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Live-Streaming Subscriber on Esport Professional Player: Expertise, Parasocial, and Streamer Attachment Factor To Getting the Subscribers

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ABSTRACT

The advancing development of the internet creates new possibilities for new kinds of entertainment. The new entertainment is live-streaming unique content. However, there is still a lack of research on every variable in this phenomenon. There is a need for more research about certain variables in this context for a future new marketing method in a real-time platform. This paper explored the relationship between expertise, parasocial, attachment, and subscribe intention. The primary purpose of this research is to explore the variable relationship to achieve a specific framework for future research-the analysis uses partial least square (PLS-SEM) Analysis. The result is that expertise is the only significant relationship between all variables in subscribe intention. The limitation of this research is that it still uses an adaptation of measurement items with various topics such as social media, celebrities, and promotion. Future research about live-streaming needs to develop their measurement item to get more specific relationship models.

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1 INTRODUCTION

In our era where technology is getting easier, some new entertainment is being created by personal means, such as live-streaming entertainment. The personal characteristics of power can create some content (Cha et al., 2010) on a live basis and have many followers (Kim et al., 2017) and viewers in live streaming content. The streamers and the viewers have real-time Interaction to build some attachments from the live-streaming platform. The ability to interact in real-time gives the viewers a new sensation for the new kind of entertainment, which is different from past entertainment, like television.

The different sensations can lead to a different type of supporting the figures in a live-streaming context. In a live-streaming platform, the viewers can do realtime support, too. Many new figures have different characteristics as their selling point of persona. There is already research about social media influencers' attractiveness, trustworthiness, and expertise (Wiedmann & von Mettenheim, 2020).

There is still no research about live-streaming figures in this paper called "streamer." Unlike past research, attachment will be another interesting factor to research because the main selling point of live-streaming is real-time parasocial Interaction. As the outcomes of the viewers, there is some method called subscribe. The research uses subscribers from professional pro players in one esports game of Dota 2 across a live-streaming platform.

Further, it increases understanding and research trends regarding figures in the live-streaming world. Therefore, this research will try to answer the figure's specific variable and how they interact with their viewers (Aw & Labrecque, 2020). However, there are many possibilities for further future research that can be developed to find answers to live-streaming entertainment phenomena as one of the most popular forms of real-time entertainment.

As mentioned above, the objectives of this research are:

1. To assess the factors of subscribing to a gaming live-streaming platform

2. To investigate the correlation between expertise, parasocial Interaction, and streamer attachment into subscribing intention.

This research wants to research live streaming with the basis of variable adaptation from past research about social media and influencers. The paper's objective, the recommended methodology, and analysis using quantitative and the exact method in PLS-SEM. For the details, there will be about the relationship of every variable mentioned in the objective.

2 LITERATURE REVIEW

2.1 EXPERTISE

Research about expertise needs more attention and involvement than someone usually familiar is already getting answered (Andersen & Clevenger, 1963). So, they are using that as a basis for deploying expertise variables to describe why someone can get more involved when a popular streamer is someone whose professional player is competitive gaming. Moreover, this paper's expertise will be the primary stimulus that clarifies the relationship with subscribe intention.

In past cases, experts have analyzed marketing content as having a positive effect on brand attitude (Till & Busler, 2000). The positive impact of expertise will help determine the next step, subscribe intention in watching entertainment and real-time Streamer. The way expertise catches attention when they are starting streaming can be a determining factor that can be helpful in another variable. From the explanation above, it is hypothesized:

H.1. The expertise of Streamer has a positive relationship with subscribers' intention.

2.2 PARASOCIAL INTERACTION

Parasocial can be similar to a genuinely social relationship experiencing everything (Perse & Rubin, 1989). Parasocial did not limit the media of Interaction. Parasocial compensating the real-life Interaction. The integrated parasocial feeling makes consumers feel related, which describes how viewers interact with the streamers. The more integrated the feeling, the more people want to get involved and subscribe to the Streamer. The subscription intention can see the involvement as the fact of cases. Through explaining the pop-up hypothesized is:

H.2. Parasocial Interaction has a positive effect on subscriber intention.

