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# **Product Reviews in YouTube**

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#### ABSTRACT

The outbreak of COVID-19 has changed our lifestyle. People spend much more time on YouTube, SNS and online shopping than before. Accordingly, the number of product review videos are steeply increasing in YouTube platform. When people watched the review videos, they might search additional information if they liked the videos. This study aims to investigate how the informativeness and the degree of attention gathering of product review videos influence on the product information sourcing intention and persuasion knowledge. We also try to find whether prior YouTube experience affects the relationship between the degree of attention gathering and persuasion knowledge. We conducted an online survey on 499 participants and analyzed using partial least square methods. Results show that 1) informativeness and the degree of attention gathering towards product review videos influence on the product information sourcing intention and user's persuasion knowledge. 2) Viewers' YouTube experiences moderate the increase of the viewers' persuasion knowledge caused by increasing the degree of viewers' attention gathering. This study implies that YouTube product review videos could be created in strategic manners. Also, it could be inferred that consumers' prior YouTube experiences may reduce negative potentials of the degree of attention gathering onto persuasion knowledge.

Keywords: YouTube Product Review, The Degree of Attention Gathering, Informativeness, Product Information Sourcing Intention, Persuasion Knowledge

## I. Introduction

Product review videos on YouTube are increasing by the day (Nandagiri and Philip, 2018; Schwemmer and Ziewiecki, 2018). Since the outbreak of COVID-19, especially, product review videos in YouTube steeply increased. The important of product review videos has increased because customers are reluctant to visit offline stores due to COVID-19. According to Bazaarvoice, the number of product reviews increased up to 76% compared to the previous year.

YouTube product review videos may increase product sales volume. This would be why firms try to hire YouTube contents creators and let them review their products. However, consumers cannot directly buy the reviewed products after watching the videos

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except movie contents. In addition, customers may need more information in order to make purchasing decisions. When consumers get interested in a product after watching a product review video, they will search for additional information from other sources such as online shopping malls (Bhatnagar and Papatla, 2019). The fundamental goal of product reviews on YouTube is to lead viewers to source more product information and ultimately to purchase the product (Schwemmer and Ziewiecki, 2018).

Here rise the following questions. Which features of the product review videos compel viewers to seek for additional information about products? Wouldn't people perceive it differently depending on the characteristics of the video?

In this study, we consider the degree of attention gathering and informativeness as main features of product review videos. In fact, the degree of attention gathering and informativeness have garnered considerable academic spotlights (Haghirian et al., 2008; Kim, 2018; Tsang et al., 2004). However, little has been studied on product information sourcing intention and/or its relationships with other factors. Previous studies mention the effect of the degree of attention gathering and informativeness on the intention of purchase (Alalwan, 2018; Rachbini, 2018; Zhao and Wang, 2020). In the context of product review, no research has focused on the product information sourcing intention.

Besides the discussion about product information sourcing intention and its relationship with antecedents, there is "consumers' resistance to advertising messages." When consumers face advertisement excessively, they tend to have negative feelings. However, consumers' perceptions towards product review videos in YouTube and their attitude towards the products need to be interpreted in different way for the following reasons. First, consumers cannot sure about

the intention of the review videos. Some videos may be created with funds from firms while other videos may not. We even find videos criticizing products, sometimes. Second, consumers' negative attitude may not head to products. Even though consumers have negative emotions towards advertisements, they may not have negative emotions towards products themselves. Based on the above two reasons, we can say that product review videos should not anchor with advertisement practices or theories. Rather, emotion-neutral concept, persuasion knowledge is more suitable concept to understand consumers' perception on product review videos. When persuasion knowledge increases, consumers may have negative feelings, which is, yet, out of scope. The definition and practices of persuasion knowledge will be explained in the next section in details. In marketing discipline, persuasion knowledge has been studied with great importance (Friestad and Wright, 1994).

In this study, we examine two research models. In research model 1, we investigate how informativeness of the product review video and the degree of attention gathering of product review videos influence the product information sourcing intention. In research model 2, we sought to examine how the degree of attention gathering of product review videos influence on persuasion knowledge. If product information sourcing intention and persuasion knowledge are factors affecting intention to purchase, it would not be necessary to distinctively test two different models. However, intention to purchase is not within the nomological network, and thus, our study formulated research model 1 and 2. Also, both product information sourcing intention and persuasion knowledge are meaningful constructs to practitioners as well as to scholars.

# $\Pi$ . Theoretical Background and Research Model

#### 2.1. Product Review Videos on YouTube

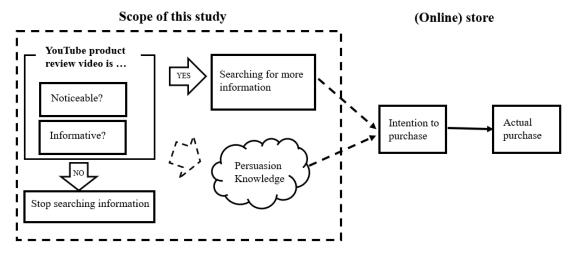
In the past, there were relatively many stars rating reviews about a singular product. Product reviews can help consumers make decisions because these indirect experiences can reduce product uncertainty (Fang et al., 2016). Currently, however, there are many products for a similar kind in market. This is why we cannot easily find a product with many stars rating reviews in an online commerce site. In most cases, when consumers find products in online commerce sites, they find products have quite a few stars rating reviews.

