are more likely to watch movies at home (Tontini et al., 2022).

3.3 Consumption Patterns

In the age group of 18 to 30 years old, as shown in Figure 9, women's willingness to pay is slightly higher than that of men, 59.65% and 57.14% respectively, and women prefer to pay 0-40 yuan. As shown in Figure 10, women are more engaged on social media, with 66.67% occasionally participating in discussions, while men share occasionally at 78.57%. As shown in Figure 11, both sexes rely on social media comments, 64.29% for men and 59.65%

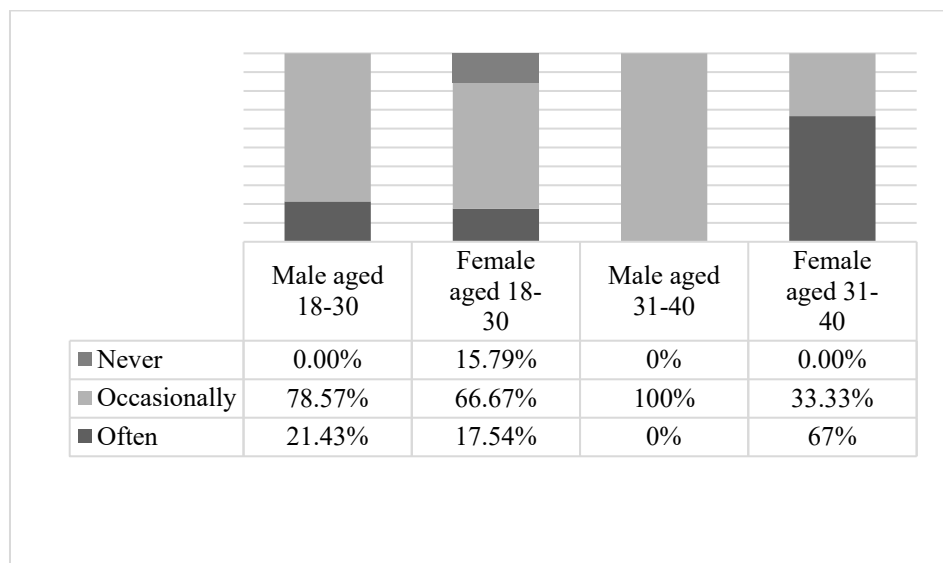
for women. As shown in Figure 12, women are more enthusiastic about participating in the film community than men (78.95% vs. 64.29%). In addition, as shown in Figure 13, women have a higher level of confidence in the market, with 50.88% of women being optimistic compared to 42.86% of men.

In the age group of 31 to 45, as shown in Figure 9 the willingness of men and women to pay is 50% and 66.67%, respectively, and most of them choose to pay 0-40 yuan. As shown in Figure 10, men completely choose to participate in social media discussions occasionally, while women participate 66.67% often and 33.33% occasionally. As shown in Figure 11, men and women are less dependent on social media comments, with 50% of men and 66.67% of women referring to them occasionally. Overall, participation in the film community in the 31 to 45 age group is extremely low, and regarding the perspective on the film market, as shown in Figure 13, all men choose "average," while 33.33% of women are optimistic.



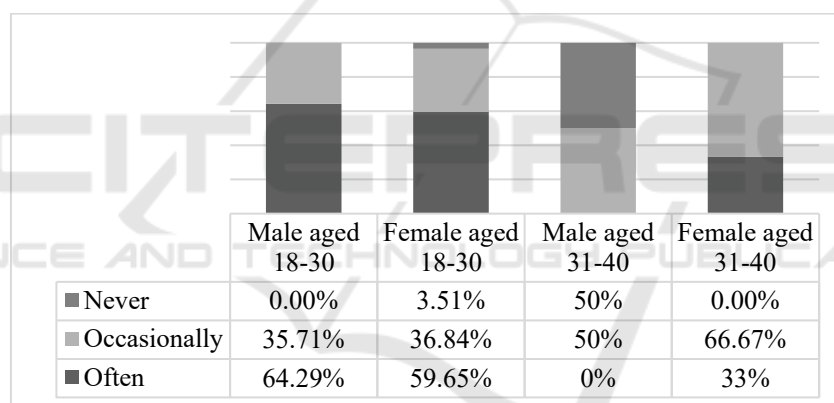
Alt Text for the figure: This picture reflects the willingness of men and women of four age groups to pay for watching movies.

