

FACTORS IMPACTING PURCHASE INTENTION OF COSMETIC PRODUCTS VIA SOCIAL COMMERCE PLATFORMS IN CHENGDU

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ABSTRACT

This research aims to investigate factors influencing purchase intention of cosmetics products via social commerce among Chinese Millennials generation in Chengdu, China. There were seven variables in this study including brand loyalty, brand awareness, social media usage, electronic word of mouth, electronic referral, brand image and purchase intention. The population and sample size (n=450) were Millennials who were born between 1980 and 2000 and currently live in Chengdu. The quantitative method was applied with nonprobability sampling method, including purposive sampling, convenience sampling and snowball sampling. Before the data collection, Item-Objective Congruence (IOC) validity and Cronbach's Alpha (CA) reliability were examined. Afterwards, confirmatory factor analysis (CFA) was used to analyze factor loadings, convergent validity, discriminant validity and goodness of fit indices. Later, structural equation model (SEM) was used to determine hypotheses and relationships between variables. The findings revealed that brand loyalty had the strongest effect on electronic word of mouth which also effected brand image. Brand awareness, electronic referral, brand loyalty and social media usage significantly affected purchase intention. Nevertheless, there were no significant effect on the relationship between brand awareness and electronic word of mouth, electronic word of mouth and purchase intention, electronic referral and brand image, and brand image and purchase intention. Marketers are recommended to drive marketing strategies targeting Chinese Millennial customers by using digital advertising, loyalty scheme and referral program.

Keywords: Brand Awareness, Brand Image, Brand Loyalty, Social Media Usage, Electronic Referral, Electronic Word of Mouth, Purchase Intention

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Introduction

Within the past twenty years, social media has become a mainstream channel for marketing communications around the world. In later age, digital marketing has played an important role which acquires large allocation of budget. Electronic commerce has grown widely and has evolved to be a social commerce following the rise of social media usage. There are numerous social platforms that has been using for communicating, selling and buying products. In global market, the large technology companies such as Meta (as known as Facebook and Instagram), Google and many more have been revolved from communication platform to social commerce. Nevertheless, China is the unique country that has developed its own social platform to serve Chinese people due to a government policy such as Weibo, WeChat and so on.

China (with 64.6% of the population using social media) is the largest country in the world in terms of social media usage (Kemp, 2021a). 59% of these users are between the ages of 20 and 49, which means the Millennial generation is the largest group of social media users by age. On average, Chinese users engage social media for 2 hours and 4 minutes per day (Kemp, 2021a). The most used social media networks include Weixin and Sina Weibo. China is also the world's largest social commerce hub, with most of the current and projected future growth in social commerce over the next six years (Coppola, 2021).

E-commerce and social commerce have incredibly grown 40% in average from year to another in China with a total number of transactions of €354 billion. The cosmetics market in China is the second-largest cosmetics market in the world, after the US with an average of 15% growth per year and

acquires the biggest market in online sales. Chinese consumers are considered to be price sensitive and they usually check the lowest price comparing between offline and online. Thus, most cosmetic brands are forced to present on popular social media channels i.e., Taobao, Jumei, Tmall, JD.com, Bilibili, Little Red Book, Yoka, Kimiss etc. Electronic word of mouth is very important in the online purchase decision of Chinese consumers (Cosmetics China, n.d.).

The problem of this research is how Chinese Millennial consumers engage with brands on social media. Social commerce is a rapid change in e-commerce, because marketers have been not just communicating with consumers on social media, but also selling directly to them (Han et al., 2018). As yet, it is unclear in the most literature how consumers respond to social commerce because it is a relatively new practice. With the earliest uses of social media for direct selling in 2009, the practice has been only becoming common within the past five years (Wu & Li, 2018). This means that there are a lot of unanswered questions about the marketing practice of social commerce. In fact, Han et al. (2018) conducted a comprehensive review of social commerce literature and found that the academic study on the topic was fragmented and incomplete.

The main significance of the study is academic in nature. Previously, few studies have integrated the perspectives of consumer-based on brand equity and social media engagement, which were examine in this study. Furthermore, very few of these studies have investigated the role of digital marketing in the consumer decision process for cosmetics markets. Therefore, the interaction of marketers and consumers, the development of

consumer-based brand equity, and ultimate online purchase intentions have been under investigated. In addition, the cosmetic industry is enormous in China and cosmetic products in social commerce has gained a lot of attention which is worth wide to inspect the factors affecting purchase intention of consumers

Literature Review

This study involves literature reviews to explain the previous theories and terminologies for clearer interpretation and the development of research model.