Consumers feel it is hard to make purchasing decision based on a few stars rating reviews. Instead, consumers want qualified reviews on richer media more and more (Duguay et al., 1997; Sunil, 2015). In this trend, referring to qualitied product reviews provided by other consumers has become important element of purchase process (Rajeev et al., 2015). If the review content is more qualitied on richer platform, consumers may feel it is useful to make purchasing decision.

YouTube video is a great platform enabling consumers to create more qualitied product reviews. Video content can provide longer and more detailed information than other types of content (Lee and Watkins, 2016). Product review videos on YouTube can effectively present visual, auditory, and detailed

<Table 1> Previous Research in Products Review Video on YouTube

Reference	Detail	Result
Kim and Whang (2019)	This study aims to analyze the advertising effect depending on the influencer type (celebrity and ordinary person) and verified how the advertising effect differs depending on displaying of economic support	ordinary people. But the advertising attitude
Lee and Watkins (2016)	This study examined how video blogs (vlogs) affect consumer perception of luxury brands, and suggests the research model in which video bloggers (vlogs) evaluate the effects of physical attractiveness, social attractiveness and attitude homogeneity on luxury brand recognition by para-social interaction (PSI).	brand perceptions and purchase intentions than
Athni (2017)	This study compared product review videos with official ads on YouTube for what types of videos have a stronger context, emotional and behavioral influence on consumers.	YouTube product review videos have a stronger contextual, emotional and behavioral influence on consumers than official advertisements.
Bi et al. (2019)	This study investigated the mediating effect of self-effect and third-person effect in the relationships between e-WOM seeking and passing on product review videos in YouTube	_
Rasmussen (2018)	This study investigated parasocial interaction (the feeling that the celebrity was the viewer's friend) occur between viewer and YouTube celebrity.	1
Ananda and Wandebori (2016)	This study examined the impact of beauty YouTube creators' makeup product reviews on Indonesian university students' purchasing intentions.	The result indicated that trustworthiness, expertise and quantity of review had significantly influenced purchase intention toward the makeup product on the review video.



<Figure 1> Conceptual Framework

information. It can also show how to use the product. In this reason, we can find recent studies about YouTube product reviews (see <Table 1>).

<Figure 1> shows the viewers' cognitive process during and after watching product review videos. Viewers refers to Internet users who watch videos and differentiated from consumers because their shopping purpose have not been identified. When viewers watch product review videos, they may like the videos or not. If they got to have interests in the reviewed product from the video, they would search more information about the product. If they lost interests in the reviewed product from the video, they would stop searching any information about the product. According to Lee et el. (2005), consumers are more likely to get to have interests in a product if the advertisement is informative and noticeable. It is interesting that consumers attribute the feelings and emotions from an advertisement onto product. In other words, if a consumer perceives an advertisement is not informative and not noticeable, he or she fails to have interests in the product. Likewise, we presume that this interesting phenomenon applies to product review video case. In this study, we apply

the relationship between informativeness and noticeability and consumer interests to YouTube review video scenarios. That is, a viewer may perceive certain levels of informativeness and attention gathering while watching a review video, and then he or she will get to have interests in the reviewed product or not. Subsequent process may not incur within YouTube. Rather, viewers will search more information from SNS, blogs, shopping malls, and other various sources.

When viewers watch product review videos, persuasion knowledge is formed. Human beings have tendency to guess message senders' purpose (Friestad and Wright, 1994). Presumably, viewers know that YouTube content creators have persuasive intent whatever it would be. If viewers perceive the persuasion attempts, they cope with the persuasion message with their own persuasion knowledge. YouTube content creators spend a lot of time and effort making their videos to make money. The number of YouTube content creators whose revenue model is based on subscriptions are steadily increasing (Perry, 2016). From YouTube content creator's point of view, it is better option to gain stable advertising revenue

by increasing the number of views and subscribers than simply making money from advertisers. It would be advantageous for YouTube product reviewers to honestly evaluate products in order to secure larger number of viewers. Viewers also know that YouTube product reviewers think as the above. The bottom line is that persuasion knowledge of YouTube product review viewer is different from persuasion knowledge of advertisement viewer. Persuasion knowledge has been regarded as a negative cue in advertisement discipline (Evans and Park, 2015; Ham et al., 2015). However, persuasion knowledge itself is value neutral and it is worth to be studied in the case-specific context.

Product information sourcing intention is expected to influence on the intention to purchase because there is no reason to search for more information otherwise. The positive relationship between the intention to purchase and actual purchase is empirically tested for decades over and over.

### 2.2. Product Information Sourcing Intention

Information sourcing is operationally defined as the process of identifying potentially useful information that exists external to the individual or organization and absorbing this information with the intention of applying it to useful ends. And consequently information sourcing intention would be the intention to gain and extend product information and knowledge from other sources such as other review videos, other review platforms (blog, SNS, community site), and offline sources (Kim and Rhee, 2018). It is believed to be related with curiosity towards the product. Curiosity is a significant cognitive belief that eventually leads to purchase (Bernard and Schulze, 2005; Hill et al., 2016; Swasy and Rethans, 1986). Many firms use strategies that stimulate consumer's curiosities to promote purchases of their products (Pierce et al., 2005).

