Impact of Live Streaming, Music, and Celebrity Endorsement on Purchase Intention

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Abstract: Online shopping has increased rapidly. There is increased market competition between online and physical stores. Hence, many retailers start using a myriad of marketing strategies to boost consumer purchase intention to increase their sales. As such, this study will investigate in three key factors that affect purchase intention drastically including Live Video Streaming (LVS), background music in retail environments and celebrity endorsement. This study employs a comprehensive literature review as its research method. According to the research and prior studies, LVS can reduce psychological distance and perceived uncertainty, leading to greater consumer trust and engagement and eventually significantly increases online purchase intention. For background music, different music styles (happy vs. sad) will Influences consumer emotions and behavior in physical stores. Hence, it is able to affect buyers' moods positively and enhance buying intention. Lastly, celebrity endorsement can Increase brand credibility and consumer awareness. Furthermore, different types of endorsement (traditional vs. internet celebrities) will have impacts on consumers' ideal and real selves respectively, hence celebrity endorssement can greatly boost consumers' purchase intention. However, the prior studies may not generalize across different demographics, cultures, or economic groups. Therefore, future research should include a more diverse population to enhance generalizability.

1 INTRODUCTION

Due to invention of Internet, online shopping has become one of the more convenient choices when people would like to buy something. This provides many opportunities for people to sell products easily online on different social media platforms like TikTok. The market share of physical stores is greatly threatened by those online stores. Furthermore, after the appearance of corona virus and the experience of lock down, more and more people have the habits of shopping online. As such, the level of competency has risen wildly in recent years. Since consumers' purchased intention is closely linked to consumers' purchasing behaviors, retailers have focus on it greatly in order to increase their sales and revenues.

This study will base on prior studies to investigate the significant factors of purchase intention and the way and the extent of their different influence on it respectively.

2 INTRODUCTION TO THE KEY CONCEPTS

According to Morwitz,V, marketing managers usually determine their future marketing strategies and behaviors through purchase intention by understanding their demand and hence enhancing the sales of products (Morwitz, 2014). Purchase intention is the preference of consumer to buy the product or service. In another words, purchase intention has another aspect that the consumer will purchase a product after evaluation. Many factors affect the consumer's intention while selecting the product and the ultimate decision depends on consumers' intention with large external factors (Keller, 2001). Since purchase intention is linked to behavior, perceptions and attitudes of consumers, retailors are inclined to impact these using various strategies and factors in order to enhance consumers' purchase intention (Peña-García et al., 2020). This study will emphasis on 3 factors that can significantly affect purchase intention in both negative and positive way. One possible factor is using LVS, which refers to online broadcasts in real time that facilitate business-

to-consumer and business-to-business communication (Zhang et al., 2020). Based on several studies, it is shown that LVS can enhance purchase intention by shortening psychological distance and reducing perceived uncertainty. Another factor is the backgound music in malls. Background music in this case is defined as the music used to improve the atmoshphere in the mall and it may or may not have lyrics (Park & Young, 1986). Considering that music is separated into a myriad of categories, different styles of music will have different rhythm, pitch, are played by different instruments. Since music can be presented differently, the emotions transfered by the music can vary greatly. By impacting consumers' emotions, music can affect purchase intention significantly in both positive and negative way based on the types of background music played in the mall. The last factor is the celebrity endorsement. Many brands have use celebrity endorsement as their strategies to increase their consumers' awareness and brands loyalty. By making their brands more popular and well-known, marketing managers can effectively enhance consumers'purchase intention and eventually increase the sales of their products.

3 IMPACT OF LIVE-VIDEO STREAMING (LVS) ON PEOPLE'S PURCHASE INTENTION

The participants are 81 undergraduates students whose average age is 23.32 years old from Tianjin University (Zhang et al., 2020). Within the 81 students, 46% are men. The students are randomly assigned into two groups to conduct a between-subject experiment. One group received non-LVS website while the other group receive LVS website. On the non-LVS website which was a very classical e-retailer's homepage, there were sellers' information including service attitude and its rating, description and pictures of the products, prices, customers reviews, inventory quantities and a buy button. On the LVS website, besites all the basic information like above, the products were display lively and e-retailors were accessible for different questions from audiences and able to try the products during the streaming. Both of the webistes were mocked up.