Related Theories

1. Consumer Decision Model (CDM)

The consumer decision model (CDM) is a classical model of consumer decision-making (Bray, 2008). The CDM was developed over several decades by a group of researchers (Blackwell et al., 2005) and is often called the Engel-Blackwell-Miniard model of consumer decision-making. The most recent statement of the CDM argues that consumer decisions are made through a central cognitive process, termed the decision process (Blackwell et al., 2005; Bray, 2008). This process begins with need recognition, then the consumer conducts a search through internal and external sources for possible alternatives and evaluates these alternatives in accordance with their needs. The consumer makes a purchase decision to engage in a series of post-purchase evaluations based on their level of cognitive dissonance between their performance expectancy and experience. Based on the outcome of this evaluation, individuals may be satisfied, dissatisfied, or decide to divest from the product entirely. Consumers do not make this decision entirely in isolation, instead, various inputs including advertising

information go through a process of exposure, attention, comprehension, acceptance and retention to become internalized to the consumer's decision process. Furthermore, the consumer's environment and individual differences and preferences also influence their consumer decision process. Therefore, each individual consumer decision results from a combination of the consumer's own needs, their environment and individual preferences, and the receipt and processing of marketing information (stimuli), which come together to form a single decision. The CDM does have some weaknesses as a theoretical model, including that it is highly complicated and therefore is not often directly empirically tested (Kotler & Armstrong, 2012). However, it is a comprehensive and specific model that includes both internal and external factors in the purchasing process, making it a useful theory for this study.

2. Consumer Based Brand Equity (CBBE) Theory

Consumer-based brand equity (CBBE) is a theory that explains how individual consumers form affective relationships with brands and how these affective relationships translate to consumer responses (Kotler & Armstrong, 2012). The CBBE bases on a brand resonance pyramid model (Keller, 2009). This four-step model relates the brand and its marketing to consumer responses. At the bottom of the brand resonance pyramid, it is brand salience or brand awareness. The second level is brand meaning or brand image, including knowledge about brand performance (or functional characteristics) and brand imagery (or symbolic and emotional characteristics). The third level is consumer responses, including consumer judgments (e.g., perceived quality) and

feelings (e.g., satisfaction with the brand experience). Finally, the top of the pyramid is brand resonance, which is the consumer-brand relationship. This component includes brand loyalty, along with other responses such as brand engagement (Keller, 2009). The CBBE pyramid illustrates brand awareness, brand image and brand loyalty, which have an influence on each other through the brand equity pyramid. Furthermore, these constructs conceptualize individuals with deeper brand awareness and more positive brand image impacting brand loyalty (Keller, 2009).

3. Social Network Theory

The concepts of electronic word of mouth (eWOM) and electronic referral (eReferral) are used in this study which are based in social network theory (Abubakar et al., 2016; Nusair et al., 2017). Social network theory is a theoretical approach to understanding relationships between people and how they influence the actions and beliefs of individuals (Liu et al., 2017). It is based on several disciplinary traditions, including interpersonal relations theory, sociometric, and anthropology.

Social network theory proposes that individuals can be understood as nodes within a network, and relationships with individuals represented as ties to other nodes (Liu et al., 2017). The strong ties of the relationship between individuals are the relationship with family members and close friends, while other relationships are weak ties. However, this does not mean these ties are unimportant. As Liu et al. (2017) noted, weak ties are highly relevant for the sharing of information and persuasion effects, particularly among central nodes and their connections. Central nodes (who can be considered as influencers) have weak ties to many other people and groups, through

which they can pass information and communicate. Thus, these connections are important for consumers and their influences on each other. Social network theory can also be used to explain persuasion and adoption of innovations through social networks; central nodes (influencers) provide knowledge and persuasive information, which then inform decisions for adoption (Liu et al., 2017). Thus, social network theory is a powerful theory for understanding how individuals influence each other through social media channels.

4. Electronic Word of Mouth (eWOM) Theory

The theory underlying eWOM is relevant to this research because while it shares similarities with social network theory, it also addresses the content of the eWOM itself (Ismagilova et al., 2019). eWOM can be understood through the lens of the information adoption model (IAM) (Erkan & Evans, 2016; Sussman & Siegal, 2003). The IAM argues that whether individuals choose to adopt information offered to them depends on the perceived usefulness of the information. Information usefulness is determined in turn by the argument quality (or how good the argument is viewed) and source credibility (or how reliable and trustworthy the information source is viewed). Erkan and Evans (2016) extended the IAM to explain the effect of eWOM by adding further characteristics, including individual information needs and attitudes toward eWOM. There are also other characteristics of eWOM that could influence the adoption of eWOM information (Ismagilova et al., 2019). One of these factors is valence (whether the eWOM is positive, negative, or neutral). Other factors include eWOM volume (how many eWOM sources there are), age of the eWOM

and perceived trustworthiness of eWOM (Ismagilova et al., 2019). While these factors relate to eWOM, they could also apply to eReferral, particularly referral quality and source credibility. The problem of dissonance related to eReferral incentives (Abubakar et al., 2016; Al-Htibat & Garanti, 2019) can also be addressed under this theory. Specifically, offering incentives for eReferral could be viewed as degrading source of credibility, which would have a negative impact on information usefulness. Thus, eWOM theory, especially the various extensions of the IAM, is useful for understanding how eWOM and eReferral influence consumer's decision making.

