

## **Discussion Paper Series**

An analysis of the relationship between lifestyle concepts and fan behavior : Focusing on the results from a survey of Chinese fans who support Japanese idols

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### An analysis of the relationship between lifestyle concepts and fan behavior : Focusing on the results from a survey of Chinese fans who support Japanese idols

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#### Abstract

The idol industry in Japan is now entering a mature phase. In the current business environment, which has entered what might be called the "idol warring age," the fans who continue to promote these idols are a significant and increasingly important trend. According to Mukai et al. (2015), the definition of fans has broadened and generalized over the years. It should also be noted that the existence of idols has a cultural aspect that is unique to Japan, and the evaluation axis and the relationship between the object and the fans are very specific (Koshiro, 2018).

Therefore, while acknowledging their uniqueness as consumers, this paper conducted an exploratory study on their relationship to fan behavior by introducing a lifestyle scale to elucidate fan behavior. Specifically, Chinese fans who are currently influenced by Japanese idols were surveyed using a questionnaire with items designed in four categories: basic attributes, fan career, fan behavior, and lifestyle, with the aid of China-VALS (Wu, 2005), a model of lifestyle typology in Chinese A survey was conducted. This analysis was used to analyze the basic image of fun, and at the same time, an exploratory analysis of lifestyle factors was conducted.

As a result, Wu (2005) 11 factors were not analyzed, indicating that Chinese fans do not converge on China-VALS even though they are themselves Chinese. Chinese fans with no fans converged on this model. Analysis of hierarchical clusters also revealed that the lifestyle factor is categorized into five clusters, and that fan behavior differs between clusters. These findings suggest that Japanese companies need to develop systematic marketing strategies for each of these hubs to attract potential fans to China.

Keywords: lifestyle concept, China-VALS, fan behavior, exploratory factor analysis, hierarchical cluster analysis

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### 1. Introduction

In the 1960s and 1970s, the Four Leaves then produced by Johnny & Associates, Inc., debuted as a band group, and its members appeared in numerous variety shows and dramas, primarily on television. The concept of idols has become strongly established. During the same period, idols such as Saori Minami, Momoe Yamaguchi, Junko Sakurada, and Masako Mori, as well as groups such as Candies and Pink Lady, emerged. In this way, the idols acquired a large number of fans and were able to keep this continuously.

Needless to say, fans are becoming increasingly important to idols today. The existence of fans is so important that it is said that "An idol is a profession that can do anything without fans" (Ueda, 2018). According to Kojien (Japanese Dictionary), a fan is "a person who patronizes a certain field, group, or individual in sports, theater, movies, music, etc." Kawakami (2005) defines it as "a person who is a self-proclaimed 'fan' who has a fondness for a particular person (including groups and teams) that he or she does not encounter in everyday life. Mukai et al. (2015) point out that "enthusiastic" feature is no longer necessarily essential to the definition of a fan. This is becoming more generalized over time, defining a fan as "a person who feels an attraction to a particular person (including a group or team) in sports, theater, film, music, etc." Wei and Lu (2014) also define Johnny's fan as "a person who engages in consumption behavior for support activities" for his or her idol.

Therefore, in this study, to deal with fan behavior, especially consumer behavior that is important when marketing, we define Japanese idol fans, the subject of this study, as "those who engage in consumption acts for support activities toward idols belonging to Japanese entertainment agencies. As the meaning of "fan" expands today, fan needs are also considered to have changed correspondingly. Ueda (2018) points out that the composition of fans is also changing due to changes in the media environment, such as the shift to transmission via the Internet. In particular, female idol fans used to be mainly male, but the number of female fans interested in the makeup and fashion information provided by the idols is rapidly increasing. In other words, fan needs are changing and diversifying.

The purpose of segmentation is to classify consumers according to different homogeneous needs, and Amikura and Shintaku (2011) define the main axes of this segmentation to be geographic, demographic, psychographic, and behavioral axes. Koshiro (2004; 2005; 2006; 2018), Yoshida (2010), Imai et al. (2010), and Mukai et al. (2015) have successfully explained fan behavior by this psychological axis, the psychological scale. However, it should be noted that idols are idiosyncratic in terms of their evaluation axes and relationships with fans, due in part to cultural aspects unique to

Japan (Koshiro 2018). Against this backdrop, the question arises whether idol fans' fan behavior is not uniform, but is determined by psychological factors.