The context of the survey was that all the participants were going to buy sunglasses for their friends who would go travel as a gift. Then, each group of participants would watch and read their scenario(LVS or non-LVS) respectively. Lastly, a survey including questions like''If I was purchasing sunglasses, I would purchase from [retailer].,' , "If someone asked me, I would say that it was likely that I would buy sunglasses from [retailer]." and "I feel that purchasing sunglasses from this e-retailer involves a high degree of uncertainty". Each question was answered on nine-point Likert scales with 1= 'Do not agree at all' and 9= 'Agree completely'. Each questions help investigate consumers' personal feeling on psychological distance, perceived uncertainty and online purchase intention. A self-rating scale was used in this experiment to measure the variables.

The authors used the Model 4 of the PROCESS macro to test the mediating effects. From the result, psychological distance ($\beta = -1.24$, 95% CI $= -1.84$ to -0.65), perceived uncertainty ($\beta = -1.05$, 95% CI $= -1.69$ to -0.41), and online purchase intention ($\beta = 1.21$, 95% CI $= 0.62$–1.81)are greatly influenced by the LVS strategy. Furthermore, psychological distance ($\beta = -0.37$, 95% CI $= -0.61$ to -0.13) and perceived uncertainty ($\beta = -0.25$, 95% CI $= -0.47$ to -0.03) has negative impact on online purchase intention. Since LVS significantly reduces psychological distance and perceived uncertainty, online purchase intention will be increased. The effect of less perceived uncertaintly has greater impact on purchase intention than that of shortened psychological distance.

However, there are certain limitations that need to be considered. Firstly, the data collection scope is too narrow. Considering that it only involved 81 students from the university, this experiment did not involve consumers from different economic status and ages. Furthermore, the study relied on data from the Taobao LVS platform to find the correlation between LVS strategy and purchase intention. This limited data source further restricts the generalizability of the findings. Secondly, this experiment only focused on psychological distance and perceived uncertainty as mediators between LVS and online purchase intention. However, there could be other possible factors like interactivity, social interaction, and the beauty of the e-retailors affect the online purchase intention and people's decision making.

The experiment considered gender, education background, occupations, income and areas they lived (Han & Xu, 2020). A total of 68 participants were involved in this survey. The participants included different genders, occupations, education background, income and areas they lived. This survey conducted both depth interview, which was 40 minutes each, and focus group interview. Each group consisted 3 people and there were totally 6 groups.

During the depth interview, participants had sufficient time for thinking and expressing themselves. In the meanwhile, their facial expressions can be fully observed to understand the extent of impact of different characteristics of e-commerce anchor on consumers' online purchase intention. Within the interview, questions like 'What do you feel when watching live streaming' ' What is the specific reason for the purchase behavior because of watching live e-commerce' and so on were asked.

The content of the interview proves the influence of the charm attribute of e-commerce anchors on the internal state of consumers to a certain extent. 47 participants mentioned that a charming e-commerce anchors could exite the consumers, such as 'When I usually watch the live streaming, I feel that the anchor speaks very gently and she looks good, and has a good personality, so I will be excited. I like everything she recommends'. Moreover, More than 44 respondents mentioned the impact of excitement in consumers' internal state on consumers' purchase intention, such as "I feel so excited when watching the anchor recommending products ceaselessly which makes me want to buy everything she recommends'. As such, charming characteristics of the e-commerce anchors can excite the audience, eventually enhancing their online purchase intention.

Furthermore, many participants had mentioned that e-commerce anchors with good appearance or professional knowledge will lift audience's moods and become more trustworthy by making themselves look reliable and honest. As such, consumers' online purchase intention is enhanced. Everald and Galletta also mentioned that trust will play a decisive role in consumers' purchase intention (Everard & Galletta, 2005).

This reference only investigates the impact of characteritics of e-commerce anchors on purchase intention, however, almost every participants had mentioned that under the "brainwashing" propaganda of the e-commerce anchor, there will be an impulse purchase intention. In this case, many people just come for a glimpse, but they end up with spending money accidentally. This phenomenon is not explained and investigated in this reference though it enhances purchase intention as well. Hence, though e-commerce anchor can impact personal purchase intention, other possible factors were not controlled effectively.

Other references have also proved similar results that live streaming can enhance purchase intention and the characteristics of the anchors are very significant. Based on the experiment done by Yu 2024, professional anchors can give clear and accurate explanation which increase consumers' trust and time spending on that specific live streaming. As such, by improving consumers' understanding of the products, the authors stimulate consumers' demand for the products and enhance people's purchase intention. This obersavation does align with the conclusion of the two studies above (Yu & Sun, 2024).