Related Terms

6. Brand Awareness

Brand awareness is briefly defined as the strength of a brand's presence in consumers' minds (Hutter et al., 2013). Brand awareness is one aspect of brand equity, which is the difference in consumer choice between the focal branded product and an unbranded product given the same level of product features (Rossiter, 2014; Khan et al., 2015). Brand awareness is one of the dimensions of brand knowledge, along with brand image. Specifically, it is the aspect of brand knowledge that is concerned with brand associations (Yoo et al., 2000).

7. Brand Image

There are many different definitions of brand image, which take different perspectives on symbolism, meaning, and cognition (Lee et al., 2014; Cian, 2011, p. 166). This research uses definitions which emphasize symbolism, meaning, and cognitive and psychological aspects of the brand (Severi & Ling, 2013). One of these definitions is that brand image is consumers perceptions and beliefs about the particular brand through which consumers are able to

evaluate the quality, recognize a product, reduce purchase risks and attain satisfaction (Khan et al., 2015, p. 173).

8. Brand Loyalty

Brand loyalty is defined as cognitive, emotional and behavioral response to the brand by the customer, which intensifies over time (Keller, 2009; Cheng, 2011). Brand loyalty is one of the forms of brand resonance, in which the customer responds to positive experiences with the brand by increasing their depth relationship (Back & Parks, 2003). A more specific definition is that brand loyalty is the degree of closeness of the client to a specific brand (Malik et al., 2013, p. 168).

9. Social Media Usage

Social media explains the adoption and use of social media by individual consumers (Prasad et al., 2019). Use of social media is a multi-level process, including adoption of the technology itself and acculturation to the social media environment (Kizgin et al., 2018; Brooks, 2015). Through the acculturation process, users begin to understand the social norms that are present in social media and how it can and should be used (Kizgin et al., 2018). Another way to understand social media usage is that it is a process of engagement with specific communication channels (Di Gangi & Wasko, 2016).

10. Electronic Referral (eReferral)

Electronic referral or online referral (eReferral) has been defined as a pass-along effect that is generated by customers directly recommending the firm or brand to another potential customers (Abubakar et al., 2016; Abubakar & Ilkan, 2016). Another definition of eReferral is that it is any positive or negative statement made by a close ally about a product or company, which is made

available to friends, relatives, colleagues and acquaintances via the Internet (Al-Htibat & Garanti, 2019, p. 528; Babić Rosario et al., 2020).

11. Electronic Word of Mouth (eWOM)

The concept of electronic word of mouth (eWOM) is based on word of mouth (WOM), which can be defined as all kinds of interpersonal communication (positive and negative) about a company, brand or product between a receiver and a communicator, who is perceived as non-commercial (Hutter et al., 2013).” eWOM, therefore, is interpersonal communication about brands or products facilitated by electronic communications, such as the Internet (Abubakar et al., 2016; Babić Rosario et al., 2020; Kudeshia & Kumar, 2017).

12. Purchase Intention

There are several different ways the purchase intention can be defined. One of these definitions is the intention to transaction, or the intent of the consumer to engage in online exchange relationships with the web retailer (Prasad et al., 2019, p. 375). This is useful because it is not only online specifically but also how purchase intention forms or what it means (Malik et al., 2013; Khan et al., 2015). Another definition is that purchase intention is the mental stage in the decision process where the consumer has developed an actual willingness to act toward an object or brand (Hutter et al., 2013, p. 346).

Research Hypotheses

1. Brand Loyalty and eWOM

The relationship between brand loyalty and eWOM is indicated within the CBBE theory, as part of brand engagement which is the provision of eWOM and other information to other consumers (Keller, 2009). However,

most studies have investigated eWOM's effect on brand loyalty, rather than the other direction. There is some empirical evidence that supports a relationship between brand loyalty and eWOM. The study of Poulis et al. (2019) offers evidence that brand loyalty contributes to eWOM, which the authors conceptualized as willingness to provide eWOM. Consequently, H1 was set:

H1: Brand loyalty has a significant effect on eWOM.

2. Brand Awareness and eWOM

eWOM theory suggests that brand awareness would be a relevant information for quality eWOM (Ismagilova et al., 2019). A gap in the literature is that there have been few studies that have examined the brand awareness and eWOM relationship in the cosmetics industry. Instead, most studies have investigated the effect of eWOM on brand awareness. However, evidence from other fields does support a causal relationship between brand awareness and eWOM sending (Hutter et al., 2013). Thus, the following hypothesis was set:

H2: Brand awareness has a significant effect on eWOM.

3. eWOM and Brand Image

Abubakar et al. (2016) serves the leading study of the relationship between eWOM and brand image. Their research tested both eReferral and eWOM and found that eWOM had a strong and significant positive effect on the consumer's brand image. There are also several other studies which can support this relationship. Another series of experimental and exploratory studies showed that eWOM could influence brand image (Sandes & Urdan, 2013). The theoretical relationship was constructed to propose a hypothesis:

H3: eWOM has a significant effect on brand image.