# 2.3. The degree of Attention Gathering Towards the Product Review Video

The degree of attention gathering towards the product review video is generated when viewers get to have interest (Lee et al., 2005). Previous researches have focused on the degree of attention gathering of consumer because it is very important in the purchasing process (Behe et al., 2015; Burke and Leykin, 2014). In previous studies, when viewers see product review video contents, the degree of attention gathering towards contents impacts on the viewers and may influence their attitude to the contents if the contents are noticeable (Haghirian et al., 2008; Kim, 2018; Tsang et al., 2004). Relationship between such the degree of attention gathering and attitudes or feelings has been studied (Kim, 2018; Kunze, 2014). It should be noted that we consider only non-subscription viewer. Non-subscribing viewers do not have long-term relationship with YouTube creators. We presumed that a viewer subscribing to a YouTube channel may evaluate its contents in biased manner.

H1: Viewers' the degree of attention gathering towards the product review video will positively influence the product information sourcing intention.

## 2.4. Informativeness of the Product Review Video

Based on a study of Kim et al. (2008), informativeness of contents would be defined as the degree to which, viewers evaluate, the contents conceive and/or provide information. Informativeness of the product review video is the ability or function of the product review video to provide users with the information they want, and it is related to the benefit or usefulness that viewers seek (Choi and Lim, 2017)

In Technology Acceptance Model, the perceived usefulness has positive relationship with users' attitude towards new systems or technologies (Davis, 1989). The perceived usefulness conceives the concept, informativeness by definition, and thus, the informativeness of the product review video and viewers' attitude to the video might be positively inter-related. Previous researches have shown that the informativeness of content positively influences the user's attitude towards the content (Haghirian et al., 2008; Tsang et al., 2004). Since viewers' attitude towards the contents leads to additional information seeking behavior in the context of this study, we hypothesize that informativeness of product review has positive relationship with product information sourcing intention

H2: Viewers' informativeness of the product review video will positively influence the product information sourcing intention.

### 2.5. Persuasion Knowledge

Persuasion knowledge model is a model that deals with how knowledge (agent knowledge, target knowledge and topic knowledge) of agents or targets, who participate in persuasion process, affects the result of persuasion (Nam, 2014). The persuasion knowledge model has a very broad and comprehensive concept. Thus, many previous studies in consumer research have focused on consumer's persuasion knowledge (Holmes et al., 2017; Pillai and Kumar, 2012). Previous persuasion knowledge studies have examined how consumers are affected by persuasion messages (Aguirre-Rodriguez, 2013; Campbell and

Kirmani, 2000).

In this study, we can refer to persuasion knowledge as YouTube product review viewers' personal awareness on coping with persuasion attempts (Isaac and Grayson, 2017). Persuasion knowledge includes consumers' beliefs about marketers' motivation, strategies, and tactic (Campbell and Kirmani, 2000). Consumers form the persuasion knowledge based on their experience. They are used their persuasion knowledge to cope with marketer's persuasion attempts and it can lead to develop their persuasion knowledge. As a result, consumers have coping tactic about persuasion attempts (Friestad and Wright, 1994; Lemanski and Hyung-Seok, 2012; Van Reijmersdal et al., 2016). In YouTube, the degree of attention gathering towards the product review video is very important for the persuasion process. Commercial and non-commercial content are strongly interconnected in YouTube (Mayrhofer et al., 2020). In the case of product review videos, it is difficult to be completely independent of commercial factors. Even if YouTube creators are not supported by the company, they provide the information, evaluation and indirect experience of commercial products. In addition, previous studies prove that consumer the degree of attention gathering has a very high correlation with persuasion knowledge (Kim et al., 2001; Nelson and Park, 2015). Even if viewers saw content that disclosed source itself or included advertising disclosure, viewers were not aware that the content had a commercial source. If viewers do not pay the degree of attention gathering to product review videos, it will have less impact on their persuasion knowledge because they are not aware of advertising or persuasion attempts (Mayrhofer et al., 2020). On the contrary, the more the degree of attention gathering viewers pay to YouTube product review videos, they will take more persuasion knowledge toward the product. Therefore, viewers' the degree of attention gathering will positive influence their persuasion knowledge toward the product.

H3: The degree of attention gathering towards the product review video will positively influence the persuasion knowledge

Viewer's YouTube experience also influences this cognitive process because experience of using products and services affects the purchase process (Holbrook et al., 1986; Richins, 1983; Yoon, 2013). In consumer studies, the first important factor is consumers' consumption experience (Holbrook et al., 1986). In purchasing process, consumers' negative experiences can adversely influence their perceptions (Yoon, 2013). Consumers' negative experience can lead to complaining behaviors, customer churn, and negative word of mouth (Richins, 1983). The impact of consumers' experiences may also occur when they visit product review videos on YouTube. According to Friestad and Wright (1994), viewers are experienced and learned through the persuasion attempts. Then, their persuasion knowledge will form, change, and ultimately automatically respond to persuasion messages. Therefore, viewer's tactics coping with the persuasion message will also depend on the viewer's experience. If beginner viewers of YouTube pay more attention to the product review, they focus on their persuasion knowledge for responding to unfamiliar persuasion messages. It is caused by their lack of YouTube experience. Beginner viewers do not have enough experience to automatically cope via their persuasion knowledge. On the contrary, viewers familiar with product review videos will respond automatically to persuasion attempts. Their natural response against persuasion attempts is caused by their long experience in YouTube. That is, viewers with

lots of experience for YouTube may be less bothered by persuasion attempts even though they pay great deal of attention on content. For this reason, viewers' YouTube experience will moderate the relationship between their degree of attention gathering and persuasion knowledge towards product.