According to the data from Ma Jia, CHICMAX had spent a lot of money on a special type of live streaming. These kinds of live streaming usually have an exciting and dramatic storyline to attract the audience and make them stay at the page. The retailors will drive consumers' sentiment and excitement. As such, audience will have greater purchase intention and eventually buy the products. In the first half of 2024, the sales and distribution expenses of CHICMAX were 2.016 billion yuan, an increase of 137.1% over the same period last year. It shows that the characteristics of streamers can have different impact on purchase intention while various types of live streaming will also lead to different level of enhancement on it (Ma, 2024).

4 IMPACT OF MUSIC ON PEOPLE'S PURCHASE INTENTION

Participants were students in three 'Principles of Marketing' classes. In order to keep the the relevance of the data, subjects that did not buy the greeting cards for their friends at the end were not involved in the final data analysis (Alpert & Alpert, 1990). Hence, there were 48 available subjects in the end. There were different cards with different emotions including sadness, happiness and neutrality. Students were separated into 3 groups, experiencing mix-factorial experiments. The variable factors are happy music, sad music and no music paired with different emotions of cards. Every group will watch the advertisements of all types of cards and each group will listen to one type of music differently. Mood monitors and rating scales were used to measure participants' feelings and purchase intention whole the experiments were conducting. Mood monitors involved 5 scales: sad, moderately sad, neutral, moderately happy, happy. While the music and card advertisements were playing, subjects were required to indicate their emotions simultaneously. The scale started from 0(sad) till 100 (happy). The process relied on the height of the pencil line relative to the left anchor. Measurements were taken at five equally spaced percentiles of the line that was drawn by the

participants. The rating scales were used to measure the perceived emotions of the cards, how much people like the cards and purchase intention.

Disparities across groups, cards, music types were tested using an SPSS partial factorial ANOVA. Based on the data collected, music can influence consumers' emotions and eventually affects their purchase intention. The study found that music structured as "happy" made listeners feel more positive, while "sad" music made listeners feel less positive. Furthermore, the purchase intention has negative relationship with consumers' emotions($r = -0.355$，$p < 0.05$). As such, the sadder the consumers feel, the higher possibility of them buying the greeting cards for friends. Additionally, the music backgrounds show great impact on purchase intension ($F = 3.55$，$p < 0.05$). Cards with sad music background are more likely to be bought as compared to that with happy music background. However, cards with happy music and those without music show similar impact on purchase intention. Sad music shows distinctive impacts as compared to no music ($p = 0.06$). Hence, it shows that different music category can affect consumers' purchase intention, and sad music in certain senario like buying greeting cards for remote friends has greater influence on enhancing purchase intention. The study done by Williman in 1986 had also shown the impact of music on consumers' purchase intention. When restuarants played slow-tempo background music, consumers tend to stay longer while eating the similar amount of foods, and more alcoholic beverages were drank (Milliman, 1986).

Though this study has investigated music structure including beats and rhythm, there are other factors like lyrics, artistic interpretations, associations with personal memories, genres and periods of music are not involved in this study. As such, the understanding about the impact of music on consumers' behaviors might not be holistic (Zhang, 2013).

The study chose some big and popular supermarkets, including Dalian Hualian Supermarket Heishijiao Store and Walmart Xueyuan Store. The author chose 45 people per supermarkets at the exit who just finished shopping. Eventually, 306 surveys were collected. Before designing the questionnaires, the authors had observed the music backgrounds of the 8 supermarkets, and the behaviors of different age groups of consumers. Interview was done to have deeper understanding about consumers' feelings and change of behaviors to provide ideas for the qustionnaires. In order to ensure the generality, the questionnaires were released in the morning and afternoon of both the weekdays and weekends. As such, consumers from different genders, age groups, occupations, education background and economic status were all involved in this survey. Rating scales are used to ask the feelings like anxiety and excitement when the consumers visit the supermarkets. The data collected used SPSS to do the final statistic analysis.