4. eReferral and Brand Image

Like eReferral and purchase intentions, the relationship of eReferral on brand image has not been investigated by many studies, with the result that there is a small, mixed and ambiguous set of findings for the relationship. Abubakar et al. (2016) examined the effect of eReferral on brand image, along with its direct effect on purchase intentions. The study found that eReferral's effect on brand image was significant. As a result, the proposed hypothesis was obtained:

H4: eReferral has a significant effect on brand image.

5. Brand Loyalty and Purchase Intention

In the context of social media marketing, brand loyalty influences the purchase intention. One of these studies investigated how firm-generated content influenced brand awareness, brand loyalty, eWOM and purchase intention (Poulis et al., 2019). The findings showed that brand loyalty had a positive and a significant influence on the consumers' purchase intention, with a stronger effect than either brand awareness or eWOM (the other direct measures in their model). Other authors have also found that brand loyalty had a positive relationship with purchase intentions. One of these studies investigated university students' skincare purchase intentions (Lee et al., 2019) as stated in the following hypothesis:

H5: Brand loyalty has a significant effect on purchase intention.

6. eWOM and Purchase Intention

The relationship between eWOM and the purchase intention was strongly supported in the previous literatures. In a study of Apple products, eWOM had a significant effect on the purchase intention (Abubakar et al., 2016). Another study, it conducted a case study of the MINI brand and showed that

eWOM had a significant positive effect on the purchasing intention (Hutter et al., 2013). In another study, eWOM had a relatively small effect compared to other factors, but it was still a significant effect (Prasad et al., 2019). Thereby, the following hypothesis was set:

H6: eWOM has a significant effect on purchase intention.

7. Brand Image and Purchase Intention

Brand image explains the impression towards brands in the mind of customers which can be functional image or brand reputation (Plumeyer et al., 2019). The image of brand can be symbols, designs, color that customers recognized without being spoken (Surachman, 2008). Brand image ties with the mental and emotional state of mind among individuals (Ferrinadewi, 2008). Brand image is a favorably feeling toward the brand which significantly effect purchase intention of consumers. Thus, a hypothesis was proposed:

H7: Brand image has a significant effect on purchase intention.

8. eReferral and Purchase Intention

Another study, which investigated eReferral in the context of the tourism sector, had slightly different findings (Al-Htibat & Garanti, 2019). These authors, who examined interactive eReferral (in which a referral was provided live), found that eReferral did have a direct positive effect on the intention to visit the location, as well as an indirect effect through engagement (Al-Htibat & Garanti, 2019). An experimental study suggests that this relationship may depend on the level of incentivization (Ahrens et al., 2013). Thus, a hypothesis was proposed:

H8: eReferral has a significant effect on purchase intention.

9. Social Media Usage and Purchase Intention

The relationship of social media usage and purchase intention was investigated. This relationship is less supported in the literature than some of the others in the conceptual framework, but there is some empirical evidence for it. One of these studies was a study of online purchase intentions for Generation Y consumers (Prasad et al., 2019). The authors investigated social media usage in terms of how they use social media to communicate and interact with firms and brands. Their analysis showed that social media usage for the brand had a direct and positive effect on the purchase intention of the brand (Prasad et al., 2019). Hence, a hypothesis was derived:

H9: Social media usage has a significant effect on purchase intention.

10. Brand Awareness and Purchase Intention

The theoretical foundation of the study, especially the CDM, argues that brand awareness, or knowledge about the brand, is a necessary prerequisite for a brand to be

included in the consumer's decision set (Blackwell et al., 2005; Bray, 2008). In other words, to form a purchase intention for a specific brand, the consumer needs to be aware of the brand (at a minimum). This is a very simple relationship, and one which has been investigated and confirmed in previous studies. A case study of MINI on Facebook showed that brand awareness had a significant positive effect on purchase intention (Hutter et al., 2013). As a result, a hypothesis was set:

H10: Brand awareness has a significant effect on purchase intention.

Research Methods and Materials

1. Research Framework

The research model was adopted based on four theories which are consumer decision model (CDM), Consumer Based Brand Equity (CBBE) Theory, Social Network Theory and Electronic Word of Mouth (eWOM) Theory. The conceptual framework of this research is shown in Figure 1.

