

# The Return and Fulfillment of Emotional Needs of Chinese Female University Students Behind the Fan Economy Phenomenon

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## **Abstract:**

With the rapid development of social media today, the fan economy has become an important part of the cultural industry, especially with a significant influence on female university students. This paper aims to explore the emotional needs of Chinese female university students behind the phenomenon of the fan economy and the deep logic of how these emotional needs are fulfilled through interactions with idols, as well as the social and psychological impacts of this phenomenon on them. The study delves into the multiple emotional deficiencies experienced by university students, how emotional compensation is achieved through symbolic interaction, and how this symbolic compensation strengthens fan loyalty, leading to the monetization of the fan economy. Through a quantitative survey and SPSS data analysis, the study found that university students reported higher emotional satisfaction, enriched emotional experiences, and improved feelings of alienation, security, and interpersonal relationships after engaging in fan behavior. The process of idol worship brought significant emotional value, with idols reflecting self-realization. In turn, this helped complete the students' identity construction and clarified future development goals, fulfilling individual needs. The conclusion is that the fan economy, to a large extent, serves as a way for fans to please themselves, improve themselves, and advance their personal development.

**Keywords:** Fan Economy; Emotional Experience; Emotional Value; Identity Construction; Idols

## 1. Introduction

In today's highly developed social media environment, the fan economy has become an essential component of the cultural industry, especially for female college students, where its impact is particularly significant. According to recent market research reports, the fan economy in China has demonstrated tremendous growth potential. Data from iResearch shows that by 2021, the market size of the fan economy had reached approximately 4.94 trillion yuan. The COVID-19 pandemic in 2020 accelerated the deep penetration of the internet, particularly in short videos, live streaming, and other interactive content, further driving the expansion of the fan economy.

New interactive modes emerged as a result of the pandemic, such as online autograph sessions, virtual concerts, and live broadcasts, which accelerated the rise of the fan economy. These virtual interactions are more convenient and cost-effective than traditional offline events, providing similar levels of engagement. Female college students represent a unique group, as they are independent actors to some extent but still rely on familial support while developing their consumption habits. They occupy a middle ground between high school students and full-time working adults, enjoying both familial financial backing and some degree of independent spending power.

For many female college students, this transitional stage of life brings uncertainty and a lack of self-identity. At this critical juncture, idols often fulfill an emotional void, and the concept of "powering up for love" (supporting idols through spending) takes root, leading to the rise of consumerism in the fan economy. Data indicates that platforms like Weibo, TikTok (Douyin), and Bilibili have provided convenient channels for fan-idol interaction, allowing the fan economy to grow rapidly. Reports show that over 60% of active monthly users on platforms such as Weibo are female, with female college students making up a significant portion of this demographic.

Social media has established a strong foundation for the fan economy, enabling fans and idols to interact through these platforms, thus forming a new consumption model. The fan economy among Chinese female college students is not only a consumer phenomenon but also a medium for expressing and satisfying their emotional needs. Through their active participation in various fan activities, they seek to express their emotions and receive responses that meet their expectations, thus fulfilling their desires for love and belonging. Additionally, by participating in fan communities, they find like-minded individuals and strengthen their sense of belonging.

Through idol interactions, female college students also mature their views on life and values, leading to a clearer

construction of their self-identity. This paper aims to explore the underlying emotional needs of Chinese female college students in the fan economy, how these needs are fulfilled through interactions with idols and the broader social and psychological effects of this phenomenon.

## 2. Literature Review

The concept of "consumerism" in the fan economy has evolved beyond simple product purchases into a deeper system of symbolic expression. Fan consumption now serves as a means for individuals, especially female college students, to gain identity recognition and confirm their self-worth. This process of purchasing is not just a transactional activity, but also a way for fans to redefine their self-identity through symbols associated with idols. Consumption becomes a way to establish a reasonable cultural identity within the fan community. The purchase of goods or participation in fan activities is no longer merely about the utility of the products but represents a spiritual connection with idols, symbolizing happiness and fulfillment. Through this process, fans not only recognize their idol's status but also consolidate their sense of identity within the fan group, transforming consumption into a symbolic expression of self [1].

Dong argues that celebrities, through the creation of carefully constructed personas, stimulate emotional responses in fans, leading to "emotional marketing" and the creation of "personalized value" that resonates with fans' emotional needs [2]. This emotional connection allows fans to empathize with celebrities, using them as outlets for their emotional attachment. Dong also explored the rise of social media and changing consumption habits, noting that young people face a paradox: while they seek independence from their families, they often struggle with feelings of isolation and emotional detachment when entering society. In this context, idols become emotional surrogates, filling the void left by incomplete self-identity [2].