H4: YouTube experience moderates the relationship between viewers' the degree of attention gathering and persuasion knowledge.

# **Ⅲ.** Research Methodology

### 3.1. Participants and Online Research Design

In our research, we had 699 participants from the US through Amazon Mechanical Turk. Out of these, 200 participants were excluded due to incorrect or incomplete answers. We had total number of 499, with 248 male and 250 female participants (see <Table 2>).

We collected the data using SurveyMonkey, and the participants were recruited from Amazon Mechanical Turk. When participants visited the online survey page, they watched the product review video first through the given YouTube video link and then answered the questionnaire. We selected an air fryer as our product because it is an experience good (Pfeuffer, 2018). People need to rely more on product review videos because experience goods need to be bought and used to know their quality. We prepared four air fryer review videos of about 10 minutes each. Lastly, participants were asked to answer a multiple-choice quiz asking questions about the product. Insincere or inappropriate responses were excluded.

Variable	Number of participants Total: 499	Percentage
	20~29: 146	~29: 29.26%
	20~39: 189	20~39: 37.88%
	40~49: 90	40~49: 18.15%
Age	50~59: 45	50~59: 9.20%
	60~69: 27	60~69: 5.45%
	70~79: 2	70~79: 0.05%
	Male: 249	Male: 49.9%
Gender	Female: 250	Female: 50.1%

< Table 2> Demographic Characteristics of Respondents

## 3.2. Survey Questionnaire

In our research, we use an online survey to test our hypotheses. The questionnaire items for all variables are based on existing studies. <Table 3> shows the variables, definitions, and questionnaire items.

# IV. Data Analysis and Results

This study examines two research models. From a viewer's perspective, the process of watching YouTube product review videos does not include the purchasing process. This is why we focus on product information sourcing intention, not on purchase intention. The second model deals with persuasion knowledge, and product information sourcing intention has nothing to do with persuasion knowledge. Thus, we separately examined two different models.

In research model 1, it investigates how informativeness of the product review video and the degree of attention gathering towards product review videos influence the product information sourcing intention. Model 2 sought to examine how informativeness and the degree of attention gathering towards product review videos influence resistance towards a product. We examined the measurement

model with a series of confirmatory factor analyses (CFA) according to the procedure recommended by Anderson and Gerbing (1988). We tested the reliability, convergent validity, and discriminant validity of the constructs. Specifically, we used Smart PLS 3 for the analysis.

### 4.1. Model 1

Model 1 is comprised of informativeness of product review video, the degree of attention gathering towards product review video, and product information sourcing intention. In order to see how sound our model and instrument are, we evaluated the reliability of the constructs through Cronbach's alpha (Cronbach, 1951). Cronbach's alpha should be higher than 0.70 (Nunnally, 1967) and all our construct Cronbach's alpha exceeded 0.70 (see <Table 4>). Gefen et al. (2000) recommended that the AVE should be greater than 0.5. < Table 4> shows that the AVEs for all construct were greater than 0.5. The square root of the AVE should be higher than the correlations of the latent variables. <Table 4> shows that all square root AVEs were higher than those for the other variables. Thus, this measurement model had discriminant validity.

< Table 5> shows that all individual items measure

<Table 3> Measurement Items

Variable	Definition	Questionnaire item	Reference
		Inf1: The information in the product review video is up to date.	(Park, 2020)
Informativeness of the product review video	Viewer's evaluation that a product review video provides sufficient product information	Inf2: I can get enough information about the product in the product review video.  Inf3: In the product review video, I can get appropriate information for the purpose of purchase.	(Kim et al., 2008)
		Inf4: The product review video helps me reduce the effort of getting the information I needed.  Inf5: The information obtained from the product review video is helpful to me.	(Kim and Choi, 2015)
The degree of attention	Vigurar's parcaiyad	Att1: The content of the product review video is unique. Att2: The content of the product review video is touching.	(Lee et al., 2005)
The degree of attention gathering towards the product review video	Viewer's perceived attractiveness of product review video	Att3: The content of the product review video is attractive. Att4: The content of the product review video is fun. Att5: The content of the product review video makes me feel good.	(Lee et al., 2005; Kim and Choi, 2015)
Product information sourcing intention.	Viewers' intention and need to search for product information from other information sources	Sourcel: I want to know more about the product information after watching the review video.  Source2: After watching the review video, I would like to explore additional information about the product.  Source3: After watching the review video, I got interested in the product.	(Kim and Rhee, 2018)
Persuasion knowledge	Viewer's personal awareness of coping about the product reviewed on YouTube	<ul> <li>PK1: I don't think the product reviewed on YouTube will be useful.</li> <li>PK2: I think the price of the product reviewed on YouTube will be higher than the quality.</li> <li>PK3: I think the messages and contents about the product in the product review video on YouTube are manipulative.</li> <li>PK4: I'm not interested in the quality of the product reviewed on YouTube.</li> <li>PK5: I don't need the product reviewed on YouTube.</li> </ul>	(Seong and Lee, 2018)

the highest load on their own potential rather than other potential variables, further supporting the convergent and discriminant validity of our measurement models (Fornell and Larcker, 1981).