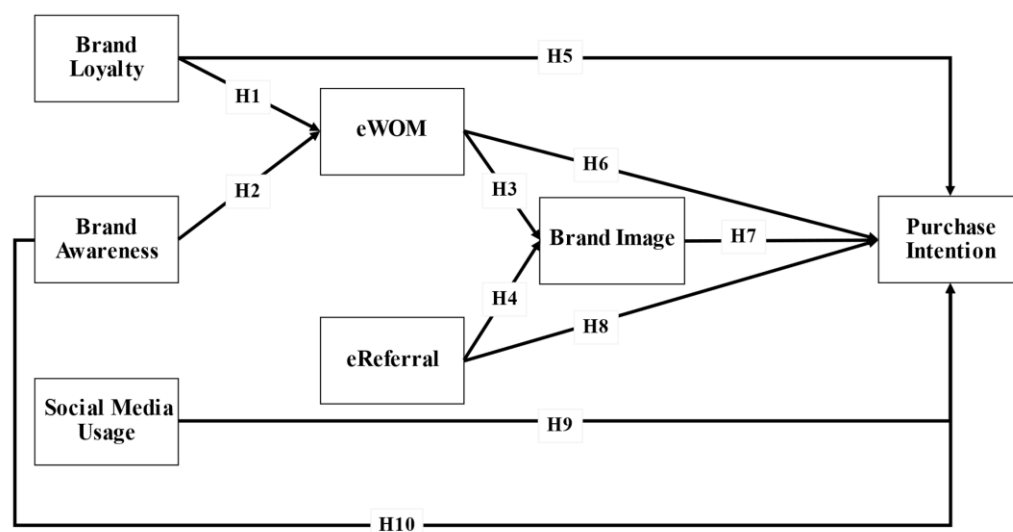


Figure 1 Conceptual Framework

The research aims to investigate the relationship among variables. Independent variables are brand loyalty, brand awareness, social media usage and eReferral. Dependent variables are eWom, brand image and purchase intention. Consequently, 7 variables and 10 hypotheses were proposed as a conceptual framework.

3. Methodology

The methodology used in this study is quantitative approach to distribute online questionnaires to 450 participants. The questionnaire has three parts, including (2) screening questions, (34) Five-point Likert scale items and (6) demographic questions.

Before the data collection, Item-Objective Congruence (IOC) validity was tested by three experts. Cronbach's Alpha (CA) reliability of 40 participants were accounted for a pilot study. IOC results were passed with all items are reserved at 0.60. Cronbach's alpha results were passed at value higher than 0.7 (Nunnally, 1967). Later, the questionnaire was distributed to the target group. The sampling technique was applied by using nonprobability sampling method, including purposive sampling, convenience sampling and snowball sampling. The data analysis was made to examine the normality of data, confirmatory factor analysis (CFA) and structural equation model (SEM), using SPSS and AMOS software.

4. Population and Sample Size

The population used in this research will be based on Millennials who were born between 1980 and 2000 and currently live in Chengdu. The recommended minimum sample size according to Soper (n.d.) is 425. However, this study aims to investigate factors affecting purchase intention of cosmetic products via social commerce

platform. Therefore, the researchers consider minimum sample size of 450 participants.

5. Sampling Technique

This research applied nonprobability sampling technique in three steps. Firstly, purposive sampling is to select millennials who were born between 1980 and 2000 and currently live in Chengdu. Secondly, convenience sampling is used to distribute questionnaires via online platform such as Email, WeChat and Weibo. Lastly, snowball sampling is accounted by encouraging participants to promotes the survey to their peers. Additionally, this study applied multivariate statistics to examine at more than two variables (Tabachnick & Fidell, 2007).

Results and Discussion

1. Demographic Information

The demographic questions were set for better understanding of participants' characteristics in the third part of a questionnaire design. From Table 5.1, the demographic results were that most of the respondents were female, presenting 59.8%, while male was 40.2%. Most respondents were born between 1986 to 1990 in this study, followed by between 1980 to 1985, at 27.6%, between 1991 to 1995 at 21.8% and between 1996 to 2000 at 21.3%. For highest education, the majority group was bachelor's degree at 44.0%, followed by associate's degree, master's degree, diploma and below and doctorate's degree at 31.8%, 14.0%, 7.6% and 2.6% respectively. For working status, it showed the major group was full-time at 70.9%, followed by 15.8% of part-time, 6.9% of between jobs, and 6.4% of students. For the

last two demographic questions, there was choices that respondents could select more than one answer. For social medial platform used, it can be accumulated for the total of 1,380 responds from 450 participants. The results were 29.1% of WeChat, 28.8% of

QQ, 26.7% of Red and 15.4% of others. Most of respondents from total responds of 1,217 have been using shopping platform of T-mall, showing 30.9%, JD of 28.6%, other of 21.6%, and PDD of 18.9%.