Figure 9. willingness to pay extra fees.



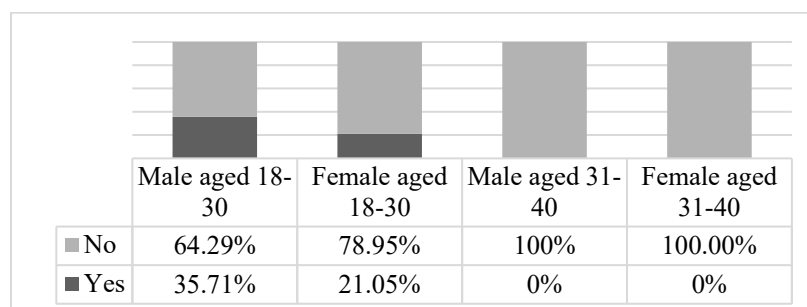
Alt Text for the figure: This picture reflects the distribution of men's and women's willingness to share with others after watching movies in four age groups.

Figure 10. Willingness to participate in community discussions after watching a film.



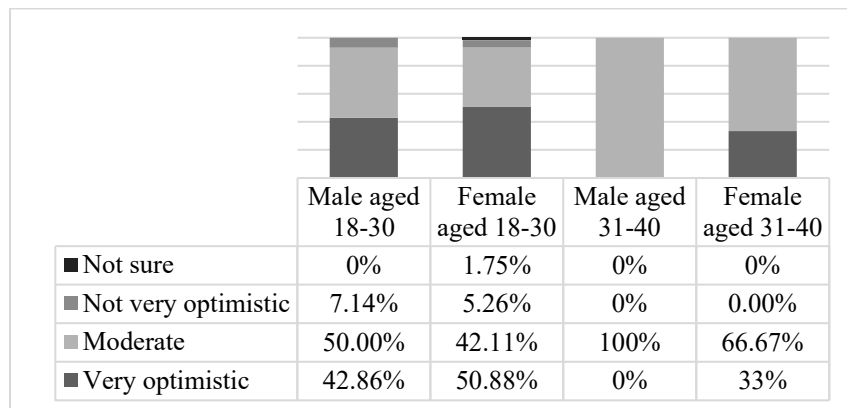
Alt Text for the figure: This picture reflects the situation that men and women of four age groups are influenced by movie-watching comments.

Figure 11. The degree of influence of social media comments on movie-watching intention.



Alt Text for the figure: This picture reflects the distribution of male and female participation in film and television interaction in four age groups.

Figure 12. The willingness to participate in the interaction of the film community.



Alt Text for the figure: This picture reflects the views of men and women of four age groups on the development of movies.

Figure 13. The recognition of the development prospects of the film market.

Overall, younger age groups (18 to 30 years old) are more open to paying extra, while older age groups are more resistant. Younger viewers are more likely to engage in social media discussions, and young women are the most active in sharing film recommendations. Younger people, especially women, rely more on social media reviews to make decisions about watching movies, while older groups rely less on those reviews (Rubin et al., 2022). Participation in film-related communities is dominated by young women, with less participation from other age groups and genders. Young women are optimistic about the film market, while men and middle-aged people are more conservative.