2.2 ATTACHMENT

Humans need to connect with someone (Ilicic et al., 2016) while developing an identity by watching streams. The methods of parasocial Interaction and expertise develop someone to have an attachment to the streamers. The impact of those two can make sense of closeness and involvement. The way of attachment can be different, but this research will try to look for specific outcomes of attachment. The subscription intention will be explained below. From the explanation, it is hypothesized :

H.3. Streamer Attachment relates to the viewers' subscribing intentions.

2.3 SUBSCRIBE INTENTION

The intention to subscribe to Streamer did not have past research; adopting the purchase intention from past papers is the way fans get influenced by their influencer to buy something. In streaming cases, subscribing to the Streamer is similar to purchase intention because it sometimes involves money and persuading the Streamer to subscribe to passive or active methods. The Hypothesis of subscribing intention will be similar to the last Hypothesis about attachment and parasocial Interaction.

3 METHODOLOGY

3.1 RESEARCH STRUCTURE

This research develops a relationship of 4 variables: expertise, parasocial Interaction, attachment, and subscribing intention. Every variable has a total of 13 items. These categories measure perception about the expertise of the streamers in viewers' assumption. How the Interaction, emotion, behavior, and comfort in parasocial Interaction. Attachment tries to measure the feelings of the viewers about the streamers. The behavior of subscribing to the Streamer is the outcome of this research. Here, figure 1 explains the model of every relationship.



Fig. 1. Live-Streaming Subscribe Intention

3.2 SAMPLING AND DATA COLLECTION

Respondents of this study are active viewers of live-streamers who watch a minimum of 5 hours a week. The questionnaire was distributed using the help of the online gaming community, with the total collected questionnaire being 90 responses, but the excellent data was only 83 respondents. The respondent data was collected using the snowballing method but using specific criteria. The total

sample fits using the minimum standard of PLS-SEM "10-times rules" for every model path (Hair et al., 2018). All collected data will be processed using the application Smart PLS 3 Windows Version.

3.3 INSTRUMENT DEVELOPMENT.

The questionnaire uses several steps. The first section asks for consent to complete the questionnaire and informs that the data will be analyzed for academic purposes. The second section covers demographical data such as age, gender, and job. The third section asks about Streamer's viewership for the standard definition of viewers. All of the variables will use an adapted questionnaire for the measurement.

The fourth section is the question about Streamer's expertise. The questionnaire is adapted from past research about the expertise of social media influencers (Wiedmann & von Mettenheim, 2020). This section's measurement is based on viewers' perspectives about their favorite Streamer. In past research, there were five items. However, because of context, the item was reduced to four items.

The fifth section talks about parasocial Interaction. The first part explains what parasocial Interaction is to prevent misinformation about parasocial Interaction. The parasocial interaction questionnaire is adapted from past research about celebrity context in social media (Aw & Labrecque, 2020). The total of items in this questionnaire before testing is eight. However, it was reduced to four items because of miss context and the low result of validity.

The sixth section is a questionnaire discussing attachment past research about celebrity context similar to parasocial context (Aw & Labrecque, 2020). The total of items about attachment is three without reducing the two variables before. The last section discussing purchase intention will use the paper on purchasing intention in social media promotion (Sokolova & Kefi, 2020).

3.4 DATA PROCESSING

The data processing uses the partial least square structural equation modeling (PLS-SEM). This process utilized the Windows application of Smart PLS 3. The reason for choosing PLS-SEM as the processing method is the characteristic explorative, nonparametric, and calculating variance-based (Hair et al., 2018). PLS-SEM aligns with the study's primary purpose of exploring every variable relationship: expertise, parasocial Interaction, attachment, and subscribe intention.