Table 1 Demographic Profile

Demographic Profile Data (N=450)		Frequency	Percentage
Gender	Male	181	40.2%
	Female	269	59.8%
Year of birth	1980-1985	124	27.6%
	1986-1990	132	29.3%
	1991-1995	98	21.8%
	1996-2000	96	21.3%
Highest Education	Diploma and below	34	7.6%
	Associate's degree	143	31.8%
	Bachelor's degree	198	44.0%
	Master's degree	63	14.0%
	Doctorate's degree	12	2.6%
Working Status	Between jobs	31	6.9%
	Student	29	6.4%
	Part-time	71	15.8%
	Full-time	319	70.9%
Social medial platform	WeChat	401	29.1%
	QQ	398	28.8%
	Red	369	26.7%
	Other	212	15.4%
	(Total responds = 1,380)		
Shopping platform used	T-mall	376	30.9%
	JD	348	28.6%
	PDD	231	18.9%
	Other	262	21.6%
	(Total responds = 1,217)		

Source: constructed by author

2. Confirmatory Factor Analysis (CFA)

The measurement model (CFA) was conducted prior to structural model (SEM) in order to ensure the accuracy and reliability of the data before testing relationship and hypotheses. The measurement model was measured using factor loading at 0.50 or above and p-values at 0.05 or less, composite reliability at 0.6 or

above (Hair et al., 2006), and Cronbach's Alpha at 0.7 or above (Nunnally, 1967). Therefore, the values passed those criterions were adequate to confirm convergent validity and Average Variance Extracted (AVE) in this study (Fornell & Larcker, 1981) as shown in Table 2 and 3.

Table 2 Confirmatory Factor Analysis Result, Composite Reliability (CR) and Average Variance Extracted (AVE)

Variables	Source	Factors Loading (>0.50)	t-value	CR (>0.60)	AVE
Brand Loyalty (BL)	Poulis et al. (2019)	0.586-0.656	10.183*-10.983*	0.867	0.373
Brand Awareness (BA)	Poulis et al. (2019)	0.699-0.767	13.024*-13.843*	0.769	0.527
Social Media Usage (SM)	Prasad et al. (2019)	0.641-0.780	12.997*-15.893*	0.819	0.531
Electronic Word of Mouth (EWOM)	Abubakar et al. (2016)	0.648-0.737	12.179*-13.635*	0.849	0.485
Electronic Referral (ER)	Abubakar et al. (2016)	0.671-0.808	13.980*-14.083*	0.804	0.580
Brand Image (BI)	Hutter et al. (2013)	0.656-0.745	12.158*-13.512*	0.787	0.481
Purchase Intention (PI)	Abubakar et al. (2016)	0.669-0.820	13.270*-13.539*	0.769	0.529

Note: CR = Composite Reliability, AVE = Average Variance Extracted

* = Significant at the 0.05 significant levels ($p < 0.05$)

Source: Created by the author

Table 3 The Value of Reliability Analysis of Each Construct in this Study (N=450)

Variable	Number of Items	Cronbach's Alpha (>0.70)	Strength of Association
Brand Loyalty (BL)	11	0.867	Good
Brand Awareness (BA)	3	0.765	Acceptable
Social Media Usage (SM)	4	0.818	Good
Electronic Word of Mouth (EWOM)	6	0.849	Good
Electronic Referral (ER)	3	0.801	Good
Brand Image (BI)	4	0.786	Acceptable
Purchase Intention (PI)	3	0.766	Acceptable

Source: Constructed by author

According to Fornell and Larcker (1981), discriminant validity was evaluated by computing the square root of each AVE. Based on this study, the value of discriminant validity is larger than all inter-construct/factor correlations, therefore, the discriminant validity is supportive. In

addition, Multicollinearity's problem can be examined through correlation coefficient. the factor correlations in Table 4 did not surpass 0.80. As a result, the problem of multicollinearity is not issued (Studenmund, 1992).

Table 4 Discriminant Validity

	EWM	BL	BA	ER	SM	PI	BI
EWM	0.696						
BL	0.580	0.611					
BA	0.007	-0.031	0.726				
ER	-0.015	-0.017	0.567	0.762			
SM	-0.034	-0.068	0.666	0.608	0.729		
PI	0.013	0.026	0.495	0.557	0.507	0.727	
BI	0.511	0.601	-0.045	-0.047	-0.028	-0.004	0.694

Note: The diagonally listed value is the AVE square roots of the variables

CFA was evaluated by goodness of fit indices including CMIN/DF, GFI, AGFI, CFI, TLI, IFI and RMSEA and confirmed convergence validity and discriminant validity of this study. All estimates were

acceptable with no required modification. Therefore, the convergence validity and discriminant validity were ensured as shown in Table 5.

Table 5 Goodness of Fit for Measurement Model

Index	Acceptable Values	Statistical Values Before Adjustment
CMIN/DF	< 3.00 (Hair et al., 2006)	(1045/506) = 2.065
GFI	≥ 0.85 (Sica & Ghisi, 2007)	0.864
AGFI	≥ 0.80 (Sica & Ghisi, 2007)	0.840
CFI	≥ 0.85 (Kline, 2011)	0.914
TLI	≥ 0.85 (Kline, 2011)	0.904
IFI	≥ 0.85 (Kline, 2011)	0.914
RMSEA	< 0.08 (Pedroso et al., 2016)	0.049
Model summary		In harmony with empirical data

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = goodness-of-fit index, AGFI = adjusted goodness-of-fit index, CFI = comparative fit index, TLI = Tucker-Lewis index, IFI = Incremental Fit Index, and RMSEA = root mean square error of approximation

Source: constructed by author

3. Structural Equation Model (SEM)

SEM was applied to determine parameters in the observed variables and latent variables analysis and to confirm relationships among variables in this research (Jöreskog & Sörbom, 1993). SPSS

AMOS was a tool to measure and modify the model of the good fit for structural equation model. As a result, all values meet its acceptable criteria per presented in Table 6.