4 DISCUSSION

4.1 Implications for Producers

The choice of film genre can be optimized for different ages and genders. Female audiences aged 18 to 30 prefer romantic films (73.68%) or comedy films (85.96%), while male audiences prefer action films. Women aged 31 to 45 prefer documentaries, while men still prefer action films. Therefore, youth love films and urban romance films should mainly target the market of women aged 18 to 30, increasing women's communication potential to narrative, emotional resonance and social communication. Action films focus on the core male market but can add more plot depth and character development to suit the needs of men over 30. At the same time, pre-heated content is released on social media in advance to encourage UGC communication, enhance audience participation on social platforms, strengthen word-of-mouth management on social media, and actively

respond to audience feedback to increase audience interaction experience and improve audience communication. Social interaction can not only increase the audience's willingness to buy tickets but also promote spontaneous communication and enhance the film market influence. When a film has both high personal interaction and active social interaction, it performs better at the box office (Castillo et al., 2021). In the highly competitive schedule, star effect can be more effective in attracting audiences, but eWOM transmission will be limited, while in the film click, word-of-mouth marketing has a greater impact on the long-term performance of the film (Fan et al., 2021). Big-budget films should choose a more competitive schedule, maximize the exposure of star effect, and attract young people to watch movies, while feature films or documentaries can choose to be released in standalone, use eWOM communication to achieve long-term box office revenue, and at the same time, accurately deliver to different audience groups.

4.2 Implications for Platforms

For online movie viewing platforms, data-driven content recommendation capabilities should be improved, and personalized movie recommendations should be made by analyzing user behavior to enhance user experience satisfaction. For example, Netflix user data analysis strategy: Netflix relies on user behavior consideration, such as viewing time, completion rate, etc., to optimize personalized recommendations and carry out unique recommendation cover design (Wayne, 2021). At the same time, a selective transparency strategy should be adopted to regularly promote the most popular movie and series data, so as to increase user trust in the platform and promote social communication. For

example, Netflix has gradually begun to selectively promote the data of some popular works in recent years to attract more users to subscribe (Wayne, 2021). But the theater experience still has advantages, but it needs to increase the strategy to compete with streaming media. Research shows that despite the growing popularity of streaming, the social nature of the immersive experience in theaters remains a strong competitive advantage (Tontini et al., 2022). Therefore, theaters should further enhance the difficult immersive devices, such as adding IMAX, Dolby Atmos, 4K and other technologies, to attract users willing to pay for a high-quality movie-watching experience. At the same time, the integration strategy of online and offline is the main trend in the future. Audiences have improved their acceptance of diversified movie-watching modes, and more and more audiences switch between theaters and media platforms, so as to choose a more suitable way for themselves (Tontini et al., 2022). At the same time, the movie-watching platform can cooperate with the theater lines to pay for a mixed model of on-demand and theatrical premieres to meet different user needs.

4.3 Marketing Strategies

The official government should reasonably combine part of the promotion power of social media. The official social media activities of a movie can improve the intention of buying tickets by changing the audience's attitude, while the third party can improve the intention of buying tickets by attracting the audience's attention and promoting a positive attitude. Meanwhile, under the same marketing intensity, local movies will have better marketing effect when they are released in popular holidays, which further affects the audience's payment. At the same time, the central path of social media promotes rational purchasing decision, while the peripheral path influences purchasing behavior through social identity (Liao & Huang, 2021). The consumption intention of the movie audience has an intermediary effect on the box office, that is, social media activities affect the increase of the audience's consumption intention and lead to the increase of the box office. However, the official promotion of social media should decide the scope, intensity and method of promotion according to the release time and the life cycle of the product. Social media marketing has a non-linear effect before and after the movie is released, and excessive marketing may lead to the audience's doubts about the quality of the movie and

reduce the final purchase willingness (Sun et al., 2020).

5 CONCLUSION

This paper makes a multidimensional analysis of moviegoers by means of questionnaires, including movie-watching preference, movie consumption behavior, viewing behavior, audience's willingness to spread movies and episodes, and audience's development of the film industry. Through the investigation, it is concluded that audiences of different ages and genders have significantly different preferences for movies, so it is suggested that film producers design different types of movies according to audiences of different age groups, design more film and television and screening modes, and achieve targeted offline screening and online promotion, and make good use of social media to attract audiences to further marketing and sharing of films and TV series. There are still some objective problems in this study, such as insufficient distribution of questionnaires, small sample size, resulting in errors in data analysis, and too single age level of research objects, resulting in insufficient objective research results. This study can be further improved, the sample size should be increased, and the way and scope of questionnaire delivery should be broadened.

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