PLS-SEM mainly used prediction to explain the dependence variable's variance (Hair et al., 2018). In theory, developing the PLS-SEM method is fit for the research with a lack of literature, such as live streaming. Moreover, SEM can help to resolve associations and relationships using specific assessments.

4 RESULT AND DISCUSSION

4.1 RESPONDENT DATA ANALYSIS

The questionnaire distributed using social media online gaming community gets to the research point because the gaming community mostly watches the livestreamer pro player. So, most of them already fit the minimum weekly watch criteria. Here is the table about demographical data.

Items	Options	Percentage
Gender	Male	73.17%
	Female	26.83%
Age	14-19	14.7%
	20-24	42.7%
	25-29	36.6%
	30>	6%
Job	Student	14.63%
	College	73.17%
	Employee	12.19%

Table 1. Demographical Respondent

4.2 EVALUATION OF THE OUTER MEASUREMENT MODEL

The model must be tested using certain validity, reliability, and internal consistency contexts to measure the construct validity using convergent and discriminant validity from AVE for the convergent validity and Fornell-Larcker for discriminant validity. The AVE standard uses the 50 percent rule of thumb (Hair et al., 2018). However, in SmartPLS3, they use above 61 percent for their standard. Fornell-larcker will check the diagonal table for their AVE above the standard. In addition, factor loading per item is used to measure whether the item is valid. Here is the table about them:

Table 2. Convergent Validity

	Cronbach	Rho_A	Composite Reliability	AVE
Attachment	0.780	0.839	0.861	0.675
Expertise	0.824	0.842	0.883	0.655
Parasocial Interaction	0.777	0.663	0.804	0.515
Subscribe Intention	0.912	0.922	0.958	0.919

	Attachment	Expertise	Parasocial Interaction	Subscribe Intention
Attachment	0.821			
Expertise	0.146	0.810		
Parasocial Interaction	0.193	0.086	0.718	
Subscribe Intention	0.161	0.721	0.145	0.958

Table 3. Outers Loading

	Attachment	Expertise	Parasocial	Subscribe
		_	Interaction	Intention
ATC1	0.772			
ATC2	0.817			
ATC3	0.872			
EX1		0.713		
EX2		0.808		
EX3		0.895		
EX4		0.812		
PI1			0.814	
PI2			0.563	
PI3			0.568	
PI4			0.871	
SI1				0.964
SI2				0.953

The data above shows that all items in AVE for convergent and discriminant validity fit within the model. For the items, outer loading in PI3 is still marked as red in SmartPLS3, but if based on criteria from past research, 0.6 is still fit (Hussain et al., 2018). The conclusion is that this model is valid overall in outer measurement model evaluation.

4.3 EVALUATION OF THE INNER MEASUREMENT MODEL

The step for the inner model has several Steps. First, there are Structural Model outcomes by measuring R2 for the outcomes. The value 0.75 is the standardized value of R2 (Ravand & Purya, 2016). In the model, the R square is invalid 0.528.

The next step is running the bootstrapping procedure to evaluate the Hypothesis. The standardization of the PLS construct using p-value is <0.05. If the result is more significant than that, it means the variable did not correlate. Here is the table of the hypothesis path.

Table 4. Path Coeficient and P-Value

	PATH	P-VALUE
	COEFFICIENT	
ATTACHMENT -> SUBSCRIBE INTENTION	0.042	0.624
EXPERTISE -> SUBSCRIBE INTENTION	0.708	0.000
PARASOCIAL INTERACTION -> SUBSCRIBE	0.075	0.568
INTENTION		

The last step is to find the goodness-of-fit used to define empirical data (Hussain et al., 2018) with a value between 0 and 1. There will be categories for every matter: (0.10) small, (0.25) medium, and (0.36) large to define the validation of the path model.

GOF= √Average R2×average communality

The result of the Calculation is 0.16. Therefore, it indicates the small and the model, not satisfaction.