### 2. Review of previous studies

### 2.1 Studies on fans

Most of the previous studies on fans have elucidated fan behavior mainly through psychological measures that cut across psychological aspects. Many studies have been accumulated in the area of so-called "fan psychology. Koshiro (2002; 2004; 2005; 2006) has successfully constructed a fan behavior scale and a fan psychology scale to elucidate general fan psychology. As a result of this series of studies, fan behavior is classified into five factors: "information gathering," "enthusiastic behavior," "collection and appreciation of works," "imitative behavior," and "promotional behavior. As for fan psychology, it is classified into eight factors: "evaluation of works," "pseudo-love feelings," "external attractiveness," "identification/similarity," "sympathy with the trend," "fan communication," "respect/admiration," and "opposition/monopoly to the trend.

In examining the relevance of the psychological measure of narcissism to fan behavior, Yoshida (2010) categorized fan behavior into three factors: information gathering/purchasing behavior factor, contact-oriented factor, and derivative behavior factor. Mukai, Takeya, Kawahara, and Kawaguchi (2015) focused on changes in the historical background and created a fan attitude (psychology) scale and a fan behavior scale adapted to the times. They categorized fan attitudes into six factors: enthusiasm/passion, appreciation of the work, liking of the appearance, goals/sympathy/identification, fan communication, and sympathy with the trend. For fan behavior, we categorized the factors into "general fan behavior" and "positive fan behavior".

Koshiro (2018) points out that fan psychology has shifted and fan behavior has differed due to changes in the media environment, as mentioned above. she categorizes fan psychology into 10 factors: fan identity, sense of mission to nurture, evaluation of works, opposition to the trends, evaluation of humanity, fan communication, external attractiveness, hidden fans, pseudo-friends, and sympathy with trends. Furthermore, the characteristics of the fan base are analyzed by classifying fans into "pseudo-friends", "enthusiastic fans", "indifferent fans", "hidden fans", and "general light fans". As mentioned above, while many studies on fans as a whole have been accumulated, studies focusing on fans targeting idols are rare. Tokuda (2010) focused on Japanese fans and clarified the image of Japanese fans through case studies. Kim (2010) analyses the reality and the phenomenon of Chinese fans. In the same category, Wei and Lu (2014) study

clarified the fan behavior of Johnny's fans in China.

Dai, Koda, and Choi (2018) clarified tourist behavior under the theme of fan tourism in fan behavior of fans, using "people" as the topic, i.e., fans who support a person or a group. Suzumi (2021) also exists a study that presents analytical results such as male fans paying attention to various aspects of female idols, such as their appearance, personality, artistic quality, and relationship with the members, and perceiving them as real beings.

### 2.2 Studies on lifestyle and marketing

Lifestyle is a concept that originally arose from the fields of sociology and psychology (Nihei 2004; Enmaru 2009). In marketing, the lifestyle concept was introduced to understand consumer behavior in a mature consumer society. Stanford University developed VALS (Value and Lifestyles) as a framework to measure lifestyle. Later, in 1989, SRI improved on VALS and developed VALS2. The "Japan-VALS<sup>TM</sup>" lifestyle approach for the Japanese population has also been developed.

The concept of lifestyle in Japan became a temporary trend in marketing in the 1970s, as discussed by Murata (1972), Ichikawa (1973), and others. Nakanishi and Namikoshi (1989) argue that the subject who determines consumer behavior is not only a "consumer" based on mere rational economic calculations as in the past, but also has the initiative to design his or her real-life system, and that the "consumer" is the one who is responsible for the design of his or her life system. He pointed out that people are beginning to have a strong sense of themselves as "consumer-citizens. By this, the cheering behavior of idol fans is also an action decided by the fans themselves. The factors that determine this behavior are considered internal factors such as the psychology of the fans or the lifestyle of the fans.