Qiao takes this a step further, arguing that emotional consumption in fan circles is driven by the need for self-identity and personal psychological compensation [3]. This highlights the link between consumer behavior and deeper psychological needs, suggesting that fans' emotional investment in idols is a way of seeking personal validation through group dynamics and capital-driven consumerism [3].

Zihan Li emphasizes the critical role of emotional labor in the fan economy, which stems from Arlie Hochschild's theory of emotional labor [4]. In the fan economy, fans not only consume idol-related products but also invest significant emotional energy, time, and effort in forming

a reciprocal emotional interaction with idols. Li identifies three key factors tied to emotional labor in fan culture: time fragmentation, increased individual consciousness, and the commercial packaging of idols [4].

Yukang focuses on how businesses leverage the fan economy, utilizing celebrity endorsement strategies and symbolic brand identities to attract young consumers. By developing derivatives, operating fan communities, and conducting emotional marketing, businesses can increase their revenues by tapping into fans' emotional attachments [5]. Huang further analyzes how the emotional labor of idols can lead to economic gains, but also notes that these returns diminish as emotional labor increases. Over-participation and emotional fatigue can lead to a decrease in fan satisfaction and negatively impact idols' revenues, highlighting the need for a balanced approach to emotional labor [6].

Wan uses the example of "Youth with You 3" to illustrate how fan-driven consumption is manipulated by group dynamics, reinforcing Randall Collins' "interaction ritual chain" theory [7]. According to this theory, emotions are the driving force behind social structure and interaction, as individuals seek shared experiences to confirm their belonging to a group. In the fan economy, fans exchange emotional investment for a sense of belonging, further fueling the cycle of consumption [7].

These scholars largely agree that emotional needs in the fan economy are often related to self-identity construction, self-recognition, and the desire for belonging. However, there is still a lack of in-depth exploration of how emotional deficiencies in specific groups, such as Chinese female college students, are addressed through fan consumption and idol interaction. Additionally, the compensatory effect of symbolic interactions between fans and idols, and how this drives the fan economy, warrants further investigation.

### 3. Methodology

The sample of this study consists of Chinese female university students, aiming to explore their participation behaviors and emotional needs in the fan economy. To ensure the representativeness and diversity of the sample, female students from different regions and different levels of universities were selected as the research subjects. The sample criteria specified female gender, with ages ranging from 18 to 27 years, and the participants were full-time university students in China who had a certain degree of involvement in idol or fan culture, such as participating in online voting, purchasing idol merchandise, or watching idol-related programs. The questionnaire was distributed via "Wenjuanxing" (a survey platform) over two weeks.

A total of 120 questionnaires were distributed, and all 120 valid questionnaires were collected. The quantitative data were processed using SPSS software.

In the questionnaire, several items related to university students' psychological experiences addressed negative emotions (e.g., "initially feeling lost in university life," "initially lacking clear future goals"). To facilitate comparison with other positively framed items (e.g., emotional satisfaction), this study reverse-coded these items to ensure higher scores corresponded to more positive psychological states. Specifically, in the original items, higher scores indicated negative psychological states (e.g., 5 indicated extreme confusion), while after reverse coding, higher scores indicated more positive states (e.g., 5 indicated no confusion).

To examine the changes in emotional satisfaction before and after engaging in fan activities, this study employed a paired-sample t-test. This test was used to compare the emotional experiences of the same group of participants before and after engaging in fan activities. The data were analyzed using SPSS software. Through this test, the study was able to assess whether fan engagement had a significant impact on the emotional state of university students. Descriptive statistical analysis was applied to other data, with the sample size, standard deviation, and mean being used to provide descriptive insights into the data. To examine the relationship between the level of family economic support and fan behavior, this study employed point-biserial correlation analysis to assess whether the level of family economic support had an influence on fan behavior.

## 4. Results

### 4.1 Demographic Variables of the Questionnaire

This study collected a total of 120 valid questionnaires from Chinese female university students. The age range of respondents was between 18 and 27 years, with an average age of 21.3 years. The data were analyzed using SPSS, primarily employing descriptive statistics, correlation analysis, and t-tests. The age distribution of the respondents is as follows: 18-20 years old accounted for 31.7% (n=38), 21-23 years old accounted for 32.5% (n=39), 24-26 years old accounted for 20.8% (n=25), and those over 27 years old accounted for 15% (n=18). Regarding the respondents' education levels: undergraduate students were the majority at 77.5%, followed by junior college students at 13.33%, and graduate students or higher at 9.17%. In terms of family monthly income, 36.67% of respondents came from families with an income between 6,000 and

10,000 yuan, 30.83% came from families with an income above 10,000 yuan, 26.67% from families with an income between 3,000 and 6,000 yuan, and 5.83% from families with a monthly income below 3,000 yuan.