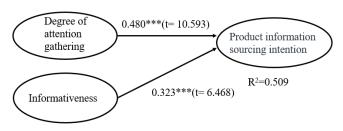
As shown in <Figure 2>, the path-coefficient between the degree of attention gathering towards the product review video and product information sourcing intention is 0.480, and the t-value is 10.593. This shows that viewers try to search for more information about the product reviewed in the video if they think the video is noticeable enough. Informativeness of the product review video also positively influence product information sourcing intention with the path coefficient of 0.323 and t-value of 6.468. Thus, if viewers think the review video is informative, they tend to search for more information for their purchasing decision.

<Table 4> Reliability and Discriminant Validity (Model 1)

Construct	Items	Factor loading	Cronbach's alpha	AVE	1	2	3
	Att1	0.758		0.602	0.776		
D ( " "	Att2	0.76					
Degree of attention gathering	Att3	0.759	.835				
gattlering	Att4	0.759					
	Att5	0.807					
Product information	Sourcing1	0.866	.771	0.686	0.662	0.828	
sourcing intention	Sourcing2	0.782					
sourcing intention	Sourcing3	0.834					
	Infl	0.702					
Informativeness of the product review video	Inf2	0.703					
	Inf3	0.745	.775	0.527	0.561	0.593	0.726
	Inf4	0.702					
	Inf5	0.774					

<Table 5> Cross Loading of Model 1

Construct	Item	Component			
Construct	nem	1	2	3	
	Att1	0.758	0.510	0.452	
	Att2	0.796	0.489	0.354	
Degree of attention gathering	Att3	0.759	0.509	0.510	
	Att4	0.759	0.478	0.389	
	Att5	0.807	0.571	0.462	
	Sourcing1	0.582	0.866	0.538	
Product information sourcing intention	Sourcing2	0.500	0.782	0.402	
	Sourcing3	0.558	0.834	0.522	
	Inf1	0.385	0.425	0.702	
Informativeness of the product review video	Inf2	0.410	0.414	0.703	
	Inf3	0.411	0.445	0.745	
	Inf4	0.373	0.379	0.702	
	Inf5	0.451	0.479	0.774	



<Figure 2> Result - Model 1

Note: \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001, ns: insignificant at the 0.05 level

#### 4.2. Model 2

Model 2 is comprised of the degree of attention gathering towards product review video and persuasion knowledge. In order to see how sound our model and instrument are, we evaluated the reliability of the constructs through Cronbach's alpha (Cronbach, 1951). Cronbach's alpha should be higher than 0.70 (Nunnally, 1967) and all our construct Cronbach's alpha exceeded 0.70 (see <Table 5>). Gefen et al. (2000) recommended that the AVE should be greater than 0.5. <Table 6> shows that the AVEs for all construct were greater than 0.5. The square root of the AVE should be higher than the correlations of the latent variables. < Table 6> shows that all square root AVEs were higher than those for the other variables. Thus, this measurement model had discriminant validity.

<Table 7> shows that all individual items measure the highest load on their own potential rather than other potential variables, further supporting the convergent and discriminant validity of our measurement model (Fornell and Larcker, 1981).

As of <Figure 3>, the path-coefficient between the degree of attention gathering towards product review video and the persuasion knowledge is 0.200, and the t-value is 5.414. This shows that the more noticeable the product review is, the viewer have stronger persuasion knowledge. YouTube experience negatively influence on the relationship between the degree of attention gathering and persuasion knowledge with the path coefficient of -0.185 and a t-value of 6.363. As viewers' YouTube experience increases, even if viewers pay more attention toward the product review video, the increase in persuasion knowledge is mitigated.

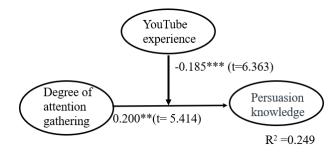
Meanwhile, we tentatively tested moderating effects of demographic features. As results, we could find that YouTube experience has negative interaction effect on the relationship between the degree of attention gathering towards the product review video and the persuasion knowledge. This shows that the period of using YouTube negatively affects the relationship between viewers' the degree of attention gathering towards the product review video and their persuasion knowledge. There is a possibility that age

< Table 6> Reliability and Discriminant Validity (Model 2)

Construct	Items	Factor loading	Cronbach's alpha	AVE		ysis (compar Root of the	
	Att1	0.717					
ъ .	Att2	0.901	.835	0.593	0.768		
Persuasion knowledge	Att3	0.698					
Mowieage	Att4	0.750					
	Att5	0.767					
	PK1	0.717	.862	0.593	3 0.261	0.803	
The degree of attention	PK2	0.901					
gathering toward the product review videoe	PK3	0.698					
	PK4	0.750					
	PK5	0.767					
YouTube experience	Experience	1	1		-0.148	-0.425	1