Wu (2005) developed "China-VALS" as a method of classifying lifestyle specifically for Chinese consumers, because the behavior of Chinese consumers differs from that of foreign consumers. The main factor analysis was conducted using a randomly selected Chinese sample of over 70,000 people aged 15-64 years in 30 cities across China, and the results were used to identify the following factors: "new lifestyle awareness," "advertising awareness," "fashion awareness," "food and drink, health awareness," "goal awareness," "economic consumption awareness," "media awareness," The 11 factors were categorized as "impulse awareness," "family life awareness," "investment awareness," and "work-finance awareness. Xu et al. (2011) also classified consumers who purchase cell phones using China-VALS, and found that although they could be classified into similar factors, the inter-factor correlations were different, and the following factors

were identified: "food and drink, health consciousness," "advertising consciousness," "media consciousness," "goal consciousness," "impulse consciousness," "new consumption consciousness," "fashion syncretic consciousness," "decision consciousness," "family consciousness," "work money They are categorized into 11 factors: "consciousness" and "saving consciousness". The reason for this difference, according to Nihei (2005), is that consumer lifestyles are changing "dynamically," while the typology of structured segments in lifestyle segmentation is "static.

The review of previous studies reviewed so far has revealed that studies on idol fans are rare as far as fan segments are concerned, and that studies on lifestyles are tackling classification methods using the VALS concept. However, although studies on individual fields have been accumulated, there are no studies on the relationship between fan behavior (particularly consumer behavior related to idol fans) and lifestyle. For this reason, the purpose of this study is to examine the relationship between fan behavior and lifestyle factors, focusing mainly on Japanese idol fans living in China (hereafter referred to as "Chinese fans").

### 3. Research framework and methods

It is assumed that Chinese fans and non-fans (hereafter "general Chinese") have different lifestyles from each other. Although lifestyle factors are determinants of fan behavior, the behavior of different groups is assumed to differ depending on lifestyle segmentation. The lifestyle of Chinese fans is different from the lifestyle characteristics of ordinary Chinese people. It is also assumed that the consumer behavior of Chinese fans will be different for each cluster divided by lifestyle segmentation. The framework and methodology of this study are shown in Figure 1. In this study, a quantitative survey of Chinese fans was conducted from the four perspectives of basic attributes, fan career, fan behavior, and lifestyle, to discover associations among the results of the analysis.



Figure 1: Research framework and methodology

First, before conducting the main survey, questionnaires will be distributed to 5 samples selected for preliminary research, and interviews will be conducted with them to determine the validity of the questions. Because the responses and subsequent interviews were positive, the questionnaire was administered directly to 306 samples of the main survey. Then, exploratory factor analysis was conducted based on the sample lifestyle variables, and a hierarchical cluster analysis was used to classify the characteristics of the categories. Based on the results, the relationship between lifestyle and fan behavior will be analyzed and clarified.

# 4. Survey4.1 Survey Overview

The questionnaire survey is divided into four main sections. First, the "Basic attributes" section includes items such as gender, age, and occupation. These are the survey items related to the so-called basic attributes of the survey targets. Next, the "fan career" section includes information on the target Japanese idol group, the number of years the group has been a fan, and the number of years the group has participated in fan clubs. The most popular idol groups in Japan are selected as target fan groups. Items related to fan behavior are used to investigate event participation, the actual status of the fan community, and contact points for collecting information. Finally, items related to China-VALS by Wu (2005) (33 items in total) were questioned. (Table 1).

Section	Number of items	Source						
Basic attributes	8	Wei & Lu (2014), Lin & Wang (2018)						
Fan career	3	Lin & Wang (2018), Thistle (2019), Suzumi (2021)						
Fan behavior	6	Wei & Lu (2014), Lin & Wang (2018)						
Lifestyle factor	33	Wu(2005)						

Table 1: Design of survey items

### 4.2 Preliminary and main survey

A simple questionnaire survey was administered to Chinese fans who met through the "QQ" service in China, followed by interviews. The results of this interview confirmed that the various items and options were valid and that no particular problems were found. The survey was conducted by the largest Chinese online survey platform Wenjuanxing. The 306 Chinese fans were collected, and at the same time, the 306 general Chinese were asked about basic attributes and lifestyle items. The survey and analysis of lifestyle differences between Chinese fans and the general Chinese people are presented (Table 2).

