International Journal of Advanced Culture Technology Vol.11 No.2 152-161 (2023)
DOI https://doi.org/10.17703/IJACT.2023.11.2.152

IJACT 23-06-16

A Study on the Types of Virtual Influencers in China Using Q Methodology

[1]LILI, [2]Jong-Yoon Lee, [3]ShanShan LIU, [4]Jang Sun Hong*

[1]*Lecturer, Henan Anyang Normal University, China*
[2]*Prof., Dept. Of Photography and Visual Media, SangMyung Univ., Korea*
[3]*Lecturer, Nanyang Institute of Technology, China*
[4]*Assistant Prof., Dept. Of Mass Communication, Konkuk Univ., Korea*
wvlily9@gmail.com, jongyoonlee1@smu.ac.kr, shanshan892@hotmail.com, js2hong@kku.ac.kr

Abstract

Modern people live a life connected with the real world and the virtual world by relying on the new media of enterprises and social consumption led by innovative technologies. In this environment, virtual influencers actively communicate with consumers and build relationships through social media, which is a new marketing tool that has attracted widespread attention. From a business perspective, it is necessary to have a solid understanding of this phenomenon, and then explore communication strategies to effectively develop virtual influencers.

To investigate followers' preference for virtual influencers, this study employs the Q-method, which studies human subjective attributes, an empirical research effort to uncover complex issues in human subjectivity. To determine the factors that trigger people's voluntary and active practice and the preference degree of virtual influencers, the Q method is implemented to examine human subjectivity, thoughts and attitudes.

According to the results of this study, virtual influencers are a new group of idols full of vitality. The interviews found that there are still many virtual influencers who do not know about followers, but each type can be clearly understood through the intuitive understanding of the interviewees. Divided out, type 1 one ego-ideal virtual influencers aim to represent an idealized version of the creator or target audience. Embodies ideal physical characteristics, personality or lifestyle desired by the audience. Type 2 is charismatic and attractive, and has the characteristics of most virtual influencers. It is suggested that it can be developed into a potential type, doing brand cooperation, and content production on social media platforms. Type 3: Game animation, derived from the image of characters in games or comics, with stylized features and energetic personalities, which can be integrated into games or entertainment experiences. Type 4 development potential type is the most successful type among virtual imagers, and it is also the purpose of marketing virtual influencers. It is essential that brand endorsement on social media platforms, integrated marketing, and driving advertising traffic. It is recommended to improve production technology to reduce investment costs.

Keywords: *Virtual Influencer, Marketing Strategy, SNS Channel, Q Methodology*

Manuscript received: May 16, 2023 / revised: May 30, 2023 / accepted: June 5, 2023
Corresponding Author: js2hong@kku.ac.kr
Tel:+82-43-840-3441, Fax: +82-43-840-3445
Assistant Professor, Dept. of Mass Communication, Konkuk Univ., Korea

Copyright©2023 by The International Promotion Agency of Culture Technology. This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (http://creativecommons.org/licenses/by-nc/4.0)

1. INTRODUCTION

In the era of national consumption and cultural industry, the training of real idols is carried out in accordance with a set of standardized and industrial processes. It can be said that idols are "products" produced by the cultural industry to meet the needs of different markets. The real idol in the frequency of homogeneous aesthetic fatigue at the same time also produced a large number of human collapse caused by the behavior of human idols. At this time, the virtual idols, which rely on technical support and artificial operation, stand out in the market with their relatively "perfect" image. Around the world, as early as 2007, Japan launched a virtual idol craze. In China, 2017 ushered in the outbreak of virtual idols in China. At this time, 14 virtual idols have made their debut, which is the sum of all virtual idols in previous years. However, in 2020 in the post-epidemic era, when the activity of real idols is relatively reduced due to the limited epidemic, the virtual idol industry is in the outlet of traffic, and has gained a great space for development [1].

With the gradual enrichment and upgrading of the pan-entertainment industry, the virtual network image is the core of the pan-entertainment era. Virtual image has developed into a strong new species of the current Internet trend, affecting the life and consumption patterns of the public while also changing the business form. Virtual idol, as content, has great commercial potential in most industries, and is a resource that can be developed and copied indefinitely. The construction of virtual idol has become a trend [2]. Virtual idol takes personification image and diversified content as the core, and its extension expression is usually based on virtual cartoon image or high imitation human image. Nowadays, virtual idols are gradually moving towards the development direction of brand visualization, but at present, virtual idols are temporarily in the stage of preliminary exploration of transformation and upgrading, and their development status and development strategies need to be further sorted out. This study provides practical value and theoretical significance for further development and development of virtual idols.