<table 7=""> Cross Lo</table>	oading of	Model	2
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Country	Item -	Component			
Construct		1	2	3	
	Att1	0.748	0.165	-0.057	
	Att2	0.873	0.302	-0.154	
Attention towards the product review video	Att3	0.673	0.079	-0.061	
	Att4	0.771	0.187	-0.115	
	Att5	0.765	0.154	-0.141	
	Sourcing1	0.207	0.832	-0.316	
	Sourcing2	0.188	0.718	-0.270	
Product information sourcing intention	Sourcing3	0.355	0.820	-0.358	
	Sourcing4	0.168	0.828	-0.366	
	Sourcing5	0.095	0.810	-0.386	
YouTube experience	Experience	-0.148	-0.425	1	



<Figure 3> Result of Model 2

Note: \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001, ns: insignificant at the 0.05 level

may be spurious factor as older persons may be believed to have more YouTube experience (Kim and Rhee, 2018). Thus, we controlled "age" variable and confirmed that age is not significant factor in this model as a control variable.

## V. Conclusion

This study investigates how informativeness and the degree of attention gathering towards product review videos influence the product information sourcing intention and persuasion knowledge through two research models. Our findings indicate that informativeness and the degree of attention gathering towards product review videos positively influence the product information sourcing intention. It means that people feel that the information in the product review videos is useful, and the more attention they pay to reviews, the more likely they are to look for the product information through other sources. The product information sourcing intention is a very useful variable for explaining the relationship between viewers and YouTube content creators on YouTube. It also can apply to other consumer researches that seek to measure the antecedents of purchase or use

products and services. In model 2, our findings show that the degree of attention gathering towards product review video positively influences the persuasion knowledge. In addition, viewers' YouTube experience negatively moderates the relationship between the degree of attention gathering towards product review videos and viewer's persuasion knowledge. When the degree of attention gathering increases, the persuasion knowledge also increases. However, as viewers' YouTube experience increases, even if viewers pay more attention toward product review videos, it mitigates the increase of their persuasion knowledge. These findings can be useful for practitioners as well as academia.

### VI. Discussion

The implications of this study are as follows. First, we shed light on the mechanism of video product reviews and consumers' attitude. We investigated the cognitive process of YouTube product review viewers through product information sourcing intention. The degree of attention gathering and perceived informativeness of product review videos have positive influence on the product information sourcing intention. In fact, while previous marketing studies focus on customer's purchasing intention, the product purchasing is not occurred directly on the YouTube contents. Also, viewers are not necessarily willing to buy the product as the result of watching the videos. Product information sourcing intention may be one of the most useful concepts for under-

Second, in this study, we found the relationship the degree of attention gathering and persuasion knowledge. Persuasion knowledge has been regarded

standing consumers' behaviors in YouTube.

as a negative concept in marketing research. However, persuasion knowledge viewers get to have may be different from that of advertisement viewers. Persuasion knowledge is worth to be solely studied in the context of "video reviews."

Third, we find that YouTube experience negatively moderates the relationship between the degree of attention gathering and persuasion knowledge. Viewers, familiar with product review videos, might already have experienced persuasion attempts over and over. Viewers' persuasion knowledge is formed, developed, and unconsciously reacted on the bases of prior YouTube experience. That is, viewers with lots of experience for YouTube may be less bothered by persuasion attempts even though they pay great deal of attention on content. On the contrary, if viewers with little experience for YouTube pay attention to product review videos, they will be more likely to be affected and their persuasion knowledge will increase. The duration of YouTube experience and its relations to persuasion knowledge provide insights into marketing strategies.

This study has the following limitations. First, we used review videos for only one product (air fryer). In YouTube, there are product review videos about various types of goods. Therefore, future studies should be considered dividing products into different criteria (e.g., homogeneous products vs heterogeneous products, experience goods vs search goods, high involvement products vs low involvement products). Second, the length of the review video may affect the result. Future studies will require a comparative study with different lengths of product review videos. Last, this study did not distinguish viewers coming through a search or through a recommendation algorithm, nor did it make any assumption. Even if both non-subscription viewers have a short and temporary relationship with YouTube contents creators, it is expected to be different in that one side is mindful of the purchase and the other is not considering the purchase. Future studies should provide each scenario to differentiate cases introduced through the video recommendation system and cases received through the search.