Table 6 Goodness of Fit for Structural Model

Index	Acceptable Values	Statistical Values Before Adjustment	Statistical Values After Adjustment
CMIN/DF	< 3.00 (Hair et al., 2006)	(1616.094/517) = 3.126	(1189.454/497) = 2.393
GFI	≥ 0.85 (Sica & Ghisi, 2007)	0.813	0.869
AGFI	≥ 0.80 (Sica & Ghisi, 2007)	0.785	0.843
CFI	≥ 0.85 (Kline, 2011)	0.824	0.889
TLI	≥ 0.85 (Kline, 2011)	0.809	0.875
IFI	≥ 0.85 (Kline, 2011)	0.825	0.890
RMSEA	< 0.08 (Pedroso et al., 2016)	0.069	0.056
Model summary		Not in harmony with empirical data	In harmony with empirical data

Remark: CMIN/DF = The ratio of the chi-square value to degree of freedom, GFI = goodness-of-fit index, AGFI = adjusted goodness-of-fit index, CFI = comparative fit index, TLI = Tucker-Lewis index, IFI = Incremental Fit Index, and RMSEA = root mean square error of approximation

Source: constructed by author

The regression weights and R^2 variance confirmed significant support in this study as reported in Table 7 when $p = 0.05$. Brand loyalty had the strongest influence on electronic word of mouth at $\beta = 0.824$, followed by electronic word of mouth on brand image at $\beta = 0.692$, electronic referral on purchase intention at $\beta = 0.508$, brand awareness on purchase intention at $\beta =$

0.337, brand loyalty on purchase intention at $\beta = 0.257$, and social media usage on purchase intention at $\beta = 0.250$. There was no support in the relationship between brand awareness and electronic word of mouth, electronic word of mouth and purchase intention, electronic referral and brand image, and brand image and purchase intention.

Table 7 Hypotheses Testing Results of the Structural Model

Hypothesis	Standardized coefficient (β)	t-value	Test result
H1: Brand Loyalty (BL) => Electronic Word of Mouth (EWM)	0.824	10.259*	Supported
H2: Brand Awareness (BA) => Electronic Word of Mouth (EWM)	0.022	0.515	Not Supported
H3: Electronic Word of Mouth (EWM) => Brand Image (BI)	0.692	10.291*	Supported
H4: Electronic Referral (ER) => Brand Image (BI)	-0.049	-1.021	Not Supported
H5: Brand Loyalty (BL) => Purchase Intention (PI)	0.257	2.026*	Supported
H6: Electronic Word of Mouth (EWM) => Purchase Intention (PI)	-0.176	-1.202	Not Supported
H7: Brand Image (BI) => Purchase Intention (PI)	-0.023	-0.272	Not Supported
H8: Electronic Referral (ER) => Purchase Intention (PI)	0.508	8.152*	Supported
H9: Social Media Usage (SM) => Purchase Intention (PI)	0.250	4.625*	Supported
H10: Brand Awareness (BA) => Purchase Intention (PI)	0.337	5.739*	Supported

Note: * $p < 0.05$

Source: Created by the author

The hypotheses testing results from Table 7 are concluded per followings:

H1: The standardized path coefficient between brand loyalty and electronic word of mouth was 0.824 (t-value = 10.259*). Thus, brand loyalty was confirmed the strongest effect on electronic word of mouth. As a result, H1 was supported.

H2: Brand awareness had no significant effect on electronic word of mouth as the standardized path coefficient was 0.022 (t-value = 0.515). Therefore, H2 was not supported.

H3: The standardized path coefficient between electronic word of mouth and brand image was supported at the value of 0.692 (t-value = 10.291*). Consequently, H3 was supported.

H4: There was no significant effect between electronic referral and brand image with the

standardized path coefficient of -0.049 (t-value = -1.021). Thus, H4 had no support.

H5: Brand loyalty significantly affected purchase intention as the standardized path coefficient was 0.257 (t-value = 2.026*). Thereby, H5 was supported.

H6: The standardized path coefficient between electronic word of mouth and purchase intention was -0.176 (t-value = -1.202). Therefore, H6 was not supported.

H7: The standardized path coefficient between brand image and purchase intention was -0.023 (t-value = -0.272). So, H7 was not support.

H8: Electronic referral and purchase intention as the standardized path coefficient was 0.508 (t-value = 8.152*). Hence, H8 was supported.

H9: The standardized path coefficient between social media usage and purchase intention was 0.250 (t-value = -4.625*). Accordingly, H9 was supported.