Table 2: Summary of this survey

	Chinese idol fans	General Chinese people				
Survey subjects	Extracted people with fans.	General Chinese people without fans were extracted.				
Survey area	all regions in China					
Survey method	Self-response survey via the Internet					
Survey period	August 9-11, 2021					
Number of valid responses	n=306(respectively)					
Research agency	Wenjuanxing (Chinese online survey platform)					

### 4.3 Results

The sampling composition of Chinese fans, this time consisted only of young adults in their 20s and 30s, with 65.3% in their 20s (20-29 years old) and 34.6% in their 30s (30-39 years old). The highest percentage of Chinese fans had graduated from college, and more women than men had. As for occupation, 62.5% of all respondents were in the "manufacturing" and "service" industries. In terms of income (in terms of monthly income), the highest percentage (30.1%) was between 5,001 yuan and 8,000 yuan, followed by 24.2% between 8,001 and 10,000 yuan. Marital status and the presence of children generally accounted for half of the respondents (Table 3).

Item	Choices	n	%
Sex	Male	106	34.6%
	Female	200	65.4%
Age	20s	199	65.3%
	30s	107	34.7%
Occupation	Agriculture	4	1.3%
	Manufacturing	112	36.6%
	Service industry	79	25.9%
	Civil servant	26	8.4%
	Student	42	13.8%
	Other	43	14.0%
Education	High school graduate	11	3.6%
	University Graduate	271	88.6%
	Graduate school	24	7.8%
Monthly income (RMB)	1,500 or less	16	5.2%
	1,501-3,000	20	6.5%
	3,001-5,000	56	18.3%
	5,001-8,000	92	30.1%
	8,001-10,000	74	24.2%
	10,000 or more	48	15.7%
Marriage status	Married	182	59.5%
	Never Married	124	40.5%
Children	Yes	168	54.9%
	No	138	45.1%

Table 3: Basic attributes of Chinese idol fans

The aggregate results of the questions regarding idol purchasing behavior are shown below (Figure 2). For example, Chinese fans were most likely to participate in "online handshake events," which have recently been introduced in the entertainment industry, due in part to the current situation of new coronavirus infection. Nearly 70% of Chinese fans have participated in such events. The next most popular event for Chinese fans was "overseas concerts in China and other countries," which were held in their hometowns, with 46.8%, or nearly half of the respondents participating. The above results suggest that Chinese fans are more likely to participate in events that can be attended online, and if there is a performance in China, they are more likely to actively attend due to the ease of geographical approach.



Figure 2: Event participation status of Chinese fans

An exploratory factor analysis (Principal axis factoring, Promax rotation) was conducted on the lifestyle questions (33 items), resulting in a total of 9 factors, excluding items with factor loadings of less than 0.30 (Table 4).