### 4.2 Family Economic Support and Fan Behavior

Regarding the question “Do you think your family and friends provide sufficient financial support?” more than two-thirds of the respondents (76.67%) believed that their family and friends provided enough financial support (options of “agree” and “strongly agree”). However, 23.33%

of respondents felt that the financial support from family and friends was insufficient. Based on the results from this question, combined with the data from the question “Have you ever spent money on products related to an idol you like,” a point-biserial correlation analysis was conducted. The analysis showed that the correlation coefficient between “family economic support” and “whether the respondent has engaged in fan-related spending” was  $r = -0.125$ ,  $p = 0.175$  ( $p > 0.05$ ). The results indicate that there is no significant correlation between family economic support and fan behavior.

### 4.3 Paired Sample t-Test Results

**Table 1. Results of the paired samples t-test**

				95% Confidence Interval of the Difference		t	Degrees of freedom(df)	Significance	
	Mean	Standard Deviation	Standard Error Mean	Lower Bound	Upper Bound			One-tailed p-value	Two-tailed p-value
Initial sense of confusion-Clearer life goals under the guidance of idols	-1.60588	1.23224	0.13366	-1.87267	-1.34009	-12.015	84	<0.001	<0.001
Initial sense of alienation-richness of interpersonal relationships after becoming a fan	-1.46471	1.22423	0.13279	-1.72877	-1.20065	-11.031	84	<0.001	<0.001
Initial sense of belonging & security-sense of belonging and security after becoming a fan	-0.89412	1.63316	0.17714	-1.24638	-0.54185	-5.047	84	<0.001	<0.001

**Table 2. Paired samples effect size**

		Standardize measure	Point estimation	95% Confidence Interval of the Difference	
				Lower Bound	Upper Bound
Initial sense of confusion-Clearer life goals under the guidance of idols	Cohen d	1.23224	-1.303	-1.591	-1.011
Initial sense of alienation-richness of interpersonal relationships after becoming a fan	Cohen d	1.22423	-1.196	-1.473	-0.915
Initial sense of belonging & security-sense of belonging and security after becoming a fan	Cohen d	1.63316	-0.547	-0.774	-0.318

In Pair 1, the mean difference of -1.60588 shows that post-test scores are significantly higher than pre-test

scores, reflecting a notable change. The t-value of -12.015 suggests a highly significant mean difference between the two-time points. With a p-value of less than 0.001, the result is statistically significant. Additionally, Cohen's d of 1.23 points to a very large effect size, indicating a strong practical impact on emotional changes before and after idol worship. As shown in Table 1 and Table 2.

For Pair 2, the mean difference is -1.46471, again indicating higher post-test scores. The t-value of -11.031 suggests a significant difference, further supported by the p-value being less than 0.001. Cohen's d is 1.22, showing a large effect size and strong practical significance between the two conditions. Refer to Tables 1 and 2 for more details.

In Pair 3, the mean difference is smaller at -0.89412, though post-test scores remain higher. The t-value of -5.047, while slightly smaller than the previous two pairs, still indicates a significant difference, supported by a p-value less than 0.001. Cohen's d is 1.63, reflecting a large effect size. See Tables 1 and 2 for the data.

All the effect sizes across the three pairs range from 1.22 to 1.63, indicating that the differences before and after idol worship are not only statistically significant but also have a strong practical effect. Particularly, the effect sizes in Pair 3, show a large difference. According to the paired-sample t-test results, there are significant differences between the pre-test and post-test scores across all three pairs, with emotional satisfaction significantly increasing after engaging in idol worship. This change is both statistically significant ( $p < 0.001$ ) and has a meaningful effect size (Cohen's  $d \geq 1$ ), indicating that idol worship has a strong positive impact on emotional satisfaction.

#### 4.4 Emotional Satisfaction Brought by Idol Worship

When asked "Do you gain emotional satisfaction from supporting your idol?", the respondents' overall average score was 3.8 (out of 5), with 85 respondents providing valid responses. Among them, 69.41% ( $n=59$ ) selected "agree" or "strongly agree," indicating that the majority of respondents gained significant emotional satisfaction from their actions in support of their idols.

When asked "Does supporting your idol make you feel closer to them?", the overall average score was 3.71 (out of 5), with 85 valid responses. Approximately 64.71% ( $n=55$ ) of the respondents chose "agree" or "strongly agree," suggesting that most respondents felt that supporting their idol indeed enhanced their sense of closeness to the idol.