H10: The standardized path coefficient between brand awareness and purchase intention was 0.337 (t-value = 5.739*). Subsequently, H10 was supported.

Conclusion and Implications

1. Conclusion

This study achieved its objectives to determine factors impacting purchase intention of cosmetic products via social commerce among Millennials in Chengdu, China. The variables were adopted from four theories, including consumer decision model (CDM), Consumer Based Brand Equity (CBBE) Theory, Social Network Theory and Electronic Word of Mouth (eWOM) Theory. The population and sample size were 450 participants. The quantitative method was applied nonprobability sampling method, including purposive sampling, convenience sampling and snowball sampling. The conceptual framework was developed with 7 latent variables and 10 hypotheses. Before the data collection, IOC validity and Cronbach's Alpha reliability were tested prior to the data analysis. Later, CFA was analyzed for factor loading, convergent validity, discriminant validity and goodness of fit. Finally, SEM was applied to confirm the casual relationships and hypotheses.

The findings revealed that that brand loyalty had the strongest effect on electronic word of mouth which also effected brand image. brand awareness, electronic referral, brand loyalty and social media usage significantly affected purchase intention. Nevertheless, there were no significant effect on the relationship between brand awareness and electronic word of mouth, electronic word of mouth and purchase intention, electronic

referral and brand image and brand image and purchase intention.

2. Implications

The results signified the key influencers effecting purchase intention of cosmetic products via social commerce platform among Millennials in Chengdu. Therefore, the marketers can develop online sales and marketing strategies in accordance with significant relationships encouraging the positive electronic word of mouth and willingness to buy products. Both theoretical and practical implications are emphasized on proven significant factors per followings.

Brand loyalty and electronic word of mouth was the strongest support in this study. Therefore, the result was complied with previous studies that customers who have loyalty or love the brand would spread word of mouth electronically to their family and friends. Therefore, those people have a high potential to consider buying products and service or being prospective customers (Poulis et al., 2019; Eelen et al., 2017; Sijoria et al., 2018). In practices, marketers would focus on building loyalty program where customers could spread electronic of mouth such as reward programs, product review bonus and exclusive sales.

The significant relationship between electronic word of mouth and brand image was also supported by numerous studies (Abubakar et al., 2016; Kudeshia & Kumar, 2017; Kala & Chaubey, 2018; Sandes & Urdan, 2013; Chin & Lai, 2018; Ismagilova et al., 2019). In the digital era, consumers would seek for an electronic product review before making a purchase decision. The positive word of mouth can build a positive brand image. Marketers should supervise the social voice in order to ensure the

positive EWOM which reflects the brand reputation and should take charge quickly for any complaints made online to avoid harassing brand image.

The finding showed that brand loyalty had a significant effect on the consumers' purchase intention of cosmetic products on social platforms (Poulis et al., 2019; Lee et al., 2019; Khraim, 2011; Choi & Lee, 2019) which determined that customers who love the brand would select to purchase products and services accordingly. Marketer requires to ensure customer's retention and relationship in order to sustain sales revenue by building loyalty programs using discount, promotion and events.

The significant relationship between electronic referral and purchase intention confirmed that the strong referrals of current customers can dominate the purchase intention of other prospective customers as aligned with many previous literatures (Abubakar et al., 2016; Chin & Lai, 2018; Al-Htibat & Garanti, 2019; Ahrens et al., 2013). Therefore, marketers can create the referral program to provide incentives for purchase intention among online buyers (Ahrens et al., 2013; Fu & Pang, 2018).

The significant effect between social media usage and purchase intention was aligned with the result in this study (Prasad et al., 2019; Hutter et al., 2013). It is also known that the extent of social media usage influences the cosmetic brands that mostly advertise on social media (Chu et al., 2013). Brand awareness significantly affected purchase intention which was supported by many studies (Blackwell et al., 2005; Bray, 2008; Hutter et al., 2013; Poulis et al., 2019; Khan et al., 2015).

Brand awareness was also a significant factor in the purchase intention for skincare products (Lee et al., 2019; Malik et al.,

2013). Marketers are recommended to pave the way to be the brand that customers are familiar with by using digital media such as website, e-newsletter, online advertisement and influencer marketing to reach the target group.

3. Limitation and Further Study

There are several limitations of this study. The study has a geographic limitation as it was only conducted in China. Since China has a distinct social media and e-commerce environment from the rest of the world, this may limit the generalization of findings outside this geographic scope. Secondly, the study is also restricted to Millennial consumers which is relevant to generalizing the findings, since Millennials have distinct patterns of consumption compared to older generational cohort (Moore, 2012). This is particularly true in terms of their use of interactive and social media, which is the heart of the present research. Finally, the topics investigated by the study are limited by variables which can be extended to other factors influencing purchase intention of online cosmetics such as perceived quality (product/service quality), performance expectancy (the performance of product serving as expected), social influence (influence from family and friends) and so on (Saunders et al., 2015).

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