

A Study of The Fan Economy of Idol Industry in Chinese Mainland

Yuhe Liu *

College of Journalism and Cultural Communication, Zhongnan University of Economics and Law,
 Wuhan, Hubei, China

* Corresponding Author Email: 202221120021@stu.zuel.edu.cn

Abstract. The development of China's idol industry began much later than that of Japan and South Korea. However, in recent years, it has grown rapidly in the mainland market. Unlike traditional celebrities active in film and television and in the music industry such as actors or singers, the commercial logic of idol groups not only reflects the efficient operation of capital but also exposes hidden risks stemming from over-reliance on fans' irrational consumption, which is particularly evident in the current mainland idol industry. Previous studies have shown that fans' consumption behaviors are closely tied to their psychological motivations. Businesses capitalize on these motivations to generate substantial profits. This study focuses on the consumption behaviors and patterns of fans in China's mainland idol industry, analyzing the prevalent fan economy business model and its associated risks. By examining fan activities, the research explores the operational mechanisms of the fan economy and its impacts on both the idol industry and fan communities.

Keywords: Mainland China, Idols, Fan Economy.

1. Introduction

China's idol industry developed much later than those of Japan and South Korea. However, in recent years, it has experienced rapid growth in the mainland market. In 2019, Time Fengjun Entertainment, the company behind the popular group TFboys, debuted a new idol group, Teens in times, TNT. Leveraging a closed-loop fan economy and frequent exposure through events like the Spring Festival Gala and variety shows, TNT quickly became a top-tier group in the mainland entertainment industry. Their first physical album, Wu Xiang Zhi Nian, sold over 100 million RMB within 119 hours of pre-sale, setting a new record for mainland boy groups. Despite such impressive revenue, the industry faces issues such as irregular fundraising for rankings, wasteful product consumption, and loan-driven fan spending. For instance, during the 2021 idol competition show Youth With You Season 3, fans purchased milk products endorsed by the show solely to collect QR codes inside bottle caps for voting, discarding the milk and sparking widespread public criticism.

This study investigates the operational mechanisms of the fan economy in mainland China and identifies potential risks to the idol industry and fan communities. A questionnaire survey was conducted among typical idol fan groups to gather data on consumption patterns.

2. Literature Review

The concept of the fan economy emerged alongside the rise of the internet and social media. In 1981, Sherwin Rosen proposed the "superstar phenomenon," explaining how a small number of top celebrities dominate market revenues. His core argument posits that celebrities, as commodities, exhibit high price elasticity of demand, with fans' consumption behaviors driven by emotional attachment rather than price sensitivity [1]. In 1992, Henry Jenkins introduced "participatory culture," emphasizing fans' transition from passive consumers to active content creators and disseminators [2]. These theories laid the groundwork for early academic discussions on the fan economy.

East Asian idol culture originated in Japan, with Johnny Kitagawa's agency Johnny & Associates pioneering the male idol industry through trainee systems and all-round artist development. South Korea's idol industry began with SM Entertainment, founded by Lee Soo-man in 1995, which rapidly



expanded internationally. With the growth of digital platforms and social media, South Korean idols and their fan economies gained global influence [3]. Although China’s idol industry started later, it has accelerated in recent years.

Previous studies on Asian fan demographics found slight gender disparities among consumers, with females slightly outnumbering males. However, these findings are outdated and fail to reflect the role of gender in the modern fan economy [4]. Brand loyalty studies also reported that 65% of surveyed fans were female [5]. Nevertheless, such research lacks specificity due to cultural and demographic differences. This study focuses on China’s underdeveloped idol industry to uncover unique characteristics and challenges within its fan economy.

3. Research Methodology

A 14-question survey was designed to explore fan consumption behaviors. The questionnaire was distributed to online fan communities and offline viewing groups in Wuhan for Teens in Times fans, organized by fans unable to attend concerts to watch livestreams together. A total of 130 valid responses were collected. Participants were self-identified fans, ensuring representation of the idol industry’s primary consumers. The survey included the following questions (Table 1):

Table 1. Survey on Teens in Times fans

Number	Questions
1	When did you start liking TNT?
2	When did you " go upstairs " (i.e., begin following Time Fengjun’s idols)?
3	Which activities have you participated in? (such as concerts, merchandise purchases)
4	What was your largest single expenditure on TNT?
5	How much was your largest single expenditure?
6	If you participated in fan-organized paid projects, which experiences apply?
7	Total estimated spending on fan activities/products.
8	Have you purchased TNT products through unofficial channels (such as scalpers)?
9	Total spending on unofficial channels.
10	Beyond spending, what else have you done? (such as researching members’ backgrounds)
11	Gender (biological)
1	Age
13	Occupation
14	Attitude (such as, bias toward specific members or the entire group)