Based on the final results, background music has a postive relationship with consumers' positive emotions, with coefficient 0.781. It means consumers will have more positive emotions in shopping when the background music is more accepted by the consumers. It explains that in the survey, consumers who have better comments of the background music are more likely to feel happy and excited. The more positive consumers' shopping emotions are, the more likely they are to engage in purchase approach behavior, with a correlation coefficient of 0.678. It is represented by the happy and excited consumers who will stay longer in the supermarkets and have more interaction with other consumers or staffs. As such, the purchase intention is enhanced. This oberservation align with the research done by Yi, F., & Kang, J., which indicates that background music encourages approach behavior by increasing satisfaction, as such consumers are more inclined to stay in the shopping malls and explore (Yi & Kang, 2019).

Furthermore, background music also shows a negative relationship with negative emotions, with coefficient -0.565. As such, consumers will have more negative emotions about shopping when they dislike the music greatly. Hence, when consumers think the volume is too high or they dislike the types of music, they may feel annoyed. When the emotions are negative, approach behavior is inhibited, and the correlation coefficient between the two is -0.289. As such, anxious or annoyed consumers will tend to stay shorter in the supermarkets and are unwilling to interact with others, leading to weaker purchase intention.

Additionally, background music shows positive relationship with consumers' approach behavior, with coefficient 0.490. It means when the music is favourable, consumers will have greater purchase intention.

However, though music can enhance the postive emotions, it is not able to adjust the negative emotion. It is because even though the music might not be favourable of some groups, they tend to think that they should bear it as they are in a public areas and the music is for other groups. Considering that the research was done in China, the economic

development and customs of different areas are greatly varied. As such, the conclusion extracted from one area may not be representative for China. The experiment will be more reliable if more data from different typical areas are collected.

From the both studies, the music background is able to influence consumers' emotions significantly. Both studies show that positive music can encourage happiness and excitement while negative music will lead to greater anxiety. Furthermore, negative emotions can discourage interaction and hence reduce purchse intention, based on the second study. Moreover, the first study shows a conlusion that negative emotions like sadness can encourage purchase behavior like buying greeting cards for friends. Hence, negative emotions may have negative impact for consumers in supermarkets, but in certain scenarios, negative emotions may enhance the purchase intention specifically.

5 IMPACT OF CELEBRITY ENDORSEMENT ON PEOPLE'S PURCHASE INTENTION

Totally 200 questionnaires where collected as valid resources (Ertugan & Mupindu, 2019). These 200 participants from the Near East University included 131 male (65.5%) and 69 female (34.5%) students. About half of the participants were from the 21-23 age group while participants between the ages of 18 to 27 are 86.5% of 200. The main age group of this survey indicated that people from younger generation are more inclined to shop online as compared to those at older ages. A field study was done using questionnaires to collect responds to measure the relationsip between different variables. Celebrity endorsement made up of five dimensions, including gender, credibility, attractiveness, celebrity versus non celebrity and single/ multiple endorsement, was the independent variable with the purchasing intention as the dependent variable. Those accomplished in respective disciplines and enjoy public recognition by a large group of people are called celebrities (Spry et al., 2011).

Celebrity endorser is defined as "any individual who enjoys public recognition and who uses this recognition on behalf of a consumer good by appearing with it in an advertisement."by McCracken (McCracken, 1989).

There were totally two sections in the questionnaire. The first one was about participants' personal details and background information. The second one included attitude statements measuring each variables mentioned above on a 5-point Likert Scale. Purchase intention was designed as dependent variable where as independent variable was celebrity endorsement included that 5 dimensions mentioned above. During the survey, authors directly approached the 200 students and ask them whether they can complete the questionnaire voluntarily. Cronbach's alpha was used to estimate the reliability of the responses. According to the results from the questionnaire, Cronbach's alpha values ranged between 0.751 to 0.846 for all variables, indicating high reliability in measuring the effects of celebrity endorsement on purchase intention. From the 5 dimentions of celebrity endorsement, credibility was Moderately correlated with purchase intention ($r = 0.529$, $p < 0.01$), yet its significance is limited based on regression analysis ($\beta = 0.080$, $p = 0.214$). Attractiveness was also Moderately correlated with purchase intention ($r = 0.555$, $p < 0.01$) and found insignificant in regression analysis ($\beta = 0.161$, $p = 0.13$). Whereas Gender had a significant positive impact on purchase intention ($\beta = 0.218$, $p = 0.002$). It indicates that female celebrities were used to capture more attention than male celebrities. In the celebrity vs non celebrity indicator, it shows Significantly influence on purchase intention ($\beta = 0.171$, $p = 0.024$). Consumers showed a preference for celebrity-endorsed advertisements. Lastly, in the Single vs. Multiple Endorsements indicator, this dimension had the strongest positive effect ($\beta = 0.307$, $p = 0.000$) on purchase intention. All in all, only three of the five dimensions (Gender, Celebrity vs. Non-Celebrity, Single vs. Multiple Endorsements) significantly influenced purchase intention.