Regarding the question "Has your idol compensated for some of your emotional needs?", the overall average score was 3.73 (out of 5), with 85 valid responses. Approximately 64.7% ( $n=55$ ) of the respondents chose "agree" or

"strongly agree," indicating that the majority of respondents believed their idol provided important emotional support in their lives, helping them address certain emotional needs.

#### 4.5 Emotional Value Provided by Idol Worship

In response to the question "Do you believe your idol helps you cope with negative emotions or stress in real life?", the overall average score was 3.73 (out of 5), with 85 valid responses. Approximately 64.71% ( $n=55$ ) of the respondents selected "agree" or "strongly agree," indicating that most respondents believed their idol provided emotional support in their lives, helping them alleviate negative emotions or cope with stress.

#### 4.6 Idol Worship and Self-Realization

Regarding the question "Do you think your idol's guidance has helped you clarify your life goals?", the respondents' overall average score was 3.68 (out of 5), with 85 valid responses. Approximately 61.18% ( $n=52$ ) of the respondents selected "agree" or "strongly agree," indicating that the majority of respondents believe their idol has helped them clarify their life goals to some extent.

For the question "Does your idol reflect your personal fantasies and help you achieve self-realization?", the overall average score was 3.79 (out of 5), with 85 valid responses. Approximately 69.41% ( $n=59$ ) of the respondents selected "agree" or "strongly agree," suggesting that most respondents believe their idol helps reflect their personal fantasies and enables them to achieve self-realization.

#### 4.7 Economic Benefits Derived from the Emotional Value Provided by Idols

When asked "Will you acquire more idol-related products after purchasing certain related items?", 87.06% ( $n=74$ ) of the respondents answered yes. In response to the follow-up question, "Will you support your idol more after acquiring new products?", 82.43% of the respondents ( $n=74$ ) selected "agree" or "strongly agree," and none of the respondents chose "disagree." This indicates that most respondents, after gaining emotional value from their idols, are more likely to continue supporting them, thereby contributing to the economic benefits of the fan economy.

### 5. Discussion

#### 5.1 Demographic Characteristics

This study focused on Chinese female university students, analyzing the fan economy and the emotional and psychological needs behind it. Most respondents were aged between 18 and 23, an age group that Erik Erikson identifies

as a critical period in human development, where individuals face the task of self-exploration and identity formation. This stage is crucial for constructing self-identity, especially for females, whose interactions with emotional and self-identification aspects tend to be significant during this time [1].

### **5.2 The Relationship Between Family Economic Support and Fan Behavior**

The results show that although the majority of respondents believed that their family and friends provided sufficient financial support (76.67%), a point-biserial correlation analysis revealed no significant statistical relationship between family economic support and fan behavior ( $r = -0.125$ ,  $p = 0.175$ ). This finding suggests that fan behavior may be, to some extent, independent of family economic support. In other words, fan behavior is not solely determined by economic conditions but is likely driven by other factors, such as personal interests, social influences, or the appeal of idol culture.

### **5.3 Identity Construction and the Role of Idols**

The results on identity construction show that the respondents' identity is mainly derived from family, friends, and school (with proportions of 61.67%, 65%, and 60%, respectively). In contrast, idols play a relatively minor role in identity construction, with only 33.33% of respondents considering idols as an important source of their identity. This suggests that personal identity is primarily shaped by one's immediate living environment and lifestyle. According to educational psychology, an individual's clear self-awareness largely develops during early childhood, a period in which family and peer groups have the most significant influence on identity. As individuals mature and become more aware of society, their personal identity framework is already largely established. Social roles and idols tend to play a supplementary role in this process, helping to refine identity and guide interests and hobbies [2].

### **5.4 Changes in Emotional Experiences Before and After Idol Worship**

A paired-sample t-test revealed significant changes in the emotional experiences of university students before and after engaging in fan activities. Particularly in areas such as security, alienation, and confusion, post-fan behavior scores were significantly higher than pre-fan behavior scores ( $p < 0.001$ ), with a large effect size (Cohen's  $d \geq 1$ ). This indicates that fan behavior has a positive influence on the emotional experiences of the respondents, helping them gain substantial emotional value and explore life goals. Additionally, respondents felt a greater sense of

belonging within the fan community, which is consistent with findings from previous studies [7].