4. Research Results

4.1. Sample Information

Table 2. Gender (biological)

Gender	subtotal	proportion
male	1	0.77%
female	129	99.23%
The number of people who fill in this question effectively	130	

Table 3. Age

Age	subtotal	proportion
under 18	35	26.92%
aged 19–25	94	72.31%
aged 25–30	1	0.77%
aged 30-40	0	0%
aged 40–45	0	0%
Over 45	0	0%
The number of people who fill in this question effectively	130	

Table 4. Occupation

Occupation	subtotal	proportion
students	116	89.23%
government employees	2	1.54%
corporate employees	2	1.54%
freelancers	7	5.38%
others	3	2.31%
The number of people who fill in this question effectively	130	

As shown in Table 2, the proportion of women who complete the questionnaire is much higher than that of men. As shown in Table 3, the vast majority of fans are under the age of 25, and nearly one-third of fans are minors. As shown in Table 4, 90% of students are enrolled in school.

Table 5. Which activities have you participated in? (such as concerts, merchandise purchases)

Events attended	Subtotal	Proportion
Vote for the list	48	36.92%
Attend the fan club membership	85	65.38%
Buy the album	111	85.38%
Purchase related products	114	87.96%
Receiving second-hand related products/exchanging related products with others	100	76.92%
Participate in offline concerts	44	33.85%
Participate in offline variety shows	13	10%
Pick-up the stars	7	5.38%
Participate in offline activities organized by fans	82	63.08%
Buy fan fanficies	74	56.92%
Didn't participate in any of these events	3	2.31%
other	0	0%
The number of people who fill in this question effectively	130	

As shown in Table 5, most fans have consumption behaviors and have sunk costs. In the process of chasing stars, fans participate in activities that require a lot of time, money and energy, such as casting, opening members, participating in offline concerts and other activities. Studies have shown that users tend to stick to activities in which they have invested large and irretrievable resources, so fans generally continue to chase stars for a long time, continue to consume for idols, and the company has also achieved the goal of making profits [6]. Fans' emotional investment in idols is in line with Maslow's hierarchy of needs theory, and the demand for a sense of belonging drives fans to integrate into the community through consumer groups, and convert their love for idols into economic support, so as to meet the needs of emotional companionship, gain group recognition, and even make up for the lack of social interaction in reality [7].

Table 6. When did you start liking TNT?

When did you start to like the Teens in Times?	subtotal	proportion
Before 2019	9	6.92%
2019 to 2020	63	48.46%
2021 to 2022	48	36.92%
2023 to 2025	10	7.69%
The number of people who fill in this question effectively	130	

Table 7. When did you "go upstairs" (i.e., begin following Time Fengjun's idols)?

When to go upstairs?	Subtotal	Proportion
Began to follow before the debut of TFboys	0	0%
After debut of TFboys	33	25.38%
Before the debut of Teens in Times, Pay attention to the second generation of trainees	14	10.77%
After the debut of Teens in Times	80	61.54%
Before the debut of T.O.P , paid attention to three generations of trainees	3	2.31%
After the debut of T.O.P	0	0%
The number of people who fill in this question effectively	130	

As shown in Table 6, about 92% of fans have been following the Teens in Times for more than three years, and about 7% have even reached more than 6 years. In Table 7, "upstairs" refers to the idol who began to chase Times Fengjun's company, and it can be seen in the table that about 25% of people have started chasing stars as early as 2013, when the group "Tfboys" debuted in the same company, and before 2019, when the Teens in Times debuted, and the longest time to chase stars can be more than 10 years. It can be seen that some fan groups are preferred, enthusiastic and single-minded, and have the ability to provide lasting consumption.

4.2. Consumer Behavior

Table 8. Beyond spending, what else have you done? (such as researching members' backgrounds)

In addition to your regular purchases, what else have you done here?	Subtotal	Proportion
Chase official materials	122	93.85%
Watch the official live stream	123	94.62%
Squatting at a fixed point to watch programs there are members of Teens in Times appear	91	70%
Pay attention to unofficial information spread on the Internet such as fans who can meet the stars themselves	88	67.69%
Follow social accounts of the main fans	85	65.38%
Produce fanart	46	35.38%
Watch fanart	82	63.08%
Understand the family background of the members	73	56.15%
Understand Time Fengjun Entertainment the company's status, history, entrepreneurial background, personnel background, etc	71	54.62%
Post things about Teens in Times on your own social media accounts such as meager and circle of friends	106	81.54%
Share things about Teens in Times with offline/online friends and family or be popcorn together	105	80.77%
The number of people who fill in this question effectively	130	

Table 9. Total estimated spending on fan activities/products.