	F1	F2	F3	F4	F5	F6	F7	F8	F9
curious about the ads around town.	.86	27	04	04	05	01	.05	05	.00
I often see ads in newspapers and magazines.	.74	03	02	.05	.10	03	.06	02	.05
Advertising is an integral part of life.	.72	.00	.13	06	15	04	01	11	.00
I like ads on TV and shows.	.57	.16	.28	.01	13	08	06	.03	24
Read fashion magazines often to keep up with trends.		01	08	17	.13	.06	.09	.15	.06
I keep magazines that I have finished reading.		.19	.00	07	.20	.11	14	.07	.18
Decisive rather than indecisive.	.03	.63	18	.16	.01	.00	11	09	01
Always have a plan.	.04	.62	07	.01	.02	17	05	.02	.05
I am particular about food.	06	.59	01	.06	.04	.01	10	06	.03
Pay attention to healthy eating habits.	13	.56	.05	.09	.00	21	01	.05	02
I have confidence in myself.	08	.56	.11	13	.14	.14	.23	07	16
I like food with health and beauty benefits.	05	.45	.04	07	04	.10	.04	04	.23
I always want to buy the most advanced products.	.10	.33	09	.31	11	.06	08	.00	02
Take the initiative and try new foods.	08	.32	.09	.00	14	.16	.07	.05	.09
It is important that the family be supportive.	02	.30	.13	.08	.01	05	.10	.26	.08
I think the risk of equity is significant.	.03	.02	.63	02	.12	03	04	04	.06
If you have extra money, deposit it in the bank.	.14	02	.53	.06	.11	07	.02	.07	.11
I believe money is a measure of success.	13	.08	.13	.64	.02	.00	03	03	01
We work to live.	09	13	.34	.43	.02	.09	15	.01	.22
I yearn for the lifestyle of a developed country.	.10	.08	10	.42	.03	11	.27	09	.15
I want to be popular with the opposite sex.	03	.05	12	.39	.08	04	.39	.07	05
No unnecessary expenses.	07	.08	.16	12	.73	.01	.10	11	.16
Always buy the cheapest product.	.00	12	.17	.19	.53	01	.06	.06	.10
Acquire information from newspapers rather than	.36	.09	07	.09	.41	.06	17	.13	08
television.									
Sometimes I make impulse purchases.	01	.01	08	07	.02	.85	03	01	.11
Acting on temporary feelings.	11	20	.09	.20	.05	.39	.01	.06	12
I long for a romantic life.	.01	09	03	.01	.07	03	.68	.07	.01
I like trends, fashion and new things.	.22	.02	.07	.07	28	.06	.31	07	.14
I think family is more important than work.	05	12	.00	02	.06	.01	.06	.78	21
Likes to be with family	02	.22	.01	11	23	.01	.01	.57	.15
Visit multiple stores to compare prices.	.01	.12	.18	.03	.16	.04	.03	12	.49
Factor correlation F	1 -	.55	09	.30	.03	.15	.20	.30	04
F	2	-	12	.21	02	.04	.38	.42	.07
F	3		-	.07	.22	01	.01	.08	.09
F	4			-	.09	.27	.10	.11	16
F	5				-	07	26	.18	.11
F	6					-	.16	02	19
F	7						-	.13	02
F	8							-	.33
_	9								

Table 4: Results of factor analysis for Chinese fans

\*The main factor method was used, and the rotation was performed by applying Promax rotation with Kaiser's normalization.

The first factor consists of the following elements: "I am interested in advertisements in town," "I often see advertisements in newspapers and magazines," "I think advertisements are essential to my life," "I like advertisements on TV and programs," "I often read fashion magazines to keep up with trends," and "I keep magazines that I have finished reading," concerning the factor name "We named it the "media-oriented factor. Factor 2 consists of planning awareness, such as "I am not indecisive but decisive," "I always make plans," and "I am confident in myself," and health awareness, such as "I am particular about food," "I pay attention to healthy eating habits," and "I like foods that have health and beauty benefits," so we named the factor the We named it the "Planned health Oriented Factor." Factor 3 was named "Investment-oriented Factor" because it consisted of "I think stocks are risky" and "II had extra money, I would deposit it in the bank. Factor 4 consisted of "I think money is a measure of

success," "I work to live," "I admire the lifestyle of developed countries," and "I want to be popular with the opposite sex," and was named the "success-oriented factor.

Factor 5 consists of factors such as "I do not waste money," "I always buy inexpensive products," and "I obtain information from newspapers rather than television," and was named the "savings-oriented factor". Factor 6 was named "emotionally oriented factor" because it consisted of factors such as "sometimes makes impulse purchases" and "acts on temporary feelings. Factor 7 consisted of "yearns for a romantic life" and "likes fads, fashions, and new things," and was named the "new life-oriented Factor". Factor 8 consisted of "I think family is more important than work" and "I like being with my family," and was named the "family life-oriented factor". Factor 9 was named the "rationalism factor" because it consisted of "I visit multiple stores and compare prices.

The 9 factors obtained here are partially consistent with the 11 factors obtained by Wu (2005): "new life-oriented," "advertising oriented," "fashion-oriented," "healthoriented," "goal-oriented," "economic consumption consciousness," "media-oriented," "impulse oriented," "family life-oriented," "investment-oriented," and "work-finance oriented. The items included are different, although they are not the same.

A hierarchical cluster analysis was subsequently conducted to classify Chinese fans, based on the Ward method, into 5 major lifestyle clusters. Cluster 1 is considered to be rational and stable in its money handling oriented, as it scored highest on the "rationalism factor" and the "investment-oriented factor," and conversely scored lowest on the "impulse oriented factor. For this reason, we named this cluster the "Rational Stability Pursuit Type". Cluster 2 had high scores on the "impulse-oriented factor" and was emotional about money, but had positive scores on the "success-oriented factor" and "investment-oriented factor. Therefore, we considered the pursuit of money as one of the characteristics and named it the "emotional money pursuit Type".