This study is based on the perspective of virtual influences, and the psychological subdivision of the preference of virtual influences according to the subjective structure of fans' understanding, interaction and preference. Q methodology is the type analysis of preferences, emotions and preferences, which is the most appropriate and belongs to the analysis method of various subjective elements. Therefore, this study used the Q method to conduct the following research questions. First, how are the subjective ideas of fans' evaluation, attitudes, preferences and other types divided, and what are the characteristics of each type? Second, what are the common dimensions of the various types found, and what are the actual preference factors and characteristics of fans for virtual influencers? Third, considering the future development and marketing strategies of virtual influencers, what are the production direction and enlightenment points of virtual influencers?

2. THEORETICAL BACKGROUND

2.1. Virtual Influencers

Virtual influencers refer to people who upload interesting content through Instagram, Facebook, YouTube, communicate with tens of thousands of fans, and have a lot of influence on them [3]. On social media, influencers share experiences, interests, information, etc., in specific fields, and the stories they share and reviews of brands will have a great impact on users' cognition and behavior. If in traditional media, celebrities and artists have always been one-way communication, Internet celebrities are based on SNS and have active two-way communication with users [4]. On the other hand, virtual influencers are virtual characters created for the purpose of enterprises and brand marketing. Just like real characters, they communicate with fans on SNS and conduct brand advertising. Virtual influencers are based on real people and generated by 3D software

engine. The second batch of products, such as short videos based in a real place or a virtual human model introducing their daily life, will also be produced relatively quickly. As a model, the virtual influencers are mainly SNS channel Instagram, with 6,000 or even 2.9 million followers [5]. Virtual influencers are manifested by different races, each showing the individual style. In addition to virtual influencers, they are also portrayed as characters with a musician profession, showing their lifestyle, and performing similar activities on SNS [6].

2.2. Influence of the virtual influencers

The influence of virtual influencers mainly comes from the reputation quantified as "followers". The influence they build in their field is first formed in the virtual world, but its influence permeates the reality and also plays the role of power. Although celebrities were born in the hierarchical structure of social media, ironically, their existence is seen as evidence of different hierarchical structures [7]. Word-of-mouth marketing pioneer Ed Keller found that one in 10 Americans actually influenced the other nine. That is to say, no matter what class or what group, 10% of the influencers exist. In addition, while the development of social media is discussed in the perspective of the democratization of communication, online user participation is actually limited. Jacob Nielsen introduced the principles in a paper on the inequality of participation. According to him, "in most online communities, 90% of users are hidden and contribute nothing, 9% contribute slightly and only 1% of users are almost most of the activity" [8]. Therefore, in the social media ecosystem, the network is often organized and influential by active users.

However, there are limitations in explaining the relationship between the influencer and the ordinary audiences by using the dichotomous relationship between the influencer and the affected person. As mentioned above, influential influencers may not be able to attract audiences to participate, and the "number of fans" may not be a measure of the quality of information. Because everyone's different values and preferences, modern society is more and more diversified. In addition, fans will not unconditionally follow the red people or blindly support the fans [9]. Fans can participate in or support the celebrities' message, and they can also influence the celebrities by providing reasonable feedback. In addition, fans have formed communities and fan groups, and they have exercised a new influence as a digital community [10]. In the media ecosystem, fans may not be positive messaging, but through responses and feedback to content, they can act as another influencer. Such facts teach us that we should not simply view the relationship between the dichotomy and the followers, but should regard it as an interactive social relationship [11].

3. RESEARCH METHODS

3.1. Q method

This study aimed to explore the subjective attitudes of the younger generation of social media users towards virtual influencers. Subjectivity refers to each person's attitude, trust, value, etc., towards a specific event or phenomenon [12]. That is to say, Q method is an analysis method for various subjective elements such as preferences, emotions, attitudes, feelings, preferences and values existing in people's inner world [13]. However, as the positivist research that tries to quantitatively explain social phenomena occupies the mainstream, subjectivity has long been excluded from the research subjects. According to William Stevenson , the founder of the Q methodology, subjectivity is not a field of mystery or romance. Then, the Q method refers to the human subjectivity research is based on the internal criterion framework of individuals. Therefore, we study the division of virtual influencers active in social media by the audience from their own subjective awareness, such as their values, preferences and emotional preferences.