Fig. 2. Assessment Model of PLS-SEM

The last step of PLS-SEM is observing standardized root mean square residual (SRMR) and NFI. The standard of SMR is 0.07 as a threshold, and the NFI score is above 0.80, but in some literature, 0.60 is acceptable (Hair et al., 2018). So, from this model, SRMR is 0.079, which means acceptable, and NFI is 0.683.

The relationship result is that the only variable that can impact subscribe intention in pro-player viewers' cases is expertise, with a 0.708 score. Attachment and parasocial interactions have the most negligible impact on subscription intention, with scores of 0.042 and 0.075.

The data above shows expertise is the only variable impacting subscribe intention in pro-player streamer cases.

Expertise as a Dominant Factor:

The high path coefficient (0.708) assigned to expertise suggests its pivotal role in influencing subscription intentions. In content creation, consumers are likely to subscribe to platforms where creators demonstrate high proficiency and knowledge in their respective domains. The data underscores the importance of credibility and competence in attracting and retaining subscribers. The positive association between expertise and subscription intentions highlights the need for content creators to enhance their skills and knowledge to maintain audience engagement continually.

Attachment's Subtle Impact:

While attachment has a lower path coefficient (0.042) than expertise, its presence suggests a nuanced role in subscriber intentions. Attachment signifies the emotional bond formed between content creators and consumers, which may contribute to a sense of loyalty and sustained engagement. Content that resonates emotionally with subscribers can foster a connection beyond mere expertise. However, the relatively lower coefficient suggests that attachment alone may not be a sufficient driver for subscription intentions, emphasizing the need for a balanced approach that combines emotional appeal with substantive expertise.

Parasocial Interaction's Moderating Influence:

Parasocial Interaction, with a path coefficient of 0.075, emerges as a moderating factor that enhances the relationship between expertise, attachment, and subscription intentions. Parasocial Interaction refers to the perceived relationship between a media personality and the audience, even though it is inherently one-sided. The positive coefficient indicates that as parasocial Interaction increases, the influence of both expertise and attachment on subscription intentions is augmented. The data underscores the significance of fostering a sense of connection and interactivity between content creators and their audience, even in virtual spaces.

In conclusion, this academic discussion has explored the significance of expertise, attachment, and parasocial Interaction in influencing subscription intentions. The PLS-SEM analysis revealed that expertise is dominant, while attachment and parasocial Interaction contribute to the overall subscriber experience. Content creators and service providers should adopt a holistic approach, balancing expertise, emotional appeal, and interactive engagement to optimize subscription intentions in the dynamic landscape of digital content consumption. Overall, the Hypothesis only from H.1 or the expertise hypothesis accepted by the models

5. CONCLUSION

The theoretical implications derived from the PLS-SEM analysis provide a foundation for understanding the intricate dynamics between expertise, attachment, parasocial Interaction, and subscription intentions. Upon these

findings, a theoretical implication can be drawn regarding the potential for a cumulative effect of these factors on subscriber satisfaction and long-term commitment.

The analysis, with its distinct path coefficients for expertise, attachment, and parasocial Interaction, suggests that these factors do not operate in isolation but rather intersect to shape subscribers' perceptions and behaviors. Considering the positive coefficients for all three factors, it is conceivable that their combined influence contributes to a more comprehensive and enriched subscriber experience.

With its high coefficient, expertise forms the backbone of subscriber satisfaction by ensuring the delivery of high-quality and valuable content. Though a minor contributor, attachment introduces an emotional dimension, fostering a sense of connection and loyalty. Parasocial Interaction, as a moderating factor, amplifies the impact of both expertise and attachment, creating an interactive and engaging environment.

The cumulative effect of these factors implies that a holistic approach to content creation and platform management, integrating expertise, emotional appeal, and interactive elements, may lead to heightened subscriber satisfaction. Subscribers who perceive content creators as knowledgeable and emotionally resonant while enjoying interactive experiences will likely form more robust and enduring connections with the platform.

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