Cluster 3 was named "indifferent except for saving" because all of the factors except for the "saving-oriented factor" were negative. Cluster 4 was extracted as positive for all factor scores, especially the "planning oriented and health-oriented," "success-oriented factor," and "saving oriented factor," which had the highest scores among the five clusters. This trend is considered to be due to the low scores for the "investment-oriented factor" and "new life-oriented factor," which is considered to be a characteristic of risk avoidance. For this reason, this cluster was named the "aggressive but high risk-averse" type. Cluster 5 had high scores for "planned health-oriented" and "new life-oriented" and was named the "ideal pursuit type with planned behavior" (Figure 3).



We analyzed the relationship between these five lifestyle clusters and fan behavior and analyzed the differences between the clusters. The following figure shows the results of the cross-tabulation of these clusters and consumption levels (Figure 4). Consumption level here refers to the amount of money Chinese fans spend on idol groups each month.



Figure 4: Cross-tabulation results between lifestyle clusters and consumption levels

The results show that the "rational stability-seeking" and "indifferent except for saving" types have low consumption levels, with more than 40% of them spending less than 200 yuan. Unlike the other clusters, the "aggressive, high-risk-averse" and "ideal-pursuing types with planned behavior" are more likely to invest high amounts of money

in their idols.

Figure 5 shows a cross-tabulation of lifestyle clusters and several years as a fan. The results show that the "emotional money pursuit type" and the "idealistic pursuit type who plan their actions" have higher percentages of remaining fans of the same idol for more than 2 years, at 43.6% and 40.0%, respectively.



Figure 5: Cross-tabulation results by lifestyle cluster and fan career

Overall, fan loyalty is high, with a tendency to support the same idol for a long period if the fan target is present. However, fan loyalty was relatively low among the "rational stability-seeking" and "indifferent except for saving money" types, with more than 50% of them having been fans for less than one year. In the cross-tabulation of lifestyle and other items (event participation, fan community, video acquisition route, merchandise acquisition route, etc.), no significant differences were found among the clusters, but the contact points between idols and fans (contact points) were similar for all clusters. Both tended to prefer "Chinese SNS service Weibo," "QQ," "Chinese BBS," etc.

Next, a factor analysis of lifestyle (33 items in total) was conducted on the general Chinese population. Since no item had a factor loading of less than 0.3, all items were adopted, resulting in 10 factors (Table 5). The first factor consisted of "I think advertisements are essential to my life," "I am concerned about advertisements in town," "I like advertisements on TV and programs," and "I often see advertisements in newspapers and magazines," and the factor name was interpreted as "advertising-oriented factor. Factor 2 consists of "I am particular about food," "I care about a healthy diet," "I take the initiative to try new foods," and "I like foods that have health and beauty

benefits," and thus the factor name was interpreted as the "eating and drinking healthoriented factor. Factor 3 consists of "acquires information from newspapers rather than TV," "keeps magazines after reading," and "often reads fashion magazines," and the factor name was named "media-oriented factor.

Factor 4 consisted of new life awareness such as "yearning for a romantic life," "wanting to be popular with the opposite sex," "yearning for a lifestyle in a developed country," "liking trends, fashion, and new things," and "having a supportive family is important," and "being confident in oneself," and was therefore named the success awareness The factor name can be interpreted as "New Life and Success Oriented Factor". Factor 5 consists of "If a product breaks, I would rather replace it than fix it," "I always want to buy the most advanced products," and "I like fashionable things more than practical things," so the factor name can be interpreted as "advanced and fashion-oriented factor. Factor 6 consists of "always buys cheap products," "thinks money is a measure of success," and "works for a living," so the factor name can be interpreted as "work-money oriented factor.