## <References>

- Aguirre-Rodriguez, A. (2013). The effect of consumer persuasion knowledge on scarcity appeal persuasiveness. *Journal of Advertising*, 42(4), 371-379.
- [2] Alalwan, A. A. (2018). Investigating the impact of social media advertising features on customer purchase intention. *International Journal of Information Management*, 42, 65-77.
- [3] Ananda, A. F., and Wandebori, H. (2016). The impact of drugstore makeup product reviews by beauty vlogger on Youtube towards purchase intention by undergraduate students in Indonesia. *International* Conference on Ethics of Business, Economics, and Social Science, 264-272.
- [4] Anderson, J. C., and Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423.
- [5] Athni, A. (2017). Contextual, emotional and behavioural influences of YouTube product review videos and official advertisements on consumers. *Journal of Applied Leadership and Management*, 5, 27-34.
- [6] Behe, B. K., Bae, M., Huddleston, P. T., and Sage, L. (2015). The effect of involvement on visual attention and product choice. *Journal of Retailing* and Consumer Services, 24, 10-21.
- [7] Bernard, J. C., and Schulze, W. (2005). The next new thing: curiosity and the motivation to purchase novel products. *Economics Bulletin*, 3(32), 1-8.
- [8] Bhatnagar, A., and Papatla, P. (2019). Do habits influence the types of information that smartphone shoppers seek? *Journal of Business Research*, 94, 89-98.
- [9] Bi, N. C., Zhang, R., and Ha, L. (2019). Does valence of product review matter? *Journal of Research in Interactive Marketing*, 13(1), 79-95.
- [10] Burke, R. R., and Leykin, A. (2014). Identifying the drivers of shopper attention, engagement, and

- purchase. Shopper Marketing and the Role of In-Store Marketing, 11, Emerald Group Publishing Limited, pp. 147-187.
- [11] Campbell, M. C., and Kirmani, A. (2000). Consumers' use of persuasion knowledge: The effects of accessibility and cognitive capacity on perceptions of an influence agent. *Journal of Consumer Research*, 27(1), 69-83.
- [12] Choi, M., and Lim, B. (2017). A study on the informativeness and the effect on the purchase intention based on types of smart phone mobile advertising. Asia-pacific Journal of Multimedia Services Convergent with Art, Humanities, and Sociology, 7, 701-714.
- [13] Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334.
- [14] Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*(3), 319-340.
- [15] Duguay, C. R., Landry, S., and Pasin, F. (1997). From mass production to flexible/agile production. International Journal of Operations & Production Management, 17(12), 1183-1195.
- [16] Evans, N. J., and Park, D. (2015). Rethinking the persuasion knowledge model: Schematic antecedents and associative outcomes of persuasion knowledge activation for covert advertising. *Journal of Current Issues & Research in Advertising*, 36(2), 157-176.
- [17] Fang, B., Ye, Q., Kucukusta, D., and Law, R. (2016). Analysis of the perceived value of online tourism reviews: Influence of readability and reviewer characteristics. *Tourism Management*, 52, 498-506.
- [18] Fornell, C., and Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing*

- Research, 18(1), 39-50.
- [19] Friestad, M., and Wright, P. (1994). The persuasion knowledge model: How people cope with persuasion attempts. Journal of Consumer Research, 21(1), 1-31.
- [20] Gefen, D., Straub, D., and Boudreau, M. C. (2000). Structural equation modeling and regression: Guidelines for research practice. Communications of the Association for Information Systems, 4(1), 7.
- [21] Haghirian, P., Madlberger, M., and Inoue, A. (2008). Mobile advertising in different stages of development: A cross-country comparison of consumer attitudes. Proceedings of the 41st Annual Hawaii International Conference on System Sciences(HICSS), IEEE, 48.
- [22] Ham, C. D., Nelson, M. R., and Das, S. (2015). How to measure persuasion knowledge. International Journal of Advertising, 34(1), 17-53.
- [23] Hill, K. M., Fombelle, P. W., and Sirianni, N. J. (2016). Shopping under the influence of curiosity: How retailers use mystery to drive purchase motivation. Journal of Business Research, 69(3), 1028-1034.
- [24] Holbrook, M. B., Lehmann, D. R., and O'Shaughnessy, J. (1986). Using versus choosing: The relationship of the consumption experience to reasons for purchasing. European Journal of Marketing, 20(8), 49-62.
- [25] Holmes, Y. M., Beitelspacher, L. S., Hochstein, B., and Bolander, W. (2017). Let's make a deal: Price outcomes and the interaction of customer persuasion knowledge and salesperson negotiation strategies. Journal of Business Research, 78, 81-92.
- [26] Isaac, M. S., and Grayson, K. (2017). Beyond skepticism: Can accessing persuasion knowledge bolster credibility? Journal of Consumer Research, 43(6), 895-912.
- [27] Kim, B. H., Pasadeos, Y., and Barban, A. (2001). On the deceptive effectiveness of labeled and unlabeled advertorial formats. Mass Communication & Society, 4(3), 265-281.
- [28] Kim, E. J., and Whang, S. C. (2019). A study on advertising effect depending on type of information source and displaying of economic support in influencer marketing: Focusing on Youtube. Journal