Especially through behaviors such as purchasing endorsed products and participating in fan voting, respondents may have gained a high level of emotional satisfaction from their interactions with idols. This finding supports the emotional compensation mechanism behind the "fan economy," where fans fulfill their emotional needs by supporting idols and feel a sense of belonging and recognition through the success of their idols. It reflects the fans' recognition of their self-worth, as they compensate for their emotions by supporting idols through various symbolic actions, thus bringing joy to themselves. In this process, fans experience the greatest possible happiness [1, 2].

### **5.5 Emotional Support and Emotional Value Provided by Idols**

Regarding the role of idols in fulfilling emotional needs, the majority of respondents (64.7%) indicated that idols provided important emotional support in their lives, helping them compensate for certain emotional deficiencies. This finding is consistent with previous research, which shows that idols are not merely objects of entertainment consumption but also emotional outlets for fans [2]. Through various symbolic interactions, fans and idols establish emotional connections, enabling empathy between them. The success and performance of idols often resonate with fans, allowing fans to project their emotions onto their idols, fulfilling emotional compensation. In certain contexts, this may enhance fans' emotional satisfaction and happiness.

### **5.6 Idol Worship and Self-Realization**

With regard to self-realization guided by idols, respondents generally agreed that idols helped them clarify their life goals and reflect their personal fantasies. A total of 69.41% of respondents believed that idols could reflect their fantasies and help them achieve self-realization. This is largely because idols, by establishing positive public personas, successful careers, and values-oriented guidance, offer fans an idealized template. This template helps fans set personal goals and facilitates their self-realization. Additionally, the perfect personas constructed by idols make it easier for fans to empathize [2]. Fans project their own needs and dreams onto their idols through a process of surrogate reinforcement. As idols create a perfect persona, they simultaneously fulfill fans' fantasies about themselves, strengthening the interaction between fans and idols and forming a two-way emotional interaction. This aligns with the theory of emotional labor [3].

### 5.7 Economic Benefits Derived from the Emotional Value Provided by Idols

Regarding the economic benefits derived from the emotional value provided by idols, the majority of respondents (87.06%) indicated that they would acquire more idol-related products after purchasing certain items, and 82.43% of respondents said they would further support their idols after acquiring new products. This shows that fans, through purchasing and consuming idol-related products, not only satisfy their emotional needs but also strengthen their loyalty to the idol, ultimately driving the continuous growth of the “fan economy.” Commercial companies continuously package the personas of idols, while fans invest more time, energy, and emotion into their idols. Throughout this interactive process, fans’ individual awareness grows, their identity construction becomes more complete, and their connection to idols strengthens, leading them to invest more in their idols. This behavior not only demonstrates the positive correlation between emotional value and economic benefits but also reveals how idol culture transforms emotional connections into economic profits [4-6].

## 6. Conclusion

This study, based on a quantitative research method involving a survey of 120 Chinese female university students, explored the satisfaction of various emotional needs behind the fan economy. These needs include self-identity, identity construction, security, belonging, confusion, future development direction, alienation, and interpersonal relationships. The results show that idols are not only objects of entertainment consumption for these respondents but also an important source of emotional support in their lives. Idol worship significantly enhanced the respondents’ emotional satisfaction, which further illustrates that fan behavior is not only about idol admiration. More importantly, it helps them cope with negative emotions and stress in real life and, to some extent, guides them in clarifying life goals and achieving self-realization. By identifying with their idols, fans can empathize with them, using symbolic interaction to refine their own identity construction, exploring themselves during a critical period of self-identity development, and ultimately “pleasing themselves” through idol worship.

Although most respondents believed that their family and friends provided sufficient economic support, this study found no significant statistical correlation between family economic support and fan behavior. This suggests that fan behavior is influenced by many factors and is not strongly related to economic support; instead, it is more driven by

emotional needs and personal interests.

Additionally, the emotional value provided by idols significantly affects fans’ consumption behavior. Most respondents indicated that they would further support their idols after acquiring idol-related merchandise, which further drives the growth of the fan economy and strengthens fan loyalty. This creates a strong emotional labor interaction. Idol culture converts emotional connections into economic benefits, turning emotional engagement into wealth, revealing the deep emotional driving force behind the fan economy.

However, this study has certain limitations. The research sample was limited to Chinese female university students. Future research could explore whether there is cross-cultural consistency based on these findings. Moreover, combining quantitative and qualitative research methods to delve deeper into the multidimensional impact of fan behavior will provide a richer perspective for future studies. Overall, this study provides strong evidence for understanding how fan culture interacts with idols, how idols influence the identity construction of fans, and how various emotional needs are met. Idols not only satisfy fans’ emotional needs but also play a key role in self-identity and realization, while also generating considerable economic benefits through emotional connections. These findings are significant for further exploring the emotional mechanisms behind the fan economy.

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