Factor 7 consists of "I act on temporary feelings," "I sometimes make impulse purchases," "I always make plans," and "I am decisive rather than indecisive," and thus the factor name can be interpreted as a "decisiveness-oriented factor. Factor 8 consists of "I think stocks are risky," and "If I had extra money, I would deposit it in the bank," and thus the factor name can be interpreted as an "investment-oriented factor. Factor 9 consists of "I think family is more important than work" and "I like being with my family," thus the factor name can be interpreted as "family life-oriented factor.

And since Factor 10 consists of "visit multiple stores and compare prices" and "do not waste money," the factor name can be interpreted as "economic consumption-oriented factor. All of the above 10 factors are consistent with the factors analyzed in Wu (2005). In other words, the factor structure of the China-VALS is generally consistent with that of the China-VALS for Chinese people in general. The results of this analysis indicate that Chinese fans cannot converge to the China-VALS factor structure, while ordinary Chinese can converge to the China-VALS factor structure and clusters, indicating that the lifestyles of Chinese fans and generally Chinese are different.

	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
I think advertising is an essential part of life.		76 .0	111	07	13	09	06	.05	.02	.03
curious about the ads around town		74 .0	102	15	01	08	.02	.07	.06	.06
I like ads on TV and shows.		520	1.12		03	.16	10	.06	01	11
I often see ads in newspapers and magazines.		50 .1	0.33	.02	05	06	.12	02	.00	.04
I am particular about food.		.7	5.00	06	.04	02	.11	04	08	10
Pay attention to healthy eating habits.		.6	214	03	.01	.03	12	.05	.09	04
Take the initiative and try new foods.		.5	417	.03	.00	.08	.17	06	08	.12
I like food with health and beauty benefits.		.4	601	.15	.00	20	.11	.08	01	.11
Acquire information from newspapers rather than television.		.00	7.81	04	.13	.00	.06	.00	.09	19
I keep magazines that I have finished reading.		041	2.64	.05	09	13	.02	09	06	.14
Read fashion magazines often.		.00	9.46	.10	.14	04	.04	.08	04	.11
I long for a romantic life.		12 .0	4 .05	.71	15	08	02	.08	10	.06
I want to be popular with the opposite sex.	-,	011	906	.48	.00	.08	.08	04	.13	.08
It is important that the family be supportive.		.1 02	6.00	.48	15	.08	06	06	.14	10
I have confidence in myself.	-,	.1 02	5.13	.45	03	03	12	09	03	06
I yearn for the lifestyle of a developed country.	-,	100	3.02	.44	.09	.06	08	.14	.05	15
I like trends, fashion and new things.		180	108	.33	.23	03	.17	.00	05	.13
When a product breaks, replace it rather than fix it.	-,	130	2.03	09	.71	02	.10	.21	05	15
I always want to buy the most advanced products.		.1 06	9.07	11	.60	02	.09	04	.16	11
I like trendy things more than practical things.		.00	5.02	.12	.49	.22	.13	08	.07	01
Always buy the cheapest product.		.00	302	04	17	.59	.09	.04	01	.25
I believe money is a measure of success.		.00	212	.16	.18	.55	06	08	06	05
We work to live.	-,	160	108	.00	.14	.50	.06	.15	.00	.14
Acting on temporary feelings.	-,	.1 02	7.02	06	.14	.15	.68	09	.05	.07
Sometimes I make impulse purchases.	-,	.0 04	5.12	03	.24	05	.54	.02	11	.10
Always have a plan.	-,	.0 05	9.06	09	.23	.03	47	02	03	.40
Decisive, not indecisive.		.1 09	0.09	.00	.21	.04	35	11	08	.00
I think the risk of equity is significant.		100	608	.06	.21	.05	04	.86	.03	.05
If you have extra money, deposit it in the bank.		.1 07	4.13	.03	07	.27	02	.42	11	10
I think family is more important than work.		.1 07	1.01	.04	.06	.01	.01	03	.74	.07
I like being with my family.		.1 02	7.00	.11	.01	19	08	.08	.47	.10
Visit several stores and compare prices.		050	1.00	03	23	.21	.10	.02	.07	.68
No unnecessary expenses.		13.1	2.24	07	27	.28	02	.04	.08	.34
Factor correlation	F1 –	.3	6.36	.37	.51	.03	03	13	.11	.21
	F2	-	.43	.33	.33	11	37	.04	.35	.39
	F3		-	.17	.21	.16	24	.02	.17	.13
	F4			-	.41	01	.08	11	.07	.37
	F5				-	06	06	39	01	.22
	F6					-	.14	.09	.01	30
	F7						-	.04	28	08
	F8							-	.07	.08
	F9								-	.14
	F10									-

Table 5: Factor analysis results for general Chinese

\*The main factor method was used and the rotation was performed by applying Promax rotation with Kaiser's normalization.