If you've participated in fan-organized projects that cost money, what of the following experiences have you had?	Subtotal	Proportion
Participate in the fundraising of the main fans organizations that have the right to speak, with no or less return, and the nature of support is larger	38	29.23 %
Expenses for participating in offline activities	89	68.46 %
Organize and launch offline fan activities	34	26.15 %
Buy fan-made products you like	72	55.38 %
other	5	3.85 %
The number of people who fill in this question effectively	130	

Most fans have consumed idol-related commercial products and invested sunk costs. As shown in Table 8, the vast majority of fans have spontaneous emotional investment, such as paying attention to the information of idols for the first time and paying attention to secondary creations. "Popcorn" in Table 8 is the specific name for Teens in Times fans. As shown in Table 5, more than 60% of fans participate in unofficial fan-organized activities, and Table 9 shows the details of such fan activities. This kind of event is held purely for fans out of love, and it takes a lot of time, money and energy for the fans to host without any connection with the official. This has formed a participatory culture, that is, a new form of media culture that is free, equal, open, inclusive, and shared through a certain identity, actively creating media texts, communication media, and other content, and strengthening network communication [8].

Table 10. How much was your largest single expenditure?

How much the largest sum of money ever spent	Subtotal	Proportion
Less than 100 yuan	4	3.08 %
\$100 to \$300	20	15.38 %
\$300 to \$500	21	16.15 %
500 to 1000 yuan	26	20 %
1000 to 2000 yuan	21	16.15 %
2000 to 3000 yuan	13	10 %
3,000 to 5,000 yuan	12	9.23 %
More than 5000 yuan	11	8.46 %
More than 10,000 yuan	2	1.54 %
more	0	0 %
Didn't spend any money	0	0 %
The number of people who fill in this question effectively	130	

From Table 3 and Table 4, it can be seen that most of the fans are students under the age of 25 and are not financially independent. From Table 8 and Table 9, it can be seen that these fans are extremely enthusiastic and spontaneous. As can be seen from Table 10, although fans are not financially independent, most of them are willing to spend, and there are no fans who have not consumed at all in the survey results. The amount of money spent is evenly distributed, most people have spent more than 300 yuan at one time, and there are not a few fans who are willing to spend more money, reaching four or even five figures. This is just a one-time draw of money, due to the difficulty of collecting data, the author did not count how much money the respondents have spent since chasing stars, but from the perspective of one-time expenses, the cumulative amount will only be larger. But for fans who are not financially independent, the biggest amount of money spent is not a small amount of money, and it may even be a large expense for families with poor economic conditions. Strictly speaking, this money, as well as the money earned by the idol company, does not belong to the fans themselves, but comes from the fans' parents' families.

4.3. Fan Psychology

Table 11. Total spending on unofficial channels

How much money was spent in the process of finding scalpers and robbing on behalf of others	Subtotal	Proportion
Less than 100 yuan	17	13.08 %
\$100 to \$300	7	5.38 %
\$300 to \$500	7	5.38 %
500 to 1000 yuan	6	4.62 %
1000 to 2000 yuan	8	6.15 %
2000 to 3000 yuan	8	6.15 %
3,000 to 5,000 yuan	5	3.85 %
More than 5000 yuan	4	3.08 %
More than 10,000 yuan	2	1.54 %
more	3	2.31 %
I didn't let anyone other than the official and fans make my money	63	48.46 %
The number of people who fill in this question effectively	130	

Tickets for in-person events such as concerts are limited and hard to come by, so about 52% of fans will buy these limited products by looking for unofficial people to help them buy tickets or through unofficial middlemen (commonly known as "scalpers"). As can be seen from Table 11, the cumulative additional amount paid for the purchase of products through non-official persons ranges from a few hundred to thousands, tens of thousands or even more. It can be seen that this kind of product has a scarcity effect, and people give it a higher value in the case of scarcity, which makes fans have a stronger desire to acquire the product [9]. This incentivizes fans to make purchases, but it also gives special groups such as unofficial middlemen the opportunity to monopolize goods. More than half of the fans have traded with unofficial middlemen, and it is clear that the scarcity of Teens in Times's products has a greater negative effect. During the questionnaire investigation, some fans took the initiative to inform the author that when she bought concert tickets through unofficial scalpers, she was cheated out of 5,000 yuan by the other party. It can be seen that there are scalpers speculating in the fan economy, speculating on product prices, and there are even worse fraud and chaos.