3.2. Q samples and P samples

This study attempts to understand the subjectivity of fans to virtual effectors. It is helpful that fans' views and preferences of virtual influencers and the development of virtual influencers. In China, the virtual influencer track is highly competitive, and many influential virtual idols have been hatched. According to the current influence of virtual influencers, the TOP30 list of virtual influencers in the recent three years (2019-2022) is selected from the number of fans, content products and commercial cooperation projects. The Q sample is extracted from the Q population and is also equivalent to the concept of a complex. Complex refers to the whole related to the subjectivity that an individual has to a particular phenomenon or object [14]. The number of Q samples is appropriate from around 20 to 40 according to the theme.

By classifying the Q sample of the ranked top 30 virtual influencers. P sample generally refers to a large number of samples based on experience, because the sample must be representative. However, the Q method does not take the generalization of hypothesis testing, but aims to find assumptions based on human subjectivity. They are not simply study participants, but variables where participants respond to the Q sample according to their different views. Therefore, the type of human subjectivity is not affected by the number of samples, and the size of the P samples that classify the Q samples need not be very large, and the number of people producing factors and being comparable is sufficient. We selected 11 males and 11 females based on the sex ratio. On social media platforms, young people have basic knowledge and preferences of virtual influencers.

4. RESEARCH RESULTS

4.1. Figures

The research adopted the Q-methodological Approach and analyzed using the QUANL PC program. The results were obtained by a "principal component analysis" of the Q factor analysis. Furthermore, the correlation between the factors is also reviewed while the factor weights are reviewed. In addition, explanatory variables and screening tests were implemented to develop a comprehensive type classification process. Four types were found with feature values of 1 or higher. The correlation coefficient between the factors and the explanatory variables were determined after a comprehensive study. In total, four types were found. The Eigenvalue values were 8.7472, 2.8320, 1.5165, and 1.3814 by type, respectively. The cumulative variable of the four types was 65.8%, with a high explanatory power (see Table 1).

Table 1. Eigenvalue, Variance, Cumulative percentage and Correlations between Types

	Type1 (N=3)	Type2 (N=7)	Type3 (N=3)	Type4 (N=9)
Eigenvalue	8.7472	2.8320	1.5165	1.3814
Variance (%)	0.6042	0.1956	0.1048	0.0954
Cumulative percentage (%)	0.3976	0.5263	0.5953	0.6581
Type1	1.000			
Type2	.439	1.000		
Type3	-.097	.171	1.000	
Type4	.585	.621	.005	1.000

(Table 2) is the demographic factors and factor weights of each type of P sample. Generally, in Q studies,

different types of characteristics are distinguished or show specific patterns according to their demographic characteristics.

Table 2. Composition and type factor weights of the sample

Type1 (N=3)				*Type2 (N=7)*			
ID	sex	age	Factor weight	ID	sex	age	Factor weight
NO 7	woman	24	1.4028	NO 2	man	27	1.2524
NO12	man	24	1.5080	NO 4	man	22	2.1805
NO14	man	21	2.2312	NO 5	woman	23	1.8732
				NO11	woman	21	1.0004
Type4 (N=9)				NO13	man	24	0.7845
NO 3	man	34	0.9306	NO20	woman	35	1.1101
NO 6	woman	24	1.2289	NO21	woman	40	1.1396
NO 8	woman	22	2.3837				
NO 9	man	22	1.2205	*Type3 (N=3)*			
NO10	woman	22	0.7506	NO 1	woman	27	1.4477
NO15	man	23	0.7117	NO17	woman	23	1.0575
NO16	man	31	0.8820	NO19	man	40	2.2857
NO18	woman	32	0.3658				
NO22	man	42	1.6663				

4.2. Type of interpretation

Type 1: Self-ideal type

This type of virtual influencer overall style is the ideal image that the followers want to achieve. They are often designed as physical characteristics, personality or lifestyle that viewers can aspire to, and may reflect certain values that are important to the creator or the target audience. The popularity when followers get closer to the self-ideal style, is related to the feelings of both sides (influencers and followers), although sometimes the pattern of quasi-social relations seems to prevail, or the illusion that followers have intimate relationships with the influencer. This type will become a bridge between human beings and non-human beings, and find the shadow of reality in the virtual world, thus generating a sense of value identity, which can supplement the sense of reality in the network world. So it is named this type as the self-ideal type.

Virtual influencer A lice is positioned as musicians, artists and fashion bloggers, and A lice deeply analyzes and integrates the form of Asian super idols, from facial features to the gender distribution of fans. Virtual people have to build Bridges through a lot of content output and people. A lice with their own music, art works and their own stories, more concentrated to users to express the virtual person, the future, and the virtual influencer what she wants to express in their own world view (# 13, z=1.71). Tao sman is an IP image designed based on real idols. With content and products in the virtual space, it enhances the sense of companionship for followers (# 24, z=1.47). The virtual influencer Liu Yuexi national style makeup, crane pattern with the fluorescent texture of cyberpunk, combined with beauty makeup and ghosts for character positioning and story creation, attracted many followers to imagine her magical, retro, beautiful image (# 15, z=1.41) (See Table 3).

Table 3. Q sample with Z-score of ±1.00 or higher in Type 1

No.	13	24	15	11	7	
Q Sample						
Z-Score	1.71	1.47	1.41	1.19	1.05	
No.	9	1	29	26	3	30
Q Sample						
Z-Score	-1.05	-1.34	-1.56	-1.65	-1.70	-1.85

The first type of virtual influencers and followers, the closer the self-ideal type, the more they want to understand and be familiar with the virtual influencers, and the more likely they are to find themselves in the virtual network world. This type is easier to build a bridge with the real world. Negative factors, the two-dimensional animation image with too strong virtual image or the overall image is more personality, and the ideal type of the followers is more far away. Beyond the real big eyes, completely animated two-dimensional image, like a childhood cartoon cartoon image. Virtual Influencer Silent Jiang is the anchor of the live broadcast short video platform, and her two-dimensional image is limited to some followers (# 9, z= -1.05). Virtual singer Luo Tianyi is also presented in the network world with the image of two yuan, which is far from the self-ideal type (# 1, z= -1.34).

In short, this type is the most ideal and yearning type with the followers. The self-ideal type can better establish the communication between the real world and the network world, and the followers can find their own shadow in the network world. For virtual influencers with too high virtual ality, they will feel too far away from followers, and limited to some followers, it is difficult to completely enter the virtual world.

Type 2: Charming and attractive type

The second type is the charm attraction type, which is inherent in the influencer, and is certainly necessary to have some real or obvious attraction, such as attracting attention with talent, beauty, style, comedy, sex appeal, or authority. Charm is related to the physical or behavioral attraction of the followers to the influencers. Charm attractiveness may also be caused by attributes such as value creation, novelty, exclusivity and so on. In addition, charm attractiveness can influence other categories. Strong attraction contributes to a stronger scalability. In this type, the virtual influencers generally have a perfect appearance, a good appearance, and a comprehensive cultural story background. So this type is named "charming and attractive type".

Virtual influence of the girl wind set of the original beauty, has a lovely real appearance, bun head, neat bangs full girl wind. Like many young people, she likes to eat snacks, go shopping, play games and read comics, and is confused about her future (# 20, z=1.85). Virtual beauty expert Liu Youxi released a video combining beauty makeup with ghosts and super special effects, which has received more than 3 million likes and 270

million views. The facial image of Liu Youxi, set as the national style and not too aggressive label, in the expression and expression, is the kind of high cold feeling, the complete story plot of the film, has successfully attracted more followers (# 15, z=1.54) (See Table 4).

Table 4. Q sample with Z-score of ±1.00 or higher in Type 2

No.	20	15	13	2	4	7
Q Sample						
Z-Score	1.85	1.54	1.52	1.14	1.07	1.07
No.	29	25	28	19	26	10
Q Sample						
Z-Score	-1.05	-1.08	-1.45	-1.45	-1.62	-1.89

Attraction in the second type is related to charm, curiosity or other factors, and the virtual person in this type has a complete story background and a perfect exterior design. On the contrary, the external image of the virtual influencer is not perfect, and there are no more fans. Virtual influence Mu LAN LAN is a sense of technology, trend, fun sense of the image, to bring users a novel experience, so her appearance is limited to a small number of followers, or because of career positioning, purple appearance, technology sense of leather clothing, not popular with the public (# 29, z= -1.05). The male image of virtual idol model CHHUAN is too ordinary, with medium-long hair pattern, high nose bridge, and unclear eastern and Western style (# 25, z= -1.08).

The last category is the charm and attraction type, which has many followers, including the popular appearance and appearance, and the story background of successfully attracting followers. For the general appearance, the appearance is too mediocre virtual influencers, not easy to follow the preference and curiosity.

Type 3: Game and animation type

The third type is the game anime type, they use the design of comic style and 2D animation to create virtual characters, often inspired by the cartoon or game characters, with exaggerated features, such as big eyes, color hair and distinctive clothing, high pitch voice, and can convey innocent, naughty or happy various postures and expressions to describe. Often fantasy characters, heavenly musical characters, virtual effectors of 2D animation may provide a sense of escapism or fantasy, appealing to young people seeking entertainment and inspiration. Therefore, this type was named "game animation type".

In order to make the audience have a sense of intimacy, her appearance design combines the national style and the future of science fiction characters. Ling Qiu is not only named from the 24 solar terms, the clothing is specially designed with blue and white porcelain pattern, the color is also the sky blue of Song porcelain, as well as the national style decoration elements such as phoenix tail, Taiji Yin and Yang (# 18,

z=1.70). Virtual Sky wireless King comes from the IP image of Tencent game King of Glory, Infinite King group also has a huge fan group, familiar faces, familiar music has attracted many game fans (# 10, z=1.64) (See Table 5).

Table 5. Q sample with Z-score of ±1.00 or higher in Type 3

No.	18	10	28	1	6	3
Q Sample						
Z-Score	1.70	1.64	1.59	1.42	1.10	1.00
No.	11	17	19	29	12	26
Q Sample						
Z-Score	-1.02	-1.23	-1.38	-1.54	-1.64	-1.85

Virtual influencers of this genre are based on anime and game images, with its design and animation inspired from Kawaii culture and comic aesthetics. Virtual influencers have large eyes, colored hair, and high-pitched sounds, and can convey a variety of innocent, playful, or happy poses and expressions. On the contrary, the virtual influencer Harbin Jiang has a frank and easy appearance and an iconic blue hair, which becomes a typical opposite image of this type of followers who like cute anime (# 11, z= -1.02). VINCE is a cool model musician who has a daily life like skiing, playing basketball, singing, watching exhibitions, and so on (# 17, z= -1.23).

Type 4: Development potential type

A fourth type of virtual effecter whose characteristics and capabilities can be expanded or customized over time. This type is designed to develop by learning from user interaction, in response to changing trends or interests, or in response to feedback from fans or creators. The obvious feature of this type is a large number of followers, a high number of fans, and a large number of advertising brands. Has been a more successful virtual influencer. They all have a publicly recognized appearance, a beautiful but not grandiose appearance, and interact more frequently on social platforms. So this type is named as the potential of the sustainable development type.

Virtual influence, Ling Ling, shared on social media platforms, guqin, Go, calligraphy, painting, plum blossom, orchid, bamboo, chrysanthemum, etc., all created a "technological Chinese style of technology". With the support of intelligent virtual content production technology and real-time interaction technology of virtual characters, Ling transcends the level and shortens the distance with the audience (# 2, z=1.82). AYAYY has a virtual image closer to a real person than any other virtual idol. In terms of skin texture, AYAYI realizes the high intensity reduction of real human beings, which can be simulated and rendered according to different light and shadow conditions. At first, she made her debut with a light photo, debating whether it was a real one.

Based on virtual images, a well-established background setting, behavioral logic and values are constructed for AYAYI. Switching between virtual and real world improves the content space that AYAYI "real" characters can play (# 4, z=1.78) (See Table 6).

Table 6. Q sample with Z-score of ±1.00 or higher in Type 4

No.	2	4	15	16	13	
Q Sample						
Z-Score	1.82	1.78	1.35	1.32	1.32	
No.	28	22	10	29	24	26
Q Sample						
Z-Score	-1.11	-1.13	-1.21	-1.23	-1.66	-1.98

This type of virtual influencer is able to respond to changing trends or feedback from fans. Brand image endorsements and social media campaigns are all mature and can improve over time. On the contrary, the virtual idol group quantum boy, two-dimensional animation images limit the range of followers (# 28, z= -1.11). The virtual influencer YOYO is too unusual two-dimensional image and friendly design style (# 22, z= -1.13).

This type of virtual influencer is flexible in design, expensive to produce, comprehensive in marketing, and responsive to changing trends or fan feedback. Not only do they have attractive looks, but comprehensive backstories from social media platforms allow them to evolve and add new content over time.

5. RESEARCH CONCLUSIONS AND RECOMMENDATIONS

Using the Q methodology, this study uses the top 30 Chinese virtual influencers ranked by a combination of factors over the last three years to understand followers' preference types for virtual influencers. Four types of preference for virtual influencers were found. For each type found, the first type was named "self-ideal", the second type was named "charming and attractive", the third type was named "game and animation", and the fourth type was named "development potential". The fourth type was named "Development Potential". Although subjective preferences of virtual influencers through type analysis and interviews with the P sample, the four types were clearly delineated, but a large proportion of the Q-sample was not known and understood in the interviews. In light of this, the following references to the development strategies of virtual icons are provided.

Followers are still unfamiliar with some of the virtual influencers, but followers hold a higher awareness and preference among the charismatic attraction type and the development potential type. People prefer the charismatic attraction type to the game and animation type of virtual influencers. People preferred the developmental potential type to the self-ideal type of virtual influencers. Therefore, in the future, virtual images

of various types of followers will be developed and applied to tap into various orientation segments. In light of this, the active development of virtual icons considering the results of this study provides assistance in the following areas. By updating new technologies using augmented reality (AR) and virtual reality (VR), creating high-quality content using virtual influencers such as music, videos, live performances, and merchandise, it will be actively used in marketing strategies to attract effective social media (Tiktok, Instagram, YouTube) followers and increase brand loyalty.

REFERENCES

[1] Y. Pan, A study on the characteristics of virtual characters based on the Chinese digital media industry, Department of Video Contents, Graduate School, Dongseo University, a doctoral dissertation, 2023.
[2] S. H. Choi, The emergence and prospects of influencer in the social media era, Department of Sociology, Dongguk University Graduate School, a master's thesis, 2022.
[3] E. J. Kim and S. J. Hwang, A study of advertising effects according to the type of information source and the presentation of economic consideration in influencer marketing, *Journal of the Korean Digital Content Society*, Vol.20, No.20, pp. 297-306, 2019.
[4] W. B. Kim and H. J. Choo, The Effect of SNS Fashion influencer Authenticity on Follower Behavior Intention - Focusing on the mediating effect of FANSHIP, *Journal of the Korean Society of Clothing*, Vol.43, No.1, pp. 17-32, 2019.
[5] H. S. Jang and E. A. Yeo, Consumer perceptions of men and women in their 20s and 30s about 3D virtual influencer, *Doubles Culture Study*, Vol.28, No.4, pp. 446-462, 2020.
[6] W. B. Kim and H. J. Choo, The Effect of SNS Fashion influencer Authenticity on Follower Behavior Intention - Focusing on the mediating effect of FANSHIP, *Journal of the Korean Society of Clothing*, Vol.43, No.1, pp. 17-32, 2019.
[7] H. J. Yoo, Follower has no power, "Humanities Magazine 2: influencer", Minumsa Temple, 2020.
[8] S. Nina(2010), "Participatory Museum", translated by H. K. Lee & D. W. Ahn, Yeonam Book, 2015.
[9] S. Y. Lee, and J. K. Ahn, "Extraordinary Influence of Ordinary People, influencer", Nexus BIZ, 2018.
[10] J. H. Lee et al., "Social Media PR", Communication Books, 2012.
[11] Y. J. Kim, A study on the types of activities of influencers in the field of visual arts, Department of Culture and Arts Management, Graduate School of Business, Kyunghee University, a master's thesis, 2021.
[12] H. K. Kim, Understanding and Application of Q Methodology: Media Information Research Institute of Seogang University, 1990.
[13] J. S. Hong, A Study on Non-verbal Communication through Self-Representation and Symbol Characteristic: Focus on SNS Emoticons, *Korean Journal of Communication Studies*, Vol. 24, No.3, pp. 5-31, 2016.
[14] W. Stephenson, The study of behavior; Q-technique and its methodology, University of Chicago Press, 1953.