- of Digital Contents Society, 20(2), 297-306.
- [29] Kim, H. S., Gim, S., and Kim, Y. G. (2008). The effect of information service quality on customer loyalty: A customer relationship management perspective. Asia Pacific Journal of Information Systems, 18(1), 1-23.
- [30] Kim, J. Y., and Rhee, C. (2018). Do users always trust more when blog posts are related to the blog's theme?: The degree of relevance and its effect on message credibility. Information Systems Review, 20(2), 163-188.
- [31] Kim, W. H. (2018). The effect of absurdity and entertainment in viral video advertising with the moderating role of sensation seeking. Advertising Research, (117), 148-181.
- [32] Kim, Y. M., and Choi, Y. H. (2015). A study on the effect of E-E program related risk: Perceived entertainment, perceived information, and perceptions of risk variables. Journal of Communication Science, 15(2), 317-347.
- [33] Kunze, P. (2014). Kidding around: Children, comedy, and social media. Comedy Studies, 5(1), 2-11.
- [34] Lee, H. W., Oh, C. I., and Cho, K. S. (2005). Comparison of the ambiguous advertising messages effect with gear advertising messages. Archives of Design Research, 18(3), 129-138.
- [35] Lee, J. E., and Watkins, B. (2016). YouTube vloggers' influence on consumer luxury brand perceptions and intentions. Journal of Business Research, 69(12), 5753-5760.
- [36] Lemanski, J. L., and Hyung-Seok, L. (2012). Attitude certainty and resistance to persuasion: Investigating the impact of source trustworthiness in advertising. International Journal of Business and Social Science, 3(1), 66-75.
- [37] Mayrhofer, M., Matthes, J., Einwiller, S., and Naderer, B. (2020). User generated content presenting brands on social media increases young adults' purchase intention. International Journal of Advertising, 39(1), 166-186.
- [38] Nam, K. (2014). What is persuasion knowledge?-The past, present, and future of the persuasion knowledge

- model. Advertising Research, (102), 35-71.
- [39] Nandagiri, V., and Philip, L. (2018). Impact of influencers from Instagram and YouTube on their followers. International Journal of Multidisciplinary Research and Modern Education, 4(1), 61-65.
- [40] Nelson, M. R., and Park, J. (2015). Publicity as covert marketing? The role of persuasion knowledge and ethical perceptions on beliefs and credibility in a video news release story. *Journal of Business Ethics*, 130(2), 327-341.
- [41] Nunnally, J. C. (1967). McGraw-Hill series in psychology. Psychometric theory. McGraw-Hill.
- [42] Park, J. S. (2020). The effect of communication of Youtube luxury haul video creator on subscribing intention. Seoul National University.
- [43] Perry, S. (2016). YouTube money: The impact of brand management on online video companies. Master's Thesis, Rollins College.
- [44] Pfeuffer, A. (2018). The effects and underlying mechanisms of sponsorship disclosure in eWOM. Ph.D. Dissertation, University of Minnesota.
- [45] Pierce, J. P., Distefan, J. M., Kaplan, R. M., and Gilpin, E. A. (2005). The role of curiosity in smoking initiation. *Addictive Behaviors*, 30(4), 685-696.
- [46] Pillai, K. G., and Kumar, V. (2012). Differential effects of value consciousness and coupon proneness on consumers' persuasion knowledge of pricing tactics. *Journal of Retailing*, 88(1), 20-33.
- [47] Rachbini, W. (2018). The influence of celebrity endorsements on purchase intention (a study on Vivo V7). IOSR Journal of Business and Management (IOSR-JBM), 20(8), 59-66.
- [48] Rajeev, P. V., and Rekha, V. S. (2015). Recommending products to customers using opinion mining of online product reviews and features. 2015 International Conference on Circuits, Power and Computing Technologies (ICCPCT), IEEE, 1-5.
- [49] Rasmussen, L. (2018). Parasocial interaction in the digital age: An examination of relationship building and the effectiveness of YouTube celebrities. *The Journal of Social Media in Society*, 7(1), 280-294.

- [50] Richins, M. L. (1983). Negative word-of-mouth by dissatisfied consumers: A pilot study. *Journal of Marketing*, 47(1), 68-78.
- [51] Schwemmer, C., and Ziewiecki, S. (2018). Social media sellout: The increasing role of product promotion on YouTube. Social Media+Society, 4(3), doi: 10.1177/2056305118786720
- [52] Seong D, and Lee, H. S. (2018). A study investigating the influence of parasocial interaction and subjective social distance between internet private broadcasting BJ and viewers and expertise on PPL effect: Focusing on persuasion knowledge model. *The Journal of Convergence Society and Public Policy*, 11(4), 87-121.
- [53] Sunil (2015). Trends and practices of consumers buying online and offline: An analysis of factors influencing consumer's buying. *International Journal* of Commerce and Management, 25(4), 442-455.
- [54] Swasy, J. L., and Rethans, A. J. (1986). Knowledge effects on curiosity and new product advertising. *Journal of Advertising*, 15(4), 28-34.
- [55] Tsang, M. M., Ho, S. C., and Liang, T. P. (2004). Consumer attitudes toward mobile advertising: An empirical study. *International Journal of Electronic Commerce*, 8(3), 65-78.
- [56] Van Reijmersdal, E. A., Fransen, M. L., Van Noort, G., Opree, S. J., Van de berg, L., Reusch, S., Van Lieshout, F., and Boerman, S. C. (2016). Effects of disclosing sponsored content in blogs: How the use of resistance strategies mediates effects on persuasion. American Behavioral Scientist, 60(12), 1458-1474.
- [57] Yoon, S. (2013). Do negative consumption experiences hurt manufacturers or retailers? The influence of reasoning style on consumer blame attributions and purchase intention. *Psychology & Marketing*, 30(7), 555-565.
- [58] Zhao, J., and Wang, J. (2020). Health advertising on short video social media: A study on user attitudes based on the extended technology acceptance model. *International Journal of Environmental Research and Public Health*, 17(5), 1501.

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