Hence, sonsumers value celebrity-endorsed advertisements for their ability to draw attention and raise awareness. Trust and respect in celebrity endorsements are also pivotal; however, skepticism arises when celebrities endorse multiple brands within a short time. Furthermore, Gender does play a crucial role, with consumers favoring endorsements by celebrities of the gender they prefer or relate to.

Considering that the study was conducted exclusively on university students at Near East University, the majority of participants are younger generation. As such, the findings may not be generalizable to other populations, including older adults or people from different countries or cultural settings (Shi, 2019).

The second study proves the positive impact of celebrities on purchase intention of consumers, it further differentiate the difference on the ways of celebrities and online celebrities affecting purchase

intention respectively via multiple experiments. The second experiment specifically differentiate the ways of celebrities and online celebrities affecting self of consumers differently. Within the second experiment, there were totally 150 students from universities in Wuhan, China. There were 138 valid responses with 34.56% of males and 65.942% of females. The average age of participants is 21.445. The author chose Liying Zhao as the celebrity and Yilei Jiang, papi as the internet celebrity. In order to weaken the relationship with present brands, the product used in this experiment was laptop with a make-up brand calle 'X'. Pictures with the images of either the chosen celebrity or internet celebrity and also the images of the laptops were given to different groups of people, including celebrity group and internet celebrity group. A context was given to them about they saw the advertisements of brand X laptop which was endorsed by Liying Zhao or Yilei Jiang when they would like to buy a laptop and scroll through some popular shopping websites. The materials for Liying Zhao introduced the popularity and well-liked nature of her while the materials for Yilei Jiang describes papi as one of the favourite internet celebrities nowdays. After seeing the pictures and the descriptions for both celebrities and internet celebrities, they were asked to fill in a rating scales including quetions about whether the advertisements show their ideal or real self images. The basic background information about genders, ages and education background were also includedwith in the survey. From the results, both internet celebrities and celebrities have positive relationship with consumers' purchase intention. The average value of purchase intention in celebrities group is 4.33 while that in internet celebrities group is 4.22. However, celebrity endorsement significantly activated the ideal self ($\beta = 0.67$, $p < 0.01$), which positively influenced purchase intention ($\beta = 0.49$, $p < 0.01$). Theindirect effect through the ideal self was significant (Bootstrap CI: [0.46, 1.01].). In comparison, the internet celebrity Endorsement significantly activated the real self ($\beta = 0.62$, $p < 0.01$), which positively influenced purchase intention ($\beta = 0.46$, $p < 0.01$).The indirect effect through the real self was significant (Bootstrap CI: [0.61, 0.88].). As such, celebrity endorsement enhances purchase intention by activating consumers' ideal self, reflecting aspirations and social identity; while internet celebrity endorsement enhances purchase intention by activating consumers' real self, emphasizing practical and functional needs.

In conclusion, both of the studies have shown that celebrity endorsement can effectively enhances consumers' purchase intention, making it a good marketing strategy to use in real life. However, from the second study, after considering the mediating effect, different types of celebrities may fit in different products from different areas and industries. As such celebrity endorsements are better suited for premium, symbolic products such as luxury goods whereas internet celebrity endorsements are more effective for functional, everyday products such as electronics.

Considering that both of the studies were conducted exclusively on university students , the majority of participants are younger generation. As such, the findings may not be generalizable to other populations, including older adults or people from different countries or cultural settings.

6 CONCLUSION

The purchase intention of consumers has been a significant and common topic in today's society, especially after the existence of internet and online shopping habits. With more competitors in the markets, retailors have used a myriad of marketing strategies to rise purchase intention. In this passage, three factors including celebrities endorsement, live-videa streaming (LVS) and music are investigated on their impacts on consumers' purchase intention. In conclusion, celebrities endorsement, LVS and music can all affect purchase intention significantly in both negative and positive ways by raising consumers awareness, shortening the distances and influencing consumers' emotions during shopping. Hence, it is proven that using these strategies could greatly enhance consumers' purchase intention, leading to higher profits. Yet, most of the studies mentioned have limited participants. This may lead to limited application to other countries with different cultures and other age groups with different purchasing habits.

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