Table 12. Attitude (such as, bias toward specific members or the entire group).

Your attitude	Subtotal	Proportion
I only like to take my own shoulders and don't like my teammates	14	10.77 %
Like to take care of yourself, no sense of teammates	19	14.62 %
I like to take my own responsibility, like my teammates, and have a good feeling for the soul	44	33.85 %
I like all the people very much, maybe slightly but generally like it, and it's nice to see everyone	53	40.77 %
The number of people who fill in this question effectively	130	

As can be seen from Table 12, fans have different preferences when chasing the same group. "Self-bearing" refers to the members you like, and "group spirit" refers to the tacit understanding and good relationship of the entire group. About a quarter of the respondents focused on the members they liked and had no feelings or even dislike for other members, and about three-quarters of the respondents had a crush on all members. And all the respondents liked the combination of the Teens in Times, and this common denominator brought them together in a communication group. Star chasing constitutes the identity of fans, which is in line with Baudrillard's theory of symbolic consumption, that is, commodities are endowed with symbolic meanings that transcend practical value, for example, buying an idol's album is regarded as a symbol of the identity of a fan of the Teens in Times, while buying one's favorite member's one's own one's favorite products can be

regarded as a symbol of the identity of a member's fans, strengthening the individual's sense of belonging in the community [10]. Fans bind themselves to the symbolic value of their idols, and the way to bind them is through the fans' consumption behaviors shown in the previous pictures.

5. Discussion of the Results of the Study

From the above results, it can be known that the fan economy in Chinese mainland can provide diversified consumer products from the perspective of consumers, and get high profits from most of the fans who are non-economic independents, but there is a dependence on fans' enthusiasm and irrational consumption, and there are potential hidden dangers of the economic and social impact of the industry. Starting from the industry itself, due to the unstable factor of relying on fan enthusiasm, the industry has a short lifespan and the popularity is easy to fade. The members of the Teens in Times themselves are looking for a way out, studying acting, musicals, broadcasting and other majors in college, preparing for careers such as actors. The members of the once-popular group "TFboys" launched by the same company no longer engage in idol activities, and all of them have become actors or singers. From the perspective of social influence, the company has greatly stimulated the consumption of fans and obtained high profits by using the consumption effect and the consumption psychology of fans, such as symbolic consumption and scarcity effect, but it has also led to a large number of irrational consumption of fans mainly from economically independent groups, which is not conducive to the formation of a healthy consumption outlook among economically independent young people, and even the emergence of bad phenomena such as fraud. It is difficult to supervise online fraud, the fraudsters are easy to operate, and it is not easy for the victims to recover their losses, so fraudsters may also tend to take advantage of the psychology of idol fans to defraud the specific group of fans [9, 10]. There are certain limitations in this study. The questionnaire was distributed to the offline viewing group of fans of the Wuhan Teens in Times without restrictions on gender and age, and the group was formed spontaneously by fans, so that fans who could not attend the concert could charter a private theater on the day of the concert and watch the live broadcast of the concert together. In this group, the questionnaire received enthusiastic answers from 130 fans, but the answers received showed that the people who participated in the questionnaire were of a single gender and age group, and most of them were female fans under the age of 25, which was unexpected. Therefore, the distribution and consumption of the Teens in Times group among male fans and other age groups need to find a suitable way for further research. In addition, previous studies may have a large number of fans who are not deeply involved or active in the online fan community, and are regarded as passers-by, passers-by, or occasional fans, whose star-chasing behavior is difficult to investigate and track, but should receive equal attention [11].

6. Conclusion

The idol industry in Chinese mainland is relatively late, and its fan economy is different from other industries and other countries, and has the characteristics of high income but relies on irrational consumption of fans. Its high income makes it have the potential to promote economic development, but its dependence on the irrational consumption of fans will create hidden dangers. Fan psychology is the result of the interweaving of multiple factors, including not only individual emotional needs, but also the shaping of the social environment, follow-up research can combine the Chinese social environment, further analyze the characteristics of the idol industry and fan groups in Chinese mainland, reveal the business logic of the idol industry and the logic of fan consumption behavior from a sociological perspective, and explore the neural mechanism of consumer behavior through neurological research. It is suggested that follow-up in-depth research on how to promote the optimization and transformation of the idol industry in Chinese mainland, and at present, policy guidance such as limiting irrational marketing and values education, such as strengthening the cultivation of students' financial quotient in schools, promoting healthy consumption, giving full play to industry advantages, and eliminating hidden dangers in the industry.

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