### 5. Discussion and conclusion

### 5.1 Discussion

In this study, we conducted an exploratory study of the relationship between lifestyle and fan behavior. First of all, the basic attribute of Chinese fans, the fan image, was found to be overwhelmingly female fans, the majority of whom were in their 20s. In addition, a high percentage of Chinese fans' main activities are "online handshake sessions" and "participation in overseas performances in China and other countries," which is evident in light of COVID-19, and Chinese fans since 2020 have only been able to participate in "online handshake sessions. Given this trend, Japanese idol agencies may want to develop events that can be organized online to attract a wider fanbase.

In addition to the basic attributes, Chinese fans were asked about 33 items in the China-VALS, and nine factors were identified. Among them, only 3 of the 11 factors in

Wu (2005) were similar to the "investment-oriented factor," "decision-making abilityoriented factor," and "family life-oriented factor. These results suggest that Chinese fans cannot converge with China-VALS. The 10 factors analyzed in the factor analysis of the general Chinese lifestyle items are similar to the China-VALS factors, and can be interpreted as being able to converge within that factorial structure. In other words, because the results of the factor analysis of Chinese fans and general Chinese are different, it is clear that the lifestyle of Chinese fans and the lifestyle of general Chinese are different.

Following the hierarchical cluster analysis based on the Ward method, five clusters were extracted: "Rationally seeking stability," "Emotionally and financially driven," "Indifferent except for saving," "Proactive except for high risk," and "Systematically acting and pursuing ideals. For example, the "Rationally Seeking Stability" and "Indifferent Except for Saving" clusters are those that tend not to spend much money on idols, so releasing low-cost products and services may be an effective measure to retain fans.

In addition, since the "aggressive except for high-risk" and "planful and idealistic" types are more likely to spend money on idols, offering a variety of products and services in different price ranges may be more effective in attracting fans. From the above, it is clear that Chinese fans differ in their consumer behavior in each of the clusters divided by lifestyle segmentation. Based on the results of the analysis of fan behavior in each cluster, it can be assumed that when Japanese idol agencies expand into China, they can achieve greater results by actively promoting their products on Chinese SNS services such as Weibo, QQ, and Chinese BBS, which are frequently used by consumers. The number of visitors is expected to increase.

### 5.2 Conclusion

In the future, when developing the Japanese idol business overseas, it will be extremely effective to approach potential customers who may become Chinese fans in advance. However, until now, the idol business has conducted the same marketing activities without identifying potential consumers, treating the target as the same customer. It is therefore difficult to acquire potential fans at an early stage. This study revealed that the lifestyle of Chinese fans differs from that of the general Chinese population. This fact will serve as an important guideline for Japanese idol agencies in their future attempts to acquire potential fans for the idols they want to market. Based on the results of the conformity/nonconformity to the cluster, it will be possible to know in advance how to approach the fans in question.

At the same time, it was shown that the consumer behavior of Chinese fans differs

in each of the clusters divided by lifestyle segmentation. This means that for potential fans classified by lifestyle items, it is possible to design marketing strategies for each cluster according to the characteristics of the applicable cluster. This implies that marketing strategies have to be systematically developed based on clusters. The fact that these two facts were derived is the most important contribution of this study.

However, there are limitations to this study. In particular, in the present study, we used the China-VALS scale, which exists in previous studies, to examine the relationship between the fan behavior of Chinese fans, but we were unable to obtain a sample size of over 70,000, as in Wu (2005). This time, we conducted an exploratory factor analysis on a very small sample to estimate the general Chinese people. The fact that Chinese fans failed to converge on the 11 factors of the China-VALS clearly shows the peculiarities of idol fans themselves. Issues such as the fit to the above scale and sampling size need to be discussed in more detail in the future, but we will leave this point for future work.

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