

Factors Influencing Identification as a Fan and Consumerism towards The Virtual K-Pop Group MAVE:

Valencia Hoesan^{*1}, Shimaditya Nuraeni²

School of Business and Management, Institut Teknologi Bandung, Bandung, Indonesia¹

Email: valencia_hoesan@sbm-itb.ac.id

Abstract

The K-Pop industry has been developing Virtual K-Pop Groups, a group with virtual human members made to be as similar to actual humans. Identification as a fan is one of the important factors in creating a purchasing behavior in the form of consumerism towards certain K-Pop groups. Therefore, this research was conducted to identify factors that significantly influence identification as a fan and consumerism towards one of the well-known Virtual K-Pop Groups, MAVE:. This research uses an extended Theory of Planned Behavior framework with additional audio and visual components, virtual group concept, peer influence and social media influence as the variables. The quantitative method used in this research uses a questionnaire with respondents from Indonesia who have at least once performed consumerism towards MAVE: as the data source. The data was analyzed using the Path Analysis method to examine the Influence between variables: attitude, subjective norms, perceived behavioral control, identification as a MAVE: fan and consumerism towards MAVE:. The result indicates that the virtual group concept's Influence on attitude and peer influence towards subjective norms are positively significant. Attitude, subjective norms and perceived behavioral control positively influence identification as a MAVE: fan. Also, identification as a MAVE: fan significantly influences consumerism towards MAVE: positively. This research aims to understand the consumer behavior of Virtual K-Pop Group consumers so that it becomes the basis for label companies that produce these groups to create effective strategies for generating revenue as the main goal of business.

Keywords: consumerism; theory of planned behavior; path analysis; virtual K-pop group.

A. INTRODUCTION

K-Pop has grown significantly and has become a global phenomenon (Romano, 2018). According to (Statista Research Department, 2022), the South Korean music industry's sales revenue reached 6.8 trillion South Korean won in 2019, and the export value of over 756 million U.S. dollars has increased continuously since 2009. K-Pop Radar Conference (2022) adds that K-Pop video content over three years of consumption grows about 2.5 times, from over 26.6 billion views in 2019 to over 64.3 billion in 2022.

Bigger developments are shown in K-Pop group projects consisting of virtual humans as the members. The idols, or group members, are virtual humans made as similar to humans as possible with AI technology. One of the examples is the virtual K-Pop group MAVE:, a South Korean virtual K-Pop group produced by Metaverse Entertainment, a subsidiary of the Netmarble Corporation and debuted on January 25, 2023, with its first album, "Pandora's Box". The group consists of four virtual members, which are SIU:, ZENA:, TYRA:, and MARTY:. Like K-pop groups in general, MAVE: has music videos and stage performances, emphasizing their singing and dancing with each member's unique expression and dance style, as well as the official fandom name and light stick. Each member has a position in the group. Moreover, they also have their birthday, zodiac, MBTI type, and even nationality.

K-pop is known for its parasocial relationships where the fans find ways to interact and communicate with the K-Pop artist, even through mass media, such as doing livestream or broadcasting messages on Instagram, Weverse, Youtube, Bubble, and much more (Souders, 2022). This parasocial relationship plays a significant role in creating a dedicated fan base. Fans often feel a sense of community and belonging

* Corresponding author

through interacting with other fans (Thomas, 2018). One example is shown in online fan wars between fans of a few different groups where they defend and protect their respective favored K-Pop group. This interaction also helps fans feel more invested in the artist's success and motivates them to support them through various ways, including streaming their music, buying merchandise, and attending concerts. Moreover, K-Pop label companies often focus on increasing fan engagement because the feeling of a close relationship with the artists generates dedicated fans, which also becomes a large source of revenue for the company, such as official merchandise purchases, subscriptions on communication platforms that allow parasocial interaction with the artists, paid fan membership with special benefits, and so on (Pereira, 2022). In conclusion, emphasizing strong emotional connection and fan-artist interaction is important to create a dedicated fan base and contribute to the consumption of K-Pop products and services.

However, it contradicts the virtual K-Pop group concept, which consists of members who are not real humans that can actually interact and communicate with fans. On several virtual K-Pop group MAVE: 's social media channels, many controversial comments were found that expressed the audiences' disapproval and lack of intention to decide to become fans or even listeners of the group despite fitting their music preference.

The controversy indicates that the new concept implemented by the virtual K-Pop group has certain factors that make people's tendency to become a fan or consumerism towards the group to be different from the general K-Pop group with actual human members. Thus, label companies that produce virtual K-Pop groups must also understand and adapt their strategy to develop their group.

Therefore, this study aims to: 1) discover the factors that influence consumerism toward virtual K-Pop groups MAVE: and 2) discover the factors that influence the identification as a virtual K-Pop group MAVE: fan. The findings from this research can be a consideration for virtual K-Pop group label companies in creating various strategies to develop their group's fan base and the fans' consumerism with the aim of increasing revenue as one of the main goals of businesses.

B. RESEARCH METHOD

This research is based on the Theory of Planned Behavior (Ajzen, 1991), a social-psychological theory that describes a predictive model of a person's behavior based on attitude, subjective norms, and perceived behavioral control. The theory is reliable and focuses on some variables, which are the most important factors and has high accuracy in generating a person's behavior (Ahmmadi, Rahimian & Movahed, 2021; Ajzen, 1991). Also, the Theory of Planned Behavior has been commonly used in many studies about a wide range of behavior, including business and marketing research. It helps explain consumer behavior related to brand loyalty and product adoption to predict purchases (Conner & Armitage, 1998). Attitudes explain how a person evaluates the behavior of action based on positive or negative perceptions toward that behavior, subjective norms are a person's perception of what other people think about the behavior, and perceived behavioral control is a person's belief in their ability to perform the planned behavior. The researcher adds audio and visual components, virtual group concept, peer influence, and social media influence as antecedent variables in the conceptual framework.

The methodology used in this research is a quantitative method using questionnaires as the data collection tools with purposive sampling, a non-probability sampling technique in which researchers have their considerations in choosing the targeted population that will be selected as the study samples. In this research, the sample criteria are Indonesian people who have performed consumerism towards MAVE: at least once. The author collected 240 questionnaire responses as the data source that will be analyzed.

For estimating the Influence between variables, this research used Path Analysis, a statistical method that enables researchers to determine the relation or dependencies between variables in a system of structural

equation models using a simple bivariate correlation (Hair, Black, Babin, Anderson & Tatham, 2006). This research uses IBM SPSS Statistics software as the data analysis tool to help authors conduct Multiple Linear Regression (MLR). This statistical regression model can be used in quantitative studies to estimate the relationship between variables that have a linear relationship, which is how the independent variables' change affects the dependent variables' change (Tranmer & Elliot, 2008). The data qualified to be analyzed using Multiple Linear Regression are measured by the ordinal scale or interval and have independent variables with linear relationships with their dependent variables.

C. RESULTS AND ANALYSIS

The authors divide the data analysis process in IBM SPSS Statistics into 4 models based on each relationship between the dependent and independent variables to be analyzed. The Influence of independent variables on the dependent variable is considered significant if the significance level (Sig.) value is lower than 0.05. The results of the analysis are shown in the tables below.

Table 1. Model 1 Regression Result

Independent Variables	Dependent Variable	Standardized Coefficients Beta	Constant	Sig.	t	R Square	Status
Audio and Visual Components	Attitude	-0.019	2.574	0.729	-0.347	0.461	Not Significant
Virtual Group Concept		0.688		<0.001			12.563

Source: processed data, 2023

Table 2. Model 2 Regression Result

Independent Variables	Dependent Variable	Standardized Coefficients Beta	Constant	Sig.	t	R Square	Status
Peer Influence	Subjective Norms	0.749	2.775	<0.001	13.937	0.655	Significant
Social Media Influence		0.083		0.125			1.541

Source: processed data, 2023

Table 3. Model 3 Regression Result

Independent Variables	Dependent Variable	Standardized Coefficients Beta	Constant	Sig.	t	R Square	Status	
Attitude	Identification as a MAVE: Fan	0.356	0.284	<0.001	5.790	0.588	Significant	
Subjective Norms		0.395		<0.001			7.326	Significant
Perceived Behavioral Control		0.159		0.002			3.180	Significant

Source: processed data, 2023

Table 4. Model 4 Regression Result

Independent Variables	Dependent Variable	Standardized Coefficients Beta	Constant	Sig.	t	R Square	Status
Identification as a MAVE: Fan	Consumerism towards MAVE:	0.386	0.669	<0.001	6.462	0.149	Significant

Source: processed data, 2023

The evaluations of each constructed hypothesis are summarized in Table 5.

Table 5. Hypothesis Testing Result

Hypothesis	Path Analysis		Result
	Variables	Sig.	
H1	Audio and Visual Components → Attitude	0.729 (Not Significant)	Rejected
H2	Virtual Group Concept → Attitude	<0.001 (Significant)	Accepted
H3	Peer Influence → Subjective Norms	<0.001 (Significant)	Accepted
H4	Social Media Influence → Subjective Norms	0.125 (Not Significant)	Rejected
H5	Attitude → Identification as a MAVE: Fan	<0.001 (Significant)	Accepted
H6	Subjective Norms → Identification as a MAVE: Fan	<0.001 (Significant)	Accepted
H7	Perceived Behavioral Control → Identification as a MAVE: Fan	0.002 (Significant)	Accepted
H8	Identification as a MAVE: Fan → Consumerism towards MAVE:	<0.001 (Significant)	Accepted

Source: processed data, 2023

The overall results are shown in the framework in Figure 1. The bold straight line indicates a significant influence between the independent variable towards the dependent variable, while the dotted line indicates no significant influence between variables. The Standardized Coefficients Beta (β) value represents how an increase in one value of the independent variable will affect the value of the dependent variable, assuming the other variables to be constant.

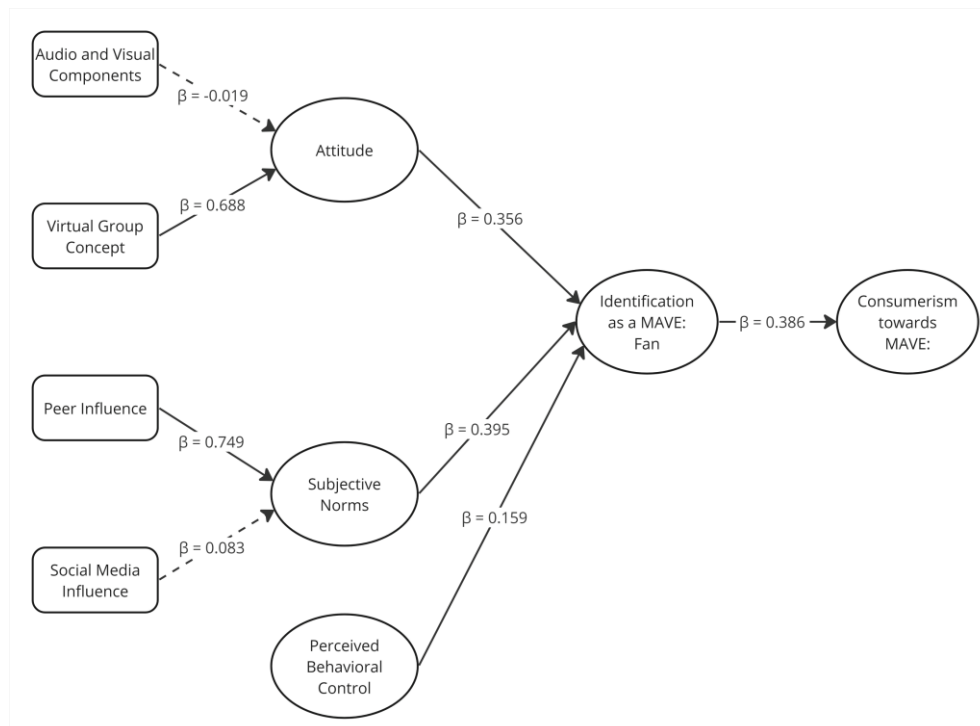


Figure 1. Adjusted Theoretical Framework

Source: processed data, 2023

Discussion

Audio and Visual Components' Influence towards Attitude (Not Significant, $\beta=-0.019$)

Hypothesis 1 states that the virtual K-Pop group MAVE: 's audio and visual components positively influence attitudes towards MAVE:. However, it was found that the virtual K-Pop group MAVE:'s audio and visual components have no significant influence on attitude towards MAVE:. Therefore, hypothesis 1 is rejected. The results of this research contrast with previous research (Ryu, Capistrano & Lin, 2020), which states that the audio and visual components of K-Pop influence the consumers' attitudes positively. This shows that the audio and visuals of the virtual K-Pop group MAVE: are not things that significantly influence attitudes towards MAVE: but other things influence attitudes towards MAVE:. The most probable assumption is because the virtual K-Pop group MAVE: has only released two songs in one single album, PANDORA'S BOX, and one music video for its song entitled PANDORA during the period of this research conducted.

Virtual Group Concept's Influence towards Attitude (Significant, $\beta=0.688$)

Hypothesis 2 states that virtual K-Pop group MAVE: 's virtual group concept positively influences attitudes towards MAVE:. Aligned with the hypothesis, it was found that the virtual K-Pop group MAVE:'s virtual group concept significantly and positively influences attitude. Therefore, hypothesis 2 is accepted. It is contrary to the previous research (Pereira, 2022; Souders, 2022; Thomas, 2018), which predicts that virtual K-Pop groups have limitations in forming a dedicated fanbase that has a strong sense of belonging because virtual members in virtual K-Pop Pop groups are not actual humans who can interact in real terms from various media. Instead, the virtual group concept implemented by the virtual K-Pop group MAVE: has a positive effect on the attitude towards MAVE:. The most likely assumption for this is that the virtual group concept is an interesting new thing for the audience, making them want to know more about the virtual K-Pop group MAVE:.

Peer Influence's Influence towards Subjective Norms (Significant, $\beta=0.749$)

Hypothesis 3 states that peer influence positively influences subjective norms. It was found that peer influence has a significant positive influence on subjective norms, aligned with the previous research (Chung, Ou, Wong, Lau & Leung, 2022), which states that peers or significant others influence a person's subjective norms. Therefore, hypothesis 3 is accepted. This shows that a person's subjective norms towards the virtual K-Pop group MAVE: are influenced by how the people closest to a person think, opinionated or behave towards the group. Information about the virtual K-Pop group MAVE is likely to be obtained from people closest to them.

Social Media Influence's Influence towards Subjective Norms (Not Significant, $\beta=0.083$)

Hypothesis 4 states that social media influence positively influences subjective norms. However, this research found that social media influence does not significantly influence a person's subjective norms. Therefore, hypothesis 4 is rejected. Contrary to previous research (Truong, 2018), which states that social media significantly influences a person's subjective norms. This shows that the various information obtained and the opinions conveyed by social media users do not significantly affect a person's subjective norms towards virtual K-Pop groups MAVE:.

On the other hand, one of the problems that motivated this study to be done was many comments stating that people could not and would not like K-Pop groups that used the virtual group concept, including MAVE:, are found. In fact, this study proved that negative comments on social media did not significantly affect a person's subjective norms towards the virtual K-Pop group MAVE:. It is also supported by how the virtual group concept implemented by the virtual K-Pop group MAVE: has a positive effect on their attitude towards MAVE:.

Attitude's Influence towards Identification as a MAVE: Fan (Significant, $\beta=0.356$)

Hypothesis 5 states that attitude towards MAVE: positively influences identification as a MAVE: fan. In this research, it is proven that attitude significantly influences identification as a MAVE: fan positively. Therefore, hypothesis 5 is accepted. Supported by previous research (Lestari & Tiarawati, 2020; Reysen, Chadborn & Plante, 2018; Sanitnarathorn, 2018), which stated that the attitude a person has toward an individual or group musical artist has a direct and positive influence on purchase intention for various products or services related to these artists, such as purchasing music, buying merchandise, artist and events. People who identify themselves as fans of a K-Pop group have a purchase intention that starts with a positive attitude toward the K-Pop group,

Subjective Norms' Influence towards Identification as a MAVE: Fan (Significant, $\beta=0.395$)

Hypothesis 6 states that subjective norms positively influence identification as a MAVE: fan. This research proves that there is a significant positive influence between a person's subjective norms towards the virtual K-Pop group MAVE: with their identification as a MAVE: fan, which is supported by previous research (Arassy, Wibisono & Rafdinal, 2021; Reysen et al., 2018; Sanitnarathorn, 2018) which states that the Influence of the closest people, which is an aspect of subjective norms, influences how a person wants to participate in consumerism of K-Pop related products and services, from music, albums to events. Therefore, hypothesis 6 is accepted. Positive subjective norms are an important aspect in underlying a person's decision to become a fan of the virtual K-Pop group MAVE:.

Perceived Behavioral Control's Influence towards Identification as a MAVE: Fan (Significant, $\beta=0.159$)

Hypothesis 7 states that perceived behavioral control positively influences identification as a MAVE: fan. In this research, perceived behavioral control is a significant aspect that positively influences people's identification as a MAVE: fan. Previous research (Arassy et al., 2021; Reysen et al., 2018; Sanitnarathorn, 2018) also shows how perceived behavioral control is important in underlying a person's intention to participate in purchasing music, following fan events, and so on. Therefore, hypothesis 7 is accepted. The belief that people have that they can and have the freedom to continue following various contents that will be released by the virtual K-Pop group MAVE contributes to how they identify themselves as a fan of the group.

Identification as a MAVE: Fan's Influence towards Consumerism towards MAVE: (Significant, $\beta=0.386$)

Hypothesis 8 states that identification as a MAVE: fan positively influences consumerism towards MAVE: fan. In this research, identification as a MAVE: fan is proven to have a positive significant Influence on consumerism towards MAVE: fan. Therefore, hypothesis 8 is accepted. Previous research (Jenol, 2020; Kim, Lee & Lee, 2018) also explain that the more a person identifies as a fan of a K-Pop artist or group, the higher their consumerism towards products and services related to that artist or group. It also aims to self-express by showing the identity of which fandom they belong. This research concludes that people who identify as fans of the virtual K-Pop group MAVE: tend to have a higher level of consumerism towards products or services from the group.

D. CONCLUSION

According to the findings of this research, identification as a MAVE: fan significantly has positive Influence on consumerism towards MAVE: fan. Also, the factors that significantly have a positive Influence towards identification as a MAVE: fan are attitude, subjective norms and perceived behavioral control, which is aligned with the Theory of Planned Behavior (Ajzen, 1991) that states a behavior's intention is based on the person's attitude toward the behavior, subjective norms and perceived behavioral control. On the other hand, this research also found that the virtual group concept of the virtual K-Pop group MAVE: has a significant positive influence on the attitude and peer influence has a significant positive influence on subjective norms.

Considering the findings in this research, label companies must focus on building a strong fanbase to be able to increase various forms of consumerism that contribute to revenue generation, taking into account the other factors, which are the virtual group concept, peer influence, attitude, subjective norms, and perceived behavioral controls. It is hoped that virtual K-Pop group label companies can use the findings from this research in creating various strategies to develop their group's fan base and the fans' consumerism to increase revenue as one of the main goals of businesses.

For future research, it is suggested to explore other factors that significantly influence identification as a MAVE: fan and consumerism towards MAVE:. In addition, due to the limited scope of research that only includes Indonesian, similar studies can be conducted on other populations in different geographical locations besides Indonesia to strengthen further and have comparisons of the research results. Forms of consumerism can also be made more specific, such as the Influence of identification as a MAVE: fan towards MAVE: 's music streaming behavior, so that more in-depth analysis results are provided for each form of consumerism. Apart from that, research with a qualitative approach is also needed considering there is still limited research on virtual K-Pop groups. The recommendations given for future research are expected to contribute to a deeper understanding of virtual K-Pop groups from a scientific point of view.

REFERENCES

Journal Article

- Ahmmadi, P., Rahimian, M., & Movahed, R. G. (2021). Theory of planned behavior to predict consumer behavior in using products irrigated with purified wastewater in Iran consumer. *Journal of Cleaner Production*, 296, 126359.
- Ajzen, I. (1991). The Theory of Planned Behavior, *Organizational Behavior And Human Decision Processes*. 50, 179-211.
- Arassy, B. F., Wibisono, N., & Rafdinal, W. (2021, September). Niat Pembelian Digital Album K-Pop: Analisis Deskriptif Theory of Planned Behavior. In *Prosiding Industrial Research Workshop and National Seminar* (Vol. 12, pp. 1016-1021).
- Chung, P. K., Ou, K. L., Wong, M. Y. C., Lau, K. L., & Leung, K. M. (2022). Investigation of Hong Kong students' Esports participation intentions using the theory of planned behavior approach: A structural equation model. *Human Behavior and Emerging Technologies*, 2022.
- Conner, M., & Armitage, C. J. (1998). Extending the theory of planned behavior: A review and avenues for further research. *Journal of applied social psychology*, 28(15), 1429-1464.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* 6th Edition.
- Jenol, A. (2020). K-pop fans' identity and the meaning of being a fan. *Universiti Sains Malaysia*.
- Kim, Y. J., Lee, J., & Lee, M. (2018). Purchasing behavior of K-pop idol goods consumers in Korea. *패션비즈니스*, 22(6), 1-13.
- Lestari, D. A., & Tiarawati, M. (2020). The Effect of Hedonic Motivation and Consumer Attitudes Towards Purchase Decision on K-Pop CD Albums (Study on KPOPSURABAYA Community). *THE SPIRIT OF SOCIETY JOURNAL: International Journal of Society Development and Engagement*, 3(2), 66-72.

- Machado Pereira, S. (2022). *Fan engagement strategies in the K-pop industry* (Doctoral dissertation, Scuola Universitaria della Svizzera Italiana (SUPSI)).
- Reysen, S., Chadborn, D., & Plante, C. N. (2018, May). Theory of planned behavior and intention to attend a fan convention. In *Journal of Convention & Event Tourism* (Vol. 19, No. 3, pp. 204-218). Routledge.
- Ryu, J., Capistrano, E. P., & Lin, H. C. (2020). Non-Korean consumers' preferences on Korean popular music: A two-country study. *International Journal of Market Research*, 62(2), 234-252.
- Sanitnarathorn, P. (2018). An Analysis of Music Fan towards Music Streaming Purchase Intention of Thailand's Music Industry. *Journal of Education and Training Studies*, 6(n3a), 78-87.
- Souders, A. J. (2022). *The New Pied Pipers: The Globalization of K-pop and the Role of Parasocial Relationships*. Temple University.
- Thomas, R. (2018). Mapping the perceptions and antecedents of football fans' co-creation behaviours with sponsoring brands: a pan-cultural study of the European leagues. *Journal of Marketing Management*, 34(17-18), 1470-1502.
- Tranmer, M., & Elliot, M. (2008). Multiple linear regression. *The Cathie Marsh Centre for Census and Survey Research (CCSR)*, 5(5), 1-5.
- Truong, N. X. (2018). The impact of Hallyu 4.0 and social media on Korean products purchase decision of generation C in Vietnam. *The Journal of Asian Finance, Economics and Business*, 5(3), 81-93.

Internet Source

- K-POP RADAR 케이팝레이더. (2022). *팬데믹을 지나, 2022 케이팝 세계지도 / SESSION 1 / 2022 K-POP RADAR CONFERENCE (ENG/JPN)* [Video file]. Retrieved from <https://www.youtube.com/watch?v=b-HXZKhgCmw>
- Romano, A. (2018). How K-pop became a global phenomenon. Vox. Retrieved from <https://www.vox.com>
- Topic: Music industry in South Korea. (2023). Retrieved from <https://www.statista.com/topics/5098/music-industry-in-south-korea/